Evaluation of GP Pharmacists' role by key stakeholders in England & Australia

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Abstract

There is a consensus on the shortage of General Practitioners (GPs) and Nurses in general practice framework, creating an opportunity for clinical pharmacists to step-in as General Practice Pharmacist (GPP). In this qualitative comparative study expectations and perceptions about GPPs' role in England & Australia has been evaluated. The study is based on the interviews with key stakeholders, from England and Australia, including GPs, Nurses, GPPs, Organisational lead and Academia. The participants were involved in a semi-structured, audio-recorded interviews, which were later transcribed verbatim, coded and underwent a thematic analysis to extract the general themes. These were raised by participants, based on their views and experiences about GPPs' role. From the transcribed data, main extracted themes were initial expectations & reservations by key stakeholders, barriers and facilitators, working collaboration, GPPs' skillset, views on key performance indicators (KPIs), patients' feedback, and the stakeholders' views on the future of GPP in England & Australia. The participants from both England & Australia did acknowledge the growing role of GPP. Few concerns were raised by some participants about aspects like role description, training pathways, prescribing protocols and funding. Despite these concerns, all participants strongly believed that by taking steps to overcome main barriers like funding in Australia and training pathway in England, GPP could be an ideal professional to bridge the gaps in general practice framework. Based on the comparative data, recommendations were made on funding structure, role description, prescribing qualification, training pathway and key performance indicators for role of GPP in general practice framework. These recommendations can be used as guidance for both England and Australia to learn from each other's and implement relative policies in their countries.

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List of Abbreviations

AMA: Australian Medical Association

BMA: British Medical Association

CP: Clinical Pharmacist

GP: General Practitioner

General Practice Pharmacist: GPP

GPhC: General Pharmaceutical Council, UK

HMRS: Homer Medication Review Service (Australia)

KPI: Key performance indicators

NHS: National Health Services

NMP: Non-Medical Prescribing

PGPIP: Pharmacist in General Practice Incentive Program

PSA: Pharmaceutical Society of Australia

QOF: Quality and Outcomes Framework

RACGP: Royal Australian College of General Practitioners

RPS: Royal Pharmaceutical Society

RCN: Royal College of Nursing

UK: United Kingdom

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Chapter No. 1

INTRODUCTION

General practices, as part of primary care, are central to the framework of health care systems like National Health Services (NHS) in England and Medicare in Australia. General practices are the first line of contact for healthcare needs like disease prevention, differential diagnosis, monitoring and management of medical conditions. These are provided by a multidisciplinary clinical team, led by GPs.

Clinical pharmacists, working as General Practice Pharmacist (GPP), are progressively becoming a part of clinical teams in general practices, either employed directly by practices as in-house GPP or integrated as part of medicine management organisations. In England, GPPs were being funded under the NHS England pilot scheme (NHS England, July 2015). It has been replaced by new Network Contract Directed Enhanced Service from 1st July 2019 (NHS England, 2019).

To evaluate the present and future impact of GPPs' role, it is important to understand how this role emerged over a period of time.

1.1 General Practice in Crisis

Workload crisis in England's general practices is widely acknowledged as it has been under immense pressure due to nature of intensity and difficulty of workload especially on General practitioners (GPs) which doesn't match with proportional growth in either government funding or GPs workforce. An English study, conducted to analyse clinical workload in UK primary care between 2007-2014, showed a remarkable rise of 16% increase in GP workload (Avery, A.J. 2017). Factors including ageing population, increasing patient numbers with multiple morbidities requiring complex medical care, focus on transferring responsibility from secondary to primary care and rising expectations at public and political level have made GPs job very stressful (Baird et al., 2015), resulting in many doctors opting against to become GP as their career (Beech et al., 2019). This also leaves a massive imbalance between resources and demands for efficient general practice framework.

1.2 Pharmacists' Workforce Crisis

There is a crisis in pharmacist's workforce as well but ironically opposite to what GPs are facing. After the UK government refusal to cap students number in pharmacy degree programmes, the centre of workforce intelligence, an advisory organisation for workforce requirements for health and social care in England, estimated an expected excess of some 11,000-19,000 pharmacists by 2040 (Pharmaceutical Journal, 2015). This number opened discussion on how to use pharmacist workforce efficiently in NHS future framework. Eventually, it led to the emergence of a unique opportunity for pharmacist professionals under NHS England pilot scheme to integrate pharmacists into general practice settings as GPPs. This is to work alongside GPs, nurses and other healthcare professionals from or within general practice to bridge the gap between workforce and demands in primary healthcare (NHS England, 2015).

1.3 GPPs' Role in England

GPP was not a new phenomenon at the time when NHS pilot scheme was launched, as some practices already had clinical pharmacist working as part of their clinical team for few years. These were either employed directly or as part of medicine management organisations like PCTs (now called CCGs). National Health Service (NHS) pilot scheme for GPP was the first time when NHS England did consider to implement it at a policy level to utilise clinical and management skills of pharmacists, viewing it as an integral part of general practices (Pharmaceutical Journal, 2015).

Traditionally pharmacist has been considered as "Dispensing pharmacist" supplying and compounding medications and delivering locally commissioned services, a setting where clinical expertise of pharmacist has never been utilised up to its full potential, and it has been hard for pharmacists to get recognition for their clinical roles by other healthcare professionals and patients (Ng & Harrison, 2010). This scenario has changed though with some key publications (Silcock, Raynor & Petty, 2004), (N et al., 2002), (Tan et al., 2012) (Tan et al., 2014), (Nkansah et al., 2010) encouraging a more integrated primary care vision in England involving a multi-disciplinary clinical team to improve working collaboration among healthcare professionals.

1.4 NHS England Pilot Scheme

In 2008, the Department of Health published a white paper "Pharmacy in England. Building on strengths-Delivering the future" highlighting the development and skills of the pharmacist as a healthcare professional (Department of Health, 2008). This paper had a significant impact on the professional growth of the pharmacists, leading them to take new roles in primary care including Independent and supplementary prescribing. A systematic review published in 2010 highlighted the positive impact of non-dispensing roles of clinical pharmacists on patients' outcomes and prescribing patterns (Nkansah et al., 2010)

In 2014, Royal Pharmaceutical Society (RPS) and NHS Alliance made the recommendation to integrate pharmacist into general practices, highlighting the significant improvement in the performance of various surgeries that already had a pharmacist working as part of their teams (Bares, Ashraf and Din, 2017).

NHS alliance in a report, published in 2015, called "Making time in general practice". In this report the data was presented to recruit clinical pharmacist into general practice in order to reduce the workload on GPs, describing pharmacist as a hidden army to rescue general practice (Making Time in General Practice, NHS England 2015).

1.4.1 General Practice Forward View

The idea to integrate GPP into general practice was re-emphasized by General practice forward view (General Practice Forward View, NHS England 2016) . This outlined the measures to tackle main challenges faced by general practice. Besides extra funding, one of

the main recommendations was to strengthen the general practice workforce by a range of healthcare professionals including clinical pharmacists leading from the front.

In 2015, NHS England launched first phase of Pilot scheme, as a part of new deal for general practice defined by the NHS five year forward review after close collaborative work with Royal College of General Practice, BMA's general practice committee, Royal Pharmaceutical Society and the Health Education England (NHS England: Clinical pharmacists in general practice pilot, 2015). The aim of the pilot scheme was to fund, recruit and employ a clinical pharmacist in a GP practice with objectives to support GPs by reducing their workload. This was also to improve patient care and by bridging the gaps present in primary care healthcare system with their clinical and management skills. It was highlighted that this role has the potential to be a win-win situation for patients, their GPs and for pharmacists. This is a working relationship in which GPs would be benefited by using clinical skills of pharmacists while pharmacist has a new role to build as their careers. (NHS England: Clinical pharmacists in general practice pilot, 2015)

1.4.2 Funding

Initial total funding under NHS pilot scheme for GPP was £15 million. NHS England partly funded the financing cost of GPP for 36 months (60% in 1st year, 40% in 2nd year, 20% in 3rd year and 0% after 36 months). Each pilot site model was based on one senior pharmacist and 5 clinical pharmacists and it was expected to recruit around 250 pharmacists in initial phase (NHS England, July 2015). This initial funding was increased to £31 million, aiming to continue part-funding of further 403 new clinical pharmacists across 73 sites in England. (NHS England, October 2015).

The pilot scheme had a massive positive response from the general practice sector, especially GPs who acknowledged that the clinical expertise of GPPs in reducing their workload. Sametime, patients and carer also acknowledged the role of GPP, highlighted by a patient survey carried out in 2016 by patients' association in partnership with a primary care pharmacist association (The Pharmacist Association, 2016).

With such an encouraging response from both GPs and patients, NHS England reviewed its funding and agreed to double the initial funding to £31million. In 2016 under General Practice Forward View, the funding was injected with a new central investment of £112million to support further 1500 clinical pharmacists in general practice by 2020 (General Practice Forward View, 2016).

1.4.3 GP Five-year Contract Framework

The new GP five-year contract framework, launched in January 2019 aims to support Primary Care Networks (PCNs) under a new funding model by recruiting additional 20,000 healthcare staff in primary care including clinical pharmacists (NHS England, 2019).

1.4.4 Proposed GPP's Role Specifications

The proposed job specifications for GPP varies from a medicine management role to carry out daily clinics in accordance with the requirements of specific general practice. It includes

medication reviews, medicines reconciliation, chronic disease management, minor ailment clinics, repeats prescription management, prescription concordance and running audits. These all activities aim to improve overall practice performance (Making Time in General Practice, NHS England 2015)

1.5 GPPs' Role in Australia

Like England, various healthcare systems around the world have been evaluating GPPs' role and its overall impact from multiple dimensions. Countries with robust healthcare systems including Australia, Canada, New Zealand, and the USA have designed national programmes to integrate pharmacists in a non-dispensing clinical role into general practices (Karampatakis et al., 2019a). In a recent report published by Royal Australian College of General Practitioners (RACGP), there are close to 37,000 GPs, and 6500 accredited general practices across Australia, with GP to patient ratio decreasing especially in remote areas (General Practice: Health of the Nation, 2019). According to this report, 13% of responded GPs did say that their practices employ pharmacists to help with the workload, while the figure for nurses was 92%. These figures reflect that the GPP role is in it's initial phase in Australia. The overall impact on practise still need to be evaluated in the context of general practice framework.

Australian government in 2010-11 budget committed further $AUS370 million for development of general practice (GP) super clinic programme with many clinics incorporating pharmacist services which created the opportunity to explore new models of practice to further utilise clinical pharmacist in primary care settings . This paved the way for an established GPP role in Australian healthcare system (Freeman et al., 2012a). This working collaboration between GPs and the pharmacist became stronger with the introduction of a direct referral by GPs for Home Medication Reviews (HMR) in October 2011 (Tan et al., 2014c)

In 2015, Australian Medical Association (AMA) after consultation with Pharmaceutical Society of Australia (PSA) released a proposal to make clinical pharmacists, in a non-dispensing role, a vital component of the future general practice healthcare team by establishing a supportive funding program called Pharmacist in General Practice Incentive Programme (PGIPP) (Australian Medical Association, 2015). This proposal was backed by independent analysis from Deloitte Access Economics, estimating the benefit-cost ratio of 1.56 from AMA's proposal which means from every $1 invested in the programme, generated savings will be $1.56 (Deloitte, 2015). A proposed role for GPP, backed up by Deloitte data, received very positive feedback by stakeholders in the Australian healthcare system. Australian general practice leaders do support the concept of employing GPP in GP led team (Freeman et al., 2012b). Emphasising the importance of GPs and pharmacist working collaboration, UGPA (United General Practice Australia) was very welcoming to include GPP into GP-led healthcare professionals' team. This is in the view to improve prescribing patterns, efficient medication usage, and reducing patient's hospital admission due to adverse drug events. (RACGP, July 2015). The idea of GPP has also been endorsed by recent position statement given by RACGP, highlighting the importance of GPP in team-based care to provide coordinated, collaborative, and continuous patient care. (RACGP, 2019).

1.6 Rationale of Study

This study aims to explore key stakeholders' views about the GPP role since the beginning of the GPP pilot scheme in England and Australia. Several research articles have been published in the UK, which evaluates the impact of GPPs. NHS England itself did fund an evaluation report, aiming to provide an overview of the first phase of the pilot scheme with suggestions for final roll-out. This was published in 2018 and was undertaken by the University of Nottingham (Mann et al., 2018).

Most of these studies evaluate overall GPP's impact on general practices from different key performance indicators but lack the detailed insight about the change in views and perceptions of key stakeholders from initial phase to present and how this transition can be analysed to design a more successful framework with improved working collaboration among GPPs and other healthcare professionals especially GPs.

Published reports and articles indicate that the role of GPP is evolving at a high pace and further research needs to be done to define parameters like views of critical stakeholders, future training pathway, defining job description, cost implications, barriers and facilitators and government policy about future funding.

Also, up to this date, no comparative study has been undertaken to compare the dynamics of GPP role in England with the one in Australia. This study would provide policy insight into this and will provide future recommendations. The thesis also aims to explore the evolution of general practice pharmacist's role in Australia and England, offering an insight into professional and organisational implications of this role.

1.7 Aims & Objectives of Research

Aim

To explore key stakeholders' expectations and perceptions about GPPs' roles in England and Australia.

Objectives

- To evaluate possible barriers and facilitators affecting GPP role.
- To compare the impact of GPPs' role on the healthcare system in England and Australia.
- To explore the collaboration of GPP with the other healthcare professionals in their respective healthcare systems
- To document recommendations for future GPPs' roles, including job description at the organisational level.
- To explore GPP skillset and training requirements to make this role successful.

Chapter No. 2

LITERATURE REVIEW

This chapter elaborates on the research that has already been conducted on the role of GPP to gather the views and perceptions of different stakeholders in various healthcare systems around the world.

Fish et al. published a systematic review in 2002 and found that studies conducted on general practice based pharmaceutical services have primarily been of poor methodological quality, showing inconsistent results. Since then, there has been an increase in the number of published studies, exploring the role of GPPs. Most of these studies have similar themes like expectations of key stakeholders from this role, barriers and facilitators as well as exploring the future guidelines. The gaps were identified in the published literature, which provided the basis to design the semi-structured interview guide for this study.

This section aims to gather and document literature about GPPs' role at a global level. It explains in detail the literature search strategies that were used, explanation of the inclusion and exclusion criteria for the studies. This is followed up by a summarized review of selected studies.

Table 1: Inclusion & exclusion Criteria

No	Category	Inclusion Criteria	Exclusion Criteria
1	Language	English	Published in a language other than English
2	Publication Period	January 2000 – December 2019	Before January 2000
3	Publication Type	Full-text original research articles, policy reports, Systematic reviews	Abstracts, conference paper, commentary
4	Outcome Measure	Professional views, reviews, key performance indicator reports and impacts of GPPs' role.	
6	Stakeholders	GPs, Nurses, GPPs, Organizational lead, Academics, Patients, community pharmacists	

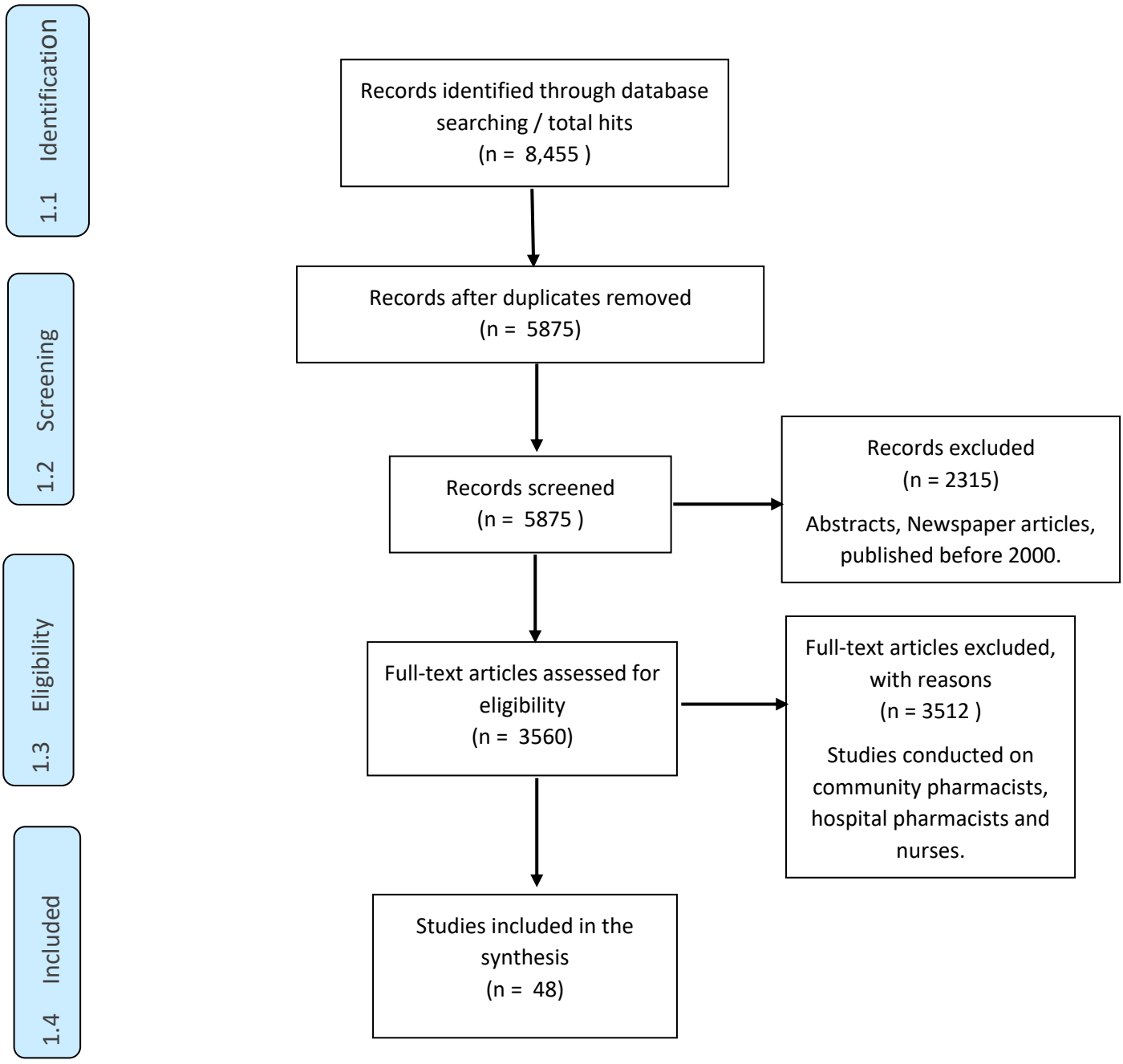

Figure 1: Study selection process

Figure 1 explains the stepwise approach towards literature review, using keywords along with inclusion and exclusion criteria given in table 1 and 2. After screening of available literature, 35 articles were included for final review.

2.1 Synthesis of Literature Review

2.1.1 England General Practice Framework and Scope of GPPs' Role

General practices are the central hub in a primary care framework of various healthcare systems in developed countries. In the UK, National Health Services (NHS), the world's most extensive healthcare system was established in 1948 on the idea of a universal health system in the whole country. This was based on reliable primary care services within which general practice has the central role. As quoted in the British medical journal "If general practice fails, the whole NHS fails" (Madan et al., 2017)

Since the creation of NHS, there have been significant changes in the general practice framework. The General Practitioner (GP) contract in 1990 was the first challenge to the independent contractor status of GP. This is when not only there was a reduction in funding but also a fee for service pay model around the promotion of health improvement activities was introduced.

Quality and Outcomes Framework (QOF): General practitioner contract 2004 changed the overall shape of how general practices were funded with the introduction of a pay for performance scheme "Quality and Outcomes Framework (QOF)" in England's general practice. It moved the responsibility of patient care from single GP to the general practice comprised of a group of one or more GPs. In this contract, 20-25% payment for practices was based on available QOF points, a criterion to measure the quality of care. However, the effectiveness of this contract was disputed and this was highlighted in a systematic review (Gillam, 2012), The GP contract in 2013/14 aimed to improve general practices by overall tightening of GPs' points achievement by reducing total points and changing the indictors for points.

The baseline for QOF-based GP contract is like an audit mechanism to control the funding available for general practices, and at the same time, it adds more responsibility on GPs to achieve financial incentives linked with points-based system. This opened the debate about the available workforce in general practices to achieve such targets and how professionals like clinical pharmacists can be integrated into clinical team as GPP.

2.1.2 General Practice Workforce Crisis in England

> *"The NHS could be short of 70,000 nurses and 7000 GPs within 5 years unless urgent action is taken to address a growing staffing crisis" (Beech et al., 2019)*

England's' general practice is under immense pressure due to the nature of intensity and workload difficulty leading to a feeling of demoralisation, especially for the GPs. The latest research report indicates a worsening crisis in NHS as 4 out of 10 GPs are planning to quit, average face to face GPs' consultation time has increased by 7% which means GP direct clinical workload has increased by 18.2% in 7 years (Beech et al., 2019). There is a growing

general perception that the work in general practice is more stressful. Also, with reduced funding, there is a less reward in comparison to other health care fields. The funding is also linked with performance-based targets, which is again extremely difficult to achieve due to lack of workforce.

However, new pharmacist workforce is proportion to the demand. There are more than 55,000 registered pharmacists in Great Britain in various settings (General Pharmaceutical Council, 2018), and the numbers are growing every year. Department of health in December 2012 requested the UK government to put a cap on student numbers in the pharmacy degree programmes which was refused by the government. Afterwards, the centre of workforce intelligence, an advisory organisation for workforce requirements for health and social care in England, estimated that by 2040 between 11,000-19,000 pharmacists will be in the excess range (Pharmaceutical Journal, 2015)

While there is a discussion on workforce crisis in general practice, the focus is now pharmacists' workforce and how this could be used to fill the gaps in primary care. It was observed that eventually, it will lead to new opportunities for pharmacist professionals as GPPs, working alongside GPs, nurses and other healthcare professionals.

Integrating a GPP into general practice was not a new concept as pharmacists were already working in many surgeries either employed directly or as part of medicine management teams in primary care organisations like CCG (Pharmaceutical journal, 2015). However, during this time it was more like a desirable effect rather than an integral part of general practice teams. There were also models in UK where pharmacists were involved in providing enhanced pharmaceutical services under local pharmaceutical contract (LPS). This requires a strong working collaboration among GPs and community pharmacists to integrate pharmacists effectively. However, despite some positive feedback a study has highlighted the concerns of GPs about LPS and lack of overall success to achieve the targeted goals (Bradley et al., 2008).

2.1.3 NHS England Pilot Scheme

NHS pilot scheme was the first time when GPPs' role was accepted, recognised and integrated at the government policy level in England as part of building the workforce. While considering the actions needed to tackle GPs workforce crisis, National Health Service (NHS), Health Education England (HEE), Royal College of GPs (RCGP) and GP committee of British Medical Association (BMA) working in collaboration with Royal Pharmaceutical Society (RPS) rolled out a 4 years pilot to test the effectiveness of pharmacists in general practice as GPP (NHS England: Clinical pharmacists in general practice pilot, 2015). The main aim was to strengthen the multidisciplinary clinical team in primary care network, which would help to reduce the workload of overburdened GPs in both patients facing clinical and medicine management roles.

Funding module for pilot scheme has been explained briefly in introduction chapter but to summarise, Initial funding for pilot scheme was £15 million which was later increased to firstly £31 million with another later injection of further £112million in General practice forward

view, 2016, aiming to support further 1500 clinical pharmacist in general practice by 2020 (General Practice Forward View, 2016). Partial funding for pharmacists' salary while working in general practice, structured training, and support along with clinical mentorship, made the base of this pilot scheme.

Most of the published literature (Tan et al., 2014), (Avery, 2017), (Bush et al., 2018) database has been about the impact of GPP under this pilot scheme evaluated in various dimensions. An evaluation report on the initial phase of pilot scheme was published in 2018, carried out by University of Nottingham and this was funded by NHS England. It evaluates the impact of the initial phase of the pilot scheme from various aspects like perceptions about GPP, role specifications, proposed KPIs, barriers and facilitators and training for GPP (Mann et al., 2018).

2.1.4 Australian General Practice Framework and GPPs' Role

GPP role in Australia is not an established one where all stakeholders are trying to find the right mechanism for this integration. However, like in England, GPP is not a new concept with literature showing it had a limited acceptance within general practice framework though the idea is getting more support (Freeman et al., 2012d) as suggested by the latest position statement by RACGP, 2019.

In the Australian healthcare system, major portion of pharmacist I.e. 85% work as community pharmacists mostly working in dispensing roles (Tan et al., 2014a) & (Freeman et al., 2014). GPs and pharmacists have a limited team-based working relationship in the form of home medication review service, where GPs refer patients to accredited pharmacists to conduct home medication reviews in a structured funding mode. Published literature in Australia has shown the views of key stakeholders on how to extend the proposed roles and government funding (Tan et al., 2012), (Tan et al., 2014a), (Freeman et al., 2012e) & (Freeman et al., 2014).

When compared to research in England, though the basic concepts are almost similar as for barriers and facilitators, the main focus has been on the funding aspect of the proposed role as medical practices, been private businesses in Australia, are reluctant to recruit GPP, unless they have clarity on funding.

2.2 Barriers & Facilitators

Pharmacist integration into general practice had to face several initial barriers, some of which are still visible in practice. Jorgenson et al., (2014) listed seven main barriers and facilitators for GPP role:

- Relationships, trust and respect.
- Pharmacist role definition.
- Orientation and support.
- Pharmacist personality and professional experiences
- Pharmacist presence and visibility.
- Resources and funding
- Value of the pharmacist role

The success of this role requires a detailed analysis of these barriers and facilitators with efforts to improve working collaboration with adequate support and planning at a personal and organisational level.

2.2.1 Pharmacy Culture: Barrier to Pharmacy Practice Change:

Globally, pharmacy profession has been under a lot of pressure within various healthcare sector as there has been a continuous discussion on how effective the pharmacists are in their roles. Pharmacists are mostly visualized in a dispensing role working in community pharmacy (Tan et al., 2014a) but there is surly a need to change this perception into a more patient-centred role like GPP to improve patient outcomes (Freeman et al., 2014). Though, there are various barriers who can hinder this change however its' worth exploring the pharmacy culture, or whether the pharmacists are willing to take on new roles like GPP and advance their careers. Factors like lack of confidence, scared of facing new responsibilities, paralysis in the face of ambiguity, need for approval and risk aversion were described as personality traits keeping pharmacists away from success (Rosenthal, Austin & Tsuyuki, 2010). Available literature shows pharmacists have taken the patient centred roles in primary and secondary care but there is always the risk that pharmacists will not be able to respond to the challenges of new roles likes GPPs (Mann et al., 2018) & (Butterworth et al., 2017). This is also due to lack of education and because such roles push them out of their comfort zone i.e. in a dispensing role. Young pharmacists, who are willing to bring the change suits better to such roles as they continue with efforts that need to update their training and knowledge (Rosenthal, Austin & Tsuyuki, 2010).

2.2.2 Mismatch between Stakeholders' Expectations & GPPs' Proposed Roles

As an evolving phenomenon, it is essential to understand the concerns and aspirations of critical stakeholders from GPP role, especially from a GP and nurse perspective.

Pharmacists are traditionally considered in a dispensing role working behind the counter in community or hospital pharmacy. Therefore, when the idea of GPP in a non-dispensing role was introduced in primary care there was a wide range of apprehensions and expectations from general practice workforce. Most of the studies highlighted the aspect of mismatch between initial expectations and what pharmacist role was or the ability of GPP to perform in the beginning. There were some hurdles as expected at initial phase mainly around aspects like building trust-based relationship within the practice and with other sectors of primary care like community pharmacy, Clinical Commissioning Group or hospital. National evaluation report (Mann et al., 2018) has reported the presence of mismatch in GPs expectations from GPP resulting in some unrealistic assumptions about pharmacist capabilities, highlighting the importance of GPs guidance about this role.

It is vital to understand the reasons behind this mismatch in expectations. As clinical pharmacists were considered to bridge the gap in workforce crisis at the general practice level. GPs thought that the pharmacists will integrate straight into patient-facing roles and

help them by running clinics. It also reflects a lack of initial inter-professional working relationship among GPs and pharmacists as healthcare professionals. (Mann et al., 2018).

2.2.3 Initial Concerns of GPP

Pharmacist perception of their roles as GPP differs across interprofessional teams which could be attributed to different educational background, philosophy of practice or characteristics of individual pharmacists (Farrell et al., 2013)

Most of the published literature has focussed mainly on exploring views of other key stakeholders, primarily GPs, but it is equally vital to understand the opinions and perceptions of pharmacists. Pharmacists were mostly considered to be in a dispensing role at community pharmacy, so when the idea of GPP was brought up at policy level, there were also barrier among pharmacist about their clinical knowledge, patient-facing skills to run clinics, expectations by GPs and doubt about their acceptance in general practice as part of the clinical team.

Nabhani-Gebara et al., (2020) in the latest study on GPP has presented some of the concerns stated by pharmacists which mainly include lack of trust with healthcare professionals and clerical staff, lack of role description as well as other organisational issues including lack of rooms or support.

An element of mismatch in initial expectations from the pharmacist perspective is also present in literature. This is again, mainly attributed to lack of initial training and understanding of the role.

Another concern on the pharmacists' part was about key performance indicators (KPIs), i.e. how they would be able to evaluate or document their effect on general practice in numbers or figures. NHS England pilot scheme has a proposed set of ten KPIs to evaluate GPPs' impact on general practice framework (NHS England: Clinical pharmacists in general practice pilot, 2015). Pharmacists in a published study about KPIs expressed their concerns that the KPIs are mostly designed according to economic priorities, mainly how to save money for NHS and is not highlighting the quality of pharmacists' actual work. Also, in KPIs, there is a high possibility of impact by different people's contribution, which again would indirectly impact an overall pharmacist performance. (Karampatakis et al., 2019a & Karampatakis et al., 2019b)

Pharmacists have also shown concerns about the lack of understanding of their role by a patient. As this is not clear sometime patients do show dissatisfaction with GPP in the patient satisfaction surveys. This perhaps impacts on pharmacists' job performance.

2.2.4 Job Description / Role Specification

Lack of role specifications can act both as a barrier as well as a facilitator for GPPs. On one side, it can lead to a mismatch of expectations, but on the other hand, it also allows practice staff and pharmacists to discuss the role and make plans to achieve these goals moving forward. GPs mostly hold the key to job description of a GPP and it depends on what roles they want the GPP to play. A survey conducted in UK (MARTIN, LUNEC & RINK, 1998)

suggested that GPs generally prefer and facilitated pharmacists' involvement in prescribing related tasks but are not so supportive for direct patient care activities like GPP led in-house clinics. An article by Farrell et al (2013) described that there can be 2 types of pharmacists working as GPP, one is physician oriented which is mainly responding to physician or doctor requests or given tasks. Other one is working at multiple levels of interaction to provide patient-centered care, acting as source of education/information on medicines, and initiating system-level interventions to improve drug therapy.

Bradley et al., (2018) in a cross-sectional survey of 145 pharmacists reported having the first evaluation from the national pilot scheme in England. This focused on integration and the role evolution of this role. It ranges from patient-facing to non-facing roles. Some of the pharmacist experiences from the study reflect lack of job description as a barrier as well as a facilitator at the same time.

As stated by (Sims & Campbell, 2017), new GPP role has changed the dimensions of pharmacy profession. If it gets support what It needs, GPP will become a robust and trustworthy profession. It will also strengthen the bond between patient and pharmacists as well as help to enhance medication appropriateness and compliance with the patients.

2.2.5 Training and Education

Lack of initial training for GPP is another barrier. GPP role is a specialised role that needs expertise in clinical skills as well as in management. Pharmacists working in practice have shown concerns about the level of training they had gained during a pharmacy career, stating it's not enough to take on this challenge and specific postgraduate training is required. (Ryan et al., 2018)

In England, GPPs are trained by Centre for Pharmacy Postgraduate Education (CPPE) under the GPP training pathway. In Australia, the pharmacist needs to undertake demanding training to get accreditation for home medication review service (HMRS). It makes the base for them to acquire the GPP role as this could strengthen their clinical knowledge. In a study by Freeman et al., (2012), participants highlighted the importance of advanced training to take GPP role in Australia.

Training should be a continuous professional development process, and pharmacists should attain the training as per the needs of the practice. Butterworth et al., (2017), concluded that training should include clinical skills through exposure to general practice and should be delivered by primary care practitioners. This aspect has been discussed in national evaluation report where training for GPP by GP mentors and individuals who have experience of working in general practice has been highlighted. A latest study by (Matheson et al., 2020) evaluated the GPP response on training programmes. The study has shown the need and desire by GPP to attain structured training to strengthen clinical and patient-communication skills. This highlighted the need to integrate a structured training programme for a GPP specially in initial phase of their career.

2.2.6 Key Performance Indicators (KPIs)

Fernandes et al., (2015) recognized ideal KPIs for pharmacy services as “a measure that reflects quality, relates to pharmacists’ roles and is supported by adequate evidence”

As mentioned earlier, there is an ongoing concern within GPPs about the absence of an appropriate mechanism of measuring KPIs of GPP role. Most feedback given by pharmacists and GPs in a study was that the current electronic system, which records codes for the daily activities is not ideal for measuring the clinical effort being put in by GPP. These concerns highlighted the need to have KPIs, which can better reflect GPPs’ role. This means to generate new activity codes which could document a range of GPP responsibilities (Karampatakis et al., 2019b).

2.2.7 Funding / Cost

The cost of employing a pharmacist is one of the main barriers. Depending on healthcare structure, different countries have proposed different funding models for GPP. In England, a major portion of the funding is coming from money available via NHS pilot scheme. Though the concerns had been raised for future when surgeries would have to pay 80% of pharmacist wages, asking whether they should opt for more GP sessions, a full-time nurse or a GPP (Avery, 2017). However, in Australia, there is no such funding structure available specifically for GPP.

Ideally, cost of employing GPP should be accounted against the savings generated by the pharmacists in practices. These cost savings include decreased workload on GPs, reduction in medications error, improvement in patient safety, improved patient service as well as reduction in drug budget (Ryan et al. 2018)

Bush et al., (2018) in a study explored interventions and cost savings by GPPs over a period of 9 months working across 49 general practices. Against a total of 23172 interventions, there was a cost-saving of over 1 million pounds. In 4 months, pharmacists saved 628 GP appointments and 647 hours that usually GPs dedicate to medication reviews or repeat prescription management. Although in England, funding for GP pilot scheme has been replaced by a combined PCN (Primary Care Networks) funding, it is strongly believed that the GP practices will carry on recruiting pharmacists as part of their multi-disciplinary team in England.

In Australia, the signing of the Fifth community pharmacy agreement (5CPA) resulted in a change of business rules for home medication review service allowing GPs to directly refer to an accredited pharmacist of patient’s choice (Pharmacy Guild of Australia, 2010). Until now, this service remains the primary funding structure for pharmacists, and most GPs aim to utilise the same funding when integrating pharmacists into practice, resulting in role limitations. Freeman et al., (2012) in a study agreed that a mix of government and private funding would be an appropriate model of remuneration.

2.3 Professional-Working Collaboration

The success of GPPs is based on the strength of the professional working bond between pharmacists with other healthcare professionals, especially GPs and Nurses. As mentioned in previous section, there was an initial mismatch in expectations (Mann et al., 2018). Furthermore, there was a factor of deskilling other healthcare professionals by GPP, which left a negative impact on the scenario especially at the beginning. But with time and improved understanding of roles, the working collaboration has massively improved between GPPs with not only healthcare professionals but also with the clerical or management staff in the organisations.

2.3.1 Relationship with GPs

Most literature published on this topic has been focused on the perceptions, expectations and reservations of GPs or physicians about integrating pharmacists into general practice clinical teams. Both sides of coin are visible in literature where at one end GPs are reluctant to accept pharmacists as a solution to workforce crisis, while at the other end GPs have given positive feedback on roles being performed by GPPs resulting in reduced workload on GPs and more spare hours to spend on GPs specific tasks like increased patient-facing activities.

As mentioned earlier, the GPPs' role was hindered initially due to practitioners' perceptions and mismatch between expectations, resulting in a tense relationship in the start as both sides were not clear how to facilitate each other roles (Nabhani-Gebara et al., 2019). Prescribing is the main activity in general practice and GP prescribing is often influenced by experiences with individual patients. Some GPs may feel slightly offended or threatened by advice from GPP who normally try to promote a rational approach which highlights the importance of a strong working bond and a trust-based relationship. GPs will need to be reassured about the training, standards, clinical effectiveness, and cost-effectiveness of practice-based pharmacists (MARTIN, LUNEC & RINK, 1998)

Once the understanding developed between the both, the scenario was bound to improve with a positive impact for both sides, a win-win situation, as stated by Simon Stevens, NHS England chief executive (NHS England, 2015).

Ryan et al.'s (2018) reviewed how GPs' workload has reduced because of pharmacists' integration in general practices. This is especially dealing with medicine queries from patients and pharmacies, thus overall improving medicines management.

It reflects a strong working collaboration among GPs and GPPs as expected in this scenario once the initial reservations were clarified. For GPs, a GPP will always be taken as a source of reference and help to reduce their workload, especially for the medicine management.

2.3.2 Relationship with Nurses

Nurses and pharmacists are considered to have complementary skills, and it is vital to have a close working collaboration among themselves for improved healthcare outcomes. Efforts have been made at organisational levels between the Royal College of Nursing and RPS conducting joint summits. In 2015, while the GP pilot scheme was being finalised a joint

report, *"Working together across primary and community care"* was published by RPS and RCN to summarise and inspire both pharmacists and nurses to work together with strong collaboration. (Royal Pharmaceutical Society & Royal College of Nursing, 2015)

Nurses are the second primary workforce in general practice framework, which highlights the importance of their views on GPP roles. It was vital to engage nurses while defining the GPP role to build a strong bond and trust-based relationship through excellent communication. One of the initial reservations, raised about GPP's role was as if it would overlap what nurses were already performing due to lack of clarity on a job description and shades of this is reflected in published literature. (Nabhani-Gebara et al., 2019). It was called as an ongoing turf war between both professions mainly due to lack of job description and communication barrier between both professionals leading to a fear factor in the mind of nurses as if pharmacists were here to replace them.

Ryan et al., (2018) reflected positive remarks about GPPs, though concerns were obvious about role description and medicolegal issues, emphasising the need for regular clinical meetings to improve understanding of each other roles. Despite acknowledging the clinical expertise of GPPs, participating nurses in this study showed their preference to speak with a GP for any medication query as they believed that GP should remain the most appropriate source of contact to deal with clinical queries.

2.3.3 Working Collaboration with Non-clinical Staff

Like the collaboration with healthcare professionals, pharmacist working relationship with clerical staff in practice is extremely important. Good understanding with reception and management staff would build the trust and confidence at both ends with appropriate task delegation and positive feedback from surgery as well as with patients.

Like GPs and nurses, initially, practice staff had also confusion or reservations about how the idea of GPPs would work, mainly due to lack of job description causing trouble on task delegation. It highlights the importance of initial briefing that needs to be done by lead GP or organisational lead to making staff understand what the role of GPP is. (Karampatakis et al., 2019a)

Available studies show the improved relationship between pharmacists and receptionist staff though an element of misunderstanding is still present as stated by some receptionist staff in a study. (Ryan et al., 2018)

2.3.4 Intra-Professional Working Collaboration

GPP's role has made an impact on working relationships within the pharmacy sector, especially with the community pharmacist. Volume of repeat prescriptions and mechanism how the repeat prescription system works at pharmacy always had concerns with surgeries (Mann et al., 2018). On the other hand, pharmacists were still critical of the communications barrier between general? practices and pharmacy (Rubio-Valera et al., 2012). GPPs seem to be in the ideal position to bridge this gap and to keep a close monitoring on repeat prescription protocol and improving the line of communication (Ryan et al., 2018). In some

scenarios, it works out well, but in others, with GPPs cutting down expensive ordering or objecting on repeats prescription ordering does cause the relationship to get worse.

GPP should try to have regular contact with community pharmacist which would be beneficial by building a direct communication line, as suggested by Karampatakis et al., (2019b) study gauging it as one of the KPIs for GPPs. Similarly, it was also stated that the pharmacists should have a strong working relationship with the hospital and organisational pharmacists to improve workflow.

2.4 GPP Skillset / Job Description

To study the shift from the non-dispensing role of community pharmacist to a clinical practice-based pharmacist, several vital publications in recent years have been published, reflecting how the integration can improve the concept of the multi-disciplinary clinical team with specific job descriptions (Stone & Williams, 2015), (Barnes, Ashraf & Din, 2017), (Baker et al., 2019). Results from these studies have resulted in marked changes in the proposed roles being taken by GPPs.

Published literature reflects all major stakeholder's belief that pharmacists are experts in medicines with strong knowledge of medications, citing many instances in which they had used the pharmacy team for information and advice. GPs and nurses described the pharmacists' knowledge of medications as superior to their own (Ryan et al., 2018). There can be the differences in the assigned roles, but GPs and nurses do acknowledge clinical expertise pharmacists have about medications. There has been no specific description for a GPP role in both England and Australia; it is mainly linked with the expectations and requirements of surgery and population. Freeman et al., (2016) in a published paper, came up with 3 broad role categories for GPP, classified as patient-directed, clinician-directed and practice or system-directed roles. In one of the latest study a comprehensive role description and competency map for GPP has elaborated 7 GPP role sub-categories (medication management, patient examination and screening, chronic disease management, drug information and education, collaboration and liaison, audit and quality assurance and research) . It has also discussed further 48 GPP individual roles (Benson et al., 2019).

2.4.1 Enhanced Patient-Facing Role

It involves in-depth face-to-face or telephone medication reviews to optimise patient treatment plans by improving medication compliance which can include stopping, changing, or commencing medication as per recent guidelines for treatment (Karampatakid et al., 2019). It also involves clinics for patients suffering from long term medical conditions like diabetes, asthma, COPD and hypertension, polypharmacy as well as triage for medicine queries. (Barnes et al. 2017) published an article which highlights the development of advanced pharmacist practitioner to strengthen the role of GPP further. Another study concluded that practices with GPP have a lower rate of medication-related hospitalisation emphasising the role of GPP in managing the care of high-risk patients. (Sloeserwij et al., 2019)

To conduct clinical medication reviews by a pharmacist is not a new phenomenon. A study (Zermansky et al., 2002) was published in 2002, suggesting better efficacy of medication

reviews by including clinical pharmacist in the review team. This could result in reduced polypharmacy and increased net NHS savings. Another study by (MacRae et al., 2003) showed that the pharmacist-led medication review clinic in general practice leads to better prescribing, improved patient satisfaction, as well improvement in GPs medicine-based knowledge.

World health organisation published a report (WHO, 2003, p. 7) stating that the adherence among patients with chronic disease averages only 50%. In the same report, the role of the pharmacist was highlighted and it was recommended to use clinical pharmacists to engage with patients and to improve compliance, a role which now has become an integral part of any GPPs' job description.

With the added qualification of Non-Medical Prescribing (NMP), GPPs are also running clinics for minor ailments. In the initial phase, most of the GPPs were not involved in patient-facing activities, but as mentioned by Bradley et al., 2018. there was a significant increase in patient-facing activities performed by phase 1 pharmacists of NHS England pilot scheme. It involved activities like medication reviews, home visits or running clinics like minor ailment or immunisation or travel clinics.

2.4.2 Comparing Home Medication Review Service with Medication Reviews Performed in the GP Practice

HMRS is the main structures medication service been performed in Australia now. As discussed earlier, the focus is to extend this role with medication reviews to be completed by GPP inside clinics. A study conducted by Tan et al., (2014a) showed the positive impact of performing such reviews in clinics rather doing it at home or in community pharmacy with much-improved satisfaction rate among patients. Similar findings were published in a study by Freeman et al., (2012) suggesting an increase in timeliness and completion rate of medication reviews by GPPs conducting medication reviews inside the clinic.

Mackie et al., 2019 conducted a study in Australia on medication reviews for patients living with HIV. The study concluded that the GPP working within general practice has better clinical knowledge and access to medical records to provide a timely and clinically useful medication review.

2.4.3 Medicines Management / Optimization Pharmacists' Role

Reducing the medicine management workload on GPs has been the primary expectation from GPs, especially in the initial phase. This role involves dealing with GPs, nurses, community pharmacy and patient's medication query. This also involved conducting audits to improve prescribing and medication usage, reducing medicine wastage, management of repeat prescriptions, dealing with the hospital discharge summaries, QOF monitoring as well as reporting etc.

2.4.4 GPP in Prescriber Role

At present pharmacists are legally able to prescribe prescription medications in New Zealand, in certain provinces of Canada as well as in some parts of United States (Raghunandan, Tordoff & Smith, 2017)

The prescribing role for pharmacists is gaining more importance as healthcare systems both in England and Australia are aiming for a multi-disciplinary team with diverse qualifications. Though concerns are present about protocols needed to supervise prescribing qualification, it is widely accepted by healthcare professionals that GPPs can take over the responsibility of dealing with repeat prescriptions authorisations and managing medication changes while running clinics for chronic conditions, medication reviews or minor ailment clinics. Gerard et al., (2012), demonstrated that patients do value pharmacist prescribing service as an alternative to doctor prescribing

In Australia, prescribing annotation for a pharmacist has not been approved by the government as GPs at this stage are not willing to award it to pharmacists. Although, like England, role acknowledgement is visible in the literature (Hale et al., 2016) but need to set up strict protocols structure is the way going forward (Hoti et al., 2011). Association Medical Association (AMA, 2008) in a report indicated that they do not support prescribing roles for pharmacist in response to a proposed limited extension of prescribing role by Pharmacy Guild of Australia, as they believe it is the sole right of doctors raising concerns on pharmacist training and conflict of interest with pharmacist engaged in both dispensing and prescribing.

2.5 Patients' Feedback on GPPs' Role

Patients feedback and satisfaction plays a significant impact on the dimensions of care plans. Strong understanding of patient's expectations by GPP role is imperative for the success of this role. The literature reflects initial hindrance by patients to interact with GPP as they had concerns about their clinical knowledge and expertise in comparison to their GPs and nurses, which shows lack of role understanding (Ng, Harrison, 2010). For patients, to interact with GPP at the surgery has been a new experience as they are used to see the pharmacist in the community (Bajorek et al., 2015). Literature shows an improvement in the trust of patients for GPP though concerns about their clinical knowledge and expertise in comparison to GPs and nurses are also apparent.

The research was done by Petty et al. (2003) on-medication reviews conducted by pharmacists in GP settings. It did not show any significant benefit of this exercise as many patients were not satisfied with the expectations of improving medication compliance or quantity of medicines they are taking, also they showed a preference for GPs to conduct the review.

The feedback is also reflected in one of the pharmacist statements given during a study conducted by Karamapatais et al., (2019). The study narrated that there is no clarity regarding the role of GPP. With the passage of time and GPP getting more settled in the settings,

positive impact on patient care is getting more visible which is also reflected in the feedback of patients given in the study by Ryan et al., (2018)

In a published report (Pharmaceutical Journal, 2016) on patient feedback about GPPs in England, 76.9% of 316 patients and carers said having a clinical pharmacist in practice was an advantage while 77.5% said they would welcome the chance to have their medicines reviewed by a clinical pharmacist. In another survey conducted in Australia (Freeman et al., 2012c) patients were welcoming the idea of integrating pharmacists into general practice.

2.6 GPP Role in Private Clinics:

Literature has also been published on proposed role of GPP in private clinics (Saw et al., 2015) & (Saw et al., 2017). With private clinics working independently, the studies have aimed to analyse how beneficial it could be to integrate a pharmacist in clinic to help with medication related issues while keeping an eye on costs. A study conducted in Malaysia (Saw et al., 2017) exploring pharmacists' views reflects the views presented by GPs, patients and pharmacists on the proposed role. The similar patterns as those of public healthcare sector can be seen with the private GPs and consumers perceived GPP to be helpful in roles including prescribing audits, medication reviews, drug information, disease management, patient counselling and medication stock management with improved communication among GPs and pharmacists. At the same time, GPs showed concerns about pharmacists affecting private clinic business as taking over some of the of GPs' functions and in turn increasing the cost. As for the pharmacists, the study showed young pharmacists are more willing to take this challenge in comparison to pharmacists who had been working in dispensing environment for a long time. The feedback from patients or consumers in private practice depends on the cost of treatment. Positive feedback is obvious for using pharmacist as source of medication expert, but concerns were raised about possibility of increase in overall cost due to pharmacist integration (Saw et al., 2015).

Chapter No. 3

RESEARCH METHODS

This chapter provides a comprehensive insight into methodology adopted to conduct this study. Choosing the right methodology is a crucial component of a successful research project. Some researchers believe quantitative research has more impact on figures for key indicators, but qualitative research has its importance that goes beyond numbers (Greenhalgh & Taylor, 1997). Research solely based on "numbers" in quantitative research will not be enough to understand the feelings of individuals involved in specific phenomenon.

3.1 Qualitative Research

Qualitative research is an important tool to improve understanding of medicines (Malterud, 2001). It helps in finding the answer for questions about "why" something is the way it is and "how" different individuals think and respond to circumstances by sharing their views and thoughts to analyse present and guidance for future (Austin and Sutton, 2014).Qualitative research is widely used in NHS England and other healthcare organisations with growing acceptance and recognition of the benefits in clinical and biomedical fields by gathering views and perceptions of key stakeholders and to probe deeper into findings of quantitative research (Pope, Pope & Mays, 2019) & (NHS England, 2017). Qualitative research can provide valuable insight into the health-related phenomena by gaining an understanding of underlying reasons, opinions and motivations of stakeholders about study objectives, providing rich details about study objectives as well as stakeholders' perspectives, expectations and experiences (Neal et al., 2015). It explores various types of existing practices, policies and beliefs with analysis leading to recommendations of how to improve it and guidance for further research by adopting person-centred and holistic perspective based on understanding of human experiences (Holloway, Wheeler, 2010, p. 12 and Babar, 2015, p. 27).

National websites such as NHS Choices enable people to give qualitative feedback about the services they receive, as do many national surveys on healthcare. At a local level, patients can give qualitative feedback in a variety of ways including through patient participation groups, complaints, or comments on online platforms. NHS England commissions qualitative research and uses qualitative data in a variety of ways, including in the design and development of new policies, in the delivery of national programmes, in the evaluation of policies and initiatives and communications and campaign activities.

Qualitative research consists of different phases, aiming for the systematic gathering of data on the required topic, which can be divided up into conceptual, design and planning stage, empirical data-generation phase, analytical phase and dissemination (Babar, 2015, p. 51). There are 3 main methodologies that are used in qualitative research to gather and analyse data. These are ethnography, grounded theory and phenomenology (Zubin & Sutton, 2015, p 172). The researcher should make sure that the selected design is appropriate for research main aim and objectives as the validity of drawn conclusion in qualitative research is dependent on clear understanding of research and intended outcomes which in turn informs

the appropriateness of the chosen design (Chapman, Hadfield & Chapman, 2015). One-to-one interviews, focus groups and observational research techniques are the ones which are most commonly used in qualitative research but additional useful methods include participant-observer research, action research, grounded theory, case studies and the Delphi method (Zubin & Sutton, 2015, p 194-202)

This is a general inductive study in which the principal researcher has used semi-structured one-to-one interviews. The GPP roles in England are still new with ongoing research to analyse its impact on the healthcare system under NHS England pilot scheme. As the main aim of this study is to explore views and perceptions of key stakeholders by understanding their individual experiences about GPPs' role, hence it was decided to undertake an Interviews technique which can unearth rich contextual data.

3.2 Ethics Approval

Ethical approval to conduct any research project is a must and a vital step. For this study, an ethical application was submitted to the Ethical board for approval with the details of aims and objectives of study, participant group detail and semi-structured interview guide. The study is approved by the University of Huddersfield Human Research Ethics Committee *(Reference number: SAS-SREIC 14.5.19-3*).

Following are the main ethical issues which were considered during this project:

***Anonymity*:** To protect the identity of participants, it is vital to ensure anonymity wherever possible with techniques like allocating pseudonyms or participant numbers instead of using real names. In this study, a unique participant number/letter was assigned to each participant from both England and Australia.

Confidentiality: personal details of participants are mostly necessary to be shared with the researcher directly or indirectly. The researcher must ensure confidentiality of such data like email ID, phone numbers, job perspectives and personal views and to access only that information which is needed only for the research project. During this course of study, the principal researcher must maintain a high level of confidentiality in all these aspects.

Ask/Observe only what is necessary: It is essential to ensure that interviews and focus groups should remain within the targeted framework related to the topic of the subject. Researchers should respect the time availability of participants as discussing irrelevant information would not only distract participants from the original purpose but also would lose their interest. To ensure this, an email was sent to all participants with relevant topic information and specific questionnaire for them to have a first-hand knowledge before the actual interview. It also gave them an opportunity to gather their views according to the interview structure, which did help to keep actual interviews within the targeted time framework.

Participant respect and honour: To schedule interviews and focus groups considering the time availability of participants is essential to highlight their respect and to acknowledge the support they are providing for the research project. It should be the researcher's responsibility to provide all the necessary facilities for participants ranging from commuting to cover any financial compensation for their time. The principal researcher kept himself very

flexible in accordance with the time slots for interviews and adjusted his working diary in accordance with time available by participants, especially for participants from Australia, considering time difference between England and Australia. It is important to highlight that there was no financial compensation requested from any participant neither it was offered at first point to lure them into participating in the study.

Option to review or withdraw: It is the researcher's responsibility to provide all participant with an opportunity to review the interview's transcripts. Participants were informed that they can withdraw from the project anytime whenever they like. The principal researcher sent an email to all participants with a participant information sheet, consent letter and with an interview guide.

Secure storage of raw data: All collected data, as part of this study is subject to secure data protocol approved by the University of Huddersfield.

Informed consent: To gain consent from all participants is essential in any research project. As highlighted before, all participants for this project were given the required information which did include rationale, objectives, methods, confidentiality, storage/disposal provisions. Their rights to withdraw or review data and informed consent were obtained from the participants before the actual interviews were conducted.

Safety netting: Finally, all participants should have details whom to contact if they have any concerns before, during or after about the research project as part of safety netting. The principal researcher provided details of relevant departments at the University of Huddersfield.

3.3 Sampling / Participant Selection

For successful research, it is vital to have relevant and well-reasoned participants who can share their experiences and views towards qualitative data. Unlike quantitative analysis, qualitative research normally has a small sample size. Sampling can be either conceptually driven approach (purposive & theoretical) or non-conceptual driven approach (convenience & opportunistic) depending on study requirements (Farrugia, 2019).

As this research is about key stakeholders' perceptions of GPP, the principal researcher opted for purposive sampling technique. After a detailed discussion with the supervising research team, five stakeholders' professionals' groups were identified. These were GPs, Nurses, GPPs, Organizational lead and Academics from England and Australia.

3.4 Semi-Structured Interview Guide

A comprehensive literature review was performed. The themes identified from the literature feed into design the semi-structured interview guide.

There were 5 separate interview guides, one for each stakeholder:

3.4.1 General Practitioners (GPs) (Appendix 1)

GPs are at the centre of every general practice framework. Any clinical or organisational policymaking at the government level is profoundly affected by the views of GPs on relevant issues. As mentioned in the introduction section, the emergence of GPP role was mainly aimed to facilitate GPs in their workload and to bridge gaps due to GP workforce crisis. Hence it was essential to have detailed information about GPs initial perceptions and as well as what changed since the beginning. Considering the central role of GPs, their views will have the main say in deciding the future of GPP role, so interview guide was designed to find if they believe GPP has reduced their workload as per their initial expectations and how they want this role to evolve in the future. (Appendix No: 2)

3.4.2 Nurses (Appendix 2)

Nurses are a central part of any multidisciplinary clinical team performing a range of clinical roles. As the role of GPP lack specific job description, there is a school of thought about GPP role being overlapping with what nurses are already performing in general practice. Therefore, it is important to get views from nurses about GPP and how they feel working along with GPP have changed their training, so interview guide was designed to explore Nurses' views on GPP as a member of a multidisciplinary team and their perspectives on barriers and facilitators especially role overlapping and the future co-ordination.

3.4.3 Clinical Practice based Pharmacists (GPP) (Appendix 3)

It is important to understand how a pharmacist has professionally grown while working as GPP. Many of the studies conducted so far have focused on views of mainly GPs and the impact of GPP on healthcare system but little focus has been on what were the perceptions of pharmacist when they took on this role and how they have changed since considering the barriers and support they have received during this time. Interview guide for a pharmacist was designed to give them an opportunity to discuss aspects like working collaboration with other healthcare professionals, job descriptions, organizational support, training requirements and any suggestions they might want to share keeping in view their experience to support future of GPP role.

3.4.4 Organizational Lead (Appendix 4)

The interview guide was designed to get the views of a stakeholder in practice or organization that has a role to play in the recruitment of clinical staff. It will give an idea of what are concerns or importance of including a GPP in the multi-disciplinary team.

3.4.5 Academic staff (Appendix 5)

A professional who has experience of research in the healthcare sector, especially the general practice framework. It will highlight how the general practice framework has been evolving, any gaps that they had found in their research, government past or ongoing policies and what impact GPP would have considering their research.

Attempts were made to keep the whole process within a defined structure, with some adjustments to make it more specific to each stakeholder. The initial interview guide was reviewed by research supervising team a few times and after a few adjustments, it was approved to be submitted for Ethics approval. The interview guide was designed on the following main themes:

3.4.6 Perceptions & Challenges

Open-end questions asking stakeholders to give their views on the initial perceptions and reservations they had about GPP's role, operational challenges that they came across in beginning and how these parameters have changed since the integration of this role in general practice.

3.4.7 GPPs' Working Collaboration

To review working collaboration of all stakeholders with GPP, how this collaboration can be improved and the impact a GPP had on the scope of practice of different healthcare professionals.

3.4.8 Pharmacists' Skillset

To review professional competency of pharmacists working as GPP to perform either patient-facing roles in clinics and medication reviews or non-patient facing roles like medication management and running clinical audits etc. It also allows discussing prescribing accreditation of GPP and how the other main stakeholders value this annotation.

3.4.9 Government Policies

Most of the available literature on GPP role is about the evaluation of government funding policies for GPP role, therefore it was important to get views of stakeholders on such policies.

3.4.10 Future of GPP Role

To review stakeholders' perception on the future of GPP including aspects like government policies for funding, pharmacist training pathways, defining job description for GPP and defining key performance indicators (KPIs) to evaluate the success of GPP role in general practice framework.

3.5 Interviews

For this study, principal researcher has opted to select individual Interviews to design and to collect the data. It gives an ideal opportunity to engage in a conversation with participants in a comfortable environment to share their personal views and perceptions about GPPs' role in their own words.

3.5.1 Participant Recruitment

As mentioned earlier, it is very important to design the interview in a correct manner, where the participants should be respected and valued by keeping the structure of interview (format and content) relative to the study and to gather the information with open-end questions.

Same time, it is equally important to select those participants who are willing to engage in the research process with an open mind and to share their views honestly.

The purposive sampling was implemented to recruit main participants, based on their respective expertise and experiences were the ideal professionals with a deep understanding of the GPP role. It was decided to recruit total of 10 participants for this study, 5 each from England and Australia, though this figure was changed later due to participant's response and availability. As it was a comparative study between England and Australia, so it was made sure that participants are working in the same set of environments in both countries. It was followed by preparing a semi-structured interview guide to perform interviews.

A participant information letter (Appendix 6) was sent to the proposed participants via email. In England, a total of 15 individuals were contacted out of which 7 did agree to participate in the main study. They were 2 GPs, 2 nurses, 1 GPP, 1 organisational lead and 1 academia.

There were difficulties in recruiting participants from Australia. The principal researcher did contact in a total of 62 individuals via email, Facebook and twitter. The primary researcher also did visit Australia during November 2019 and contacted few healthcare professionals regarding the study. Finally, the principal researcher was able to recruit in a total of 8 participants from Australia. They were 1 GP, 1 nurse, 3 GPPs, 1 organisation lead and 2 Academia. Out of these, 3 participants of Blackburn Medical clinic in Australia (GP, Nurse and pharmacist) agreed to provide a written response to the designed interview guide. Ideally, an interview would have been a preferred choice, but as the principal researcher was unable to recruit any GP or nurse from Australia despite all attempts, after consultation with the supervisor, it was agreed to proceed with a written response. The pharmacist from same surgery was also asked to provide a written response. So, for this study, in total 12 interviews were conducted including 2 pilot interviews. The details are provided in table 2 and 4.

3.5.2 Pilot Interviews

After approval of ethics application and the initial draft of the interview guide the main researcher contacted participants, both in England and Australia, to conduct pilot interviews. The main researcher is working as a GPP since 2016, an informal discussion with the GPs helped to develop a semi-structured interview guide as well.

The pilot interviews were also conducted with a GP in England (Appendix 7) and a clinical pharmacist in Australia (Appendix 8) who gave valuable views about the scenario of GPP role in England and Australia respectively.

3.5.3 Conducting Interviews

To get the best, out of participants during interview, it is particularly important to create a professional interview environment where participants have got beforehand information about the topic. The participants were also provided with interview guide, study description and a participant information sheet.

The ethics approval form and the guide were sent to the participants. Time for interviews was decided with mutual understanding. Before starting interviews, consent was gained from

participants to proceed with interviews as well as to record the interviews either via skype or on phone. Each interview was scheduled for about 30-45 minutes. The interviews transcripts are provided in the appendix.

Appendix 9: Interview with GP2/England

Appendix 10: Interview with GPP/England

Appendix 11: Interview with Organizational Lead/England

Appendix 12: Interview with Academia/England

Appendix 13: Interview with Nurse 1/England

Appendix 14: Interview with Nurse 2/England

Appendix 15: Interview with GPP1/Australia

Appendix 16: Written Statement by GPP2/Australia

Appendix 17: Interview with Organizational Lead/Australia

Appendix 18: Interview with Academia 1/Australia

Appendix 19: Interview with Academia 2/Australia

Appendix 20: Written statement by Nurse/Australia

Appendix 21: Written statement by GP/Australia

3.6 Data Analysis

All interviews were transcribed verbatim and the detailed data analysis was performed. During the coding stage, the principal researcher after reading the transcribed document, identified possible themes that emerged from the available data. For the analysis of qualitative data, thematic analysis was used because it is a method with a flexible approach that can be used to identify, analyse, organize, describe and report themes found within the available data and can produce trustworthy and insightful findings (Braun & Clarke, 2006). . There are two ways to identify the themes in thematic analysis namely, deductive, and inductive thematic analysis. The inductive thematic analysis was employed to identify and analyse themes in this study. The inductive analysis is preferred over deductive thematic analysis because no pre-determined theory or framework is used to analyse data and researcher use the logic to understand concepts, results and then summarize them unlike deductive analysis in which researcher has already a picture or idea in mind (Wardani, Kusuma, 2020). Another reason was that little is known about the topic under study, therefore inductive analysis is a better option as it is a process of coding the data without trying to fit it into a pre-existing coding frame or the researcher's analytic preconceptions (Nowell et al., 2017). For this study inductive thematic analysis was performed using "Nvivo software" and results were compiled based on those themes.

Chapter No. 4

RESULTS

4.1 Demographics

The main idea of the research was to compare GPPs' role between England and Australia in similar settings for which a similar number of key stakeholders from both countries were targeted for interviews. In total 21 participants from England and 41 from Australia were contacted but only 7 from each country agreed to participate. It is important to highlight that the number of participants within each group varies between both countries. Table 2 and table 4 describe the breakdown of participants in detail.

Table No.2: Participants' profiles from England (E)

	Contacted	Responded	Discussion
GPs	5	2	GP1/E & GP2/E
Nurses	6	2	Ns1/E & Ns2/E
GPPs	4	1	GPP/E
Organizational Lead	3	1	OL/E
Academics	3	1	Ac/E
Total	**21**	**7**	

Table No.4: Participants' profiles from Australia (A)

	Contacted	Responded	Discussion
GPs	6	1	GP/A
Nurses	8	1	Ns/A
GPP	7	2	GPP1/A, GPP2/A
Organisational Lead	8	1	OL/A
Academics	12	2	Ac1/A, Ac2/A
Total	**41**	**7**	

Overall, in total 62 professionals were contacted to participate in this study, out of which 14 agreed to participate. In total, 12 interviews were conducted. This low rate of response might have an impact on the strength of the results as well as on conclusion. This aspect has been acknowledged while gathering the results and drawing conclusions. Same time it is important to understand that, at government policy level, GPP is a new role and it is hard to recruit large pool of expert participants. As explained in the table 2 and table 4 a large number of

pharmacists and GPs were also approached in Australia and England. Though numbers may be small, but they do significantly add to the thesis. This has also been described in the section 6.1 under limitations of the study

4.2 Themes

Major themes that emerged during the interviews were:

1. Initial Expectations & Reservations by Key Stakeholders
2. Barriers and Facilitators
3. Working collaboration
    a. GP and Pharmacist
    b. Nurse and Pharmacist
4. Pharmacist Skillset
    a. Patient facing role
    b. Prescribing role
    c. Medicine management role
5. Key performance indicators
6. Evolving GPP role
7. Future of GPP role
    a. Government funding
    b. Future Research
    c. Training and job description
8. Patients feedback

Table No. 4: Thematic analysis of data

Main themes	Sub-themes
1. Gaps in general practice framework	How GPP can fill the gaps highlighted in general practice framework.
2. Initial expectations & reservations by key stakeholders	1. Lack of training 2. Medicolegal issues 3. Role overlapping with nurses 4. Patient facing role 5. Patients' acceptance
3. Working collaboration	1. GPs & Pharmacists 2. Nurses & Pharmacists 3. Inter-professional collaboration 4. GPP as link in between organizations
4. Pharmacist Skillset	1. Patient facing role 2. Prescribing role 3. Medicine Management role

5. Future of GPP role	1. Government funding 2. Training and job description 3. Future research
6. Patients' feedback	
7. Key Performance Indicators	Discussion about what measures can be used to evaluate GPP impact on healthcare.
8. Evolving GPP role	Discussion about how GPP role has evolved both in England & Australia in the past 5-10 years.

4.3 Gaps in the General Practice Framework

All participants from England and Australia recognised that there are gaps present in the healthcare system, whether it is primary or secondary, having a significant impact on the general practice framework. Reasons behind this widening gap, range from staff levels, i.e. shortage of healthcare professionals, especially GPs and nurses to an ageing population with complex medical conditions that need a multi-disciplinary clinical team to address issues from various angles.

GPs said that there is a big gap which is getting bigger and with present steps taken, it could be another 5-10 years before the situation can be improved. This also highlights to focus on a multi-disciplinary clinical team approach. This can facilitate other healthcare professionals including pharmacists into the team.

England's academia also highlighted the significant impact of Brexit on workforce especially nursing sector which would have a dominos effect on primary healthcare workforce adding more pressure on GPs and a negative effect on the quality of patient care.

Academic from Australia highlighted the impact of gaps in general practice onto the secondary care, where she believes many patients come in an emergency or for hospital admission, which could have been treated in the general practice.

> *"I think in terms of gaps, one of the main gaps or one of the main challenges is the fact that it can be quite difficult to get into a good GP. And yeah, that then flows on to the public hospitals being flooded" (Ac/E)*

GPP as a source to bridge the gaps in general practice framework

A consensus has emerged from the collected data that clinical pharmacist can bridge the gaps present in general practice framework. Though some reservations have been raised, in general, participants agreed that the expertise of the pharmacist regarding medicines can be used to facilitate the workflow of general practice and support for all clinician. There are differences in England and Australia in terms of available opportunities. England is running

the NHS pilot scheme under which pharmacist integration into medical practices is being facilitated financially. Australia seems to be in very much initial phase, where Home Medication Review Service (HMRS) is being considered as the leading team-based service which involves pharmacists.

Nurses from both England and Australia acknowledged the importance of integrating pharmacist in general practice to fill the gaps and perform roles in medication reviews, minor ailment clinics, optimise medications and to be the professional to contact by patients who get anxious when medications are changed in accordance with local guidelines.

> *"I think there's always a gap in healthcare system to be honest, but with the clinical pharmacists, I think every GP practice needs to have them because they do cover a broad range of topics in the practice itself, and they're more of a support for every clinician, any GP practices they don't have pharmacist, they're kind losing out." (Ns2/E)*

Academic from England (A/E) believes that there is strong potential for pharmacists to lead from the front and fill this gap especially if they can support GPs in managing long term medical conditions. This could be linked to possible shortage of nurses in coming years due to Brexit. Similar observations were described by academia from Australia that as a medicine expert, the GPP can look into medication-related issues and can be a valuable addition to the general practice workforce in providing a holistic approach to treat long term conditions by performing medication reviews.

> *"I think putting pharmacists into GP practice has a lot of benefits because then patients experience holistic care, especially if you got pharmacists, nurse and GPs". (Ac2/A)*

Organisational lead from England (OL/E) highlighted the clinical pharmacists as the professionals best placed to deal with the clinical issues such as polypharmacy.

The views from OL/Australia were also important, and she said that writing a prescription is the most common intervention done in general practice where pharmacists' clinical expertise can be vital in providing quality use of medicines framework.

> *"within that episodic care that the GPs provide probations, there's a gap in more overarching expertise into decisions about medications and monitoring that would be- could fulfil by having a resource of a clinical pharmacist in practice". (OL/A)*

4.4 Expectations by Key Stakeholders Regarding GPPs' Role

This study shows a variance of expectations by key stakeholders from GPP role in initial phases. The initial expectations vary and are based-on surgery's requirements.

One of the GPs said that the initial phase was very unstructured with time limitations linked with available funding. The main aim was to utilise pharmacists in their best expertise but same time making sure pharmacist is enjoying and developing the role.

> *"I didn't have any great massive expectations. It was more like, see how the things work out in the end. Initially it was very unstructured, in retrospect, unfortunate, may be and I wish we'd been able to structure it a bit better" (GP1/E).*

The Organisational lead (OL/E) from England was expecting pharmacist as a professional who could join the organisation in a management role performing optimisation and audits, but with time it was realised that in addition to management, the pharmacist could be a beneficial addition to the clinical multi-disciplinary team as well.

> *"Yeah. So, I think they were used as sort of a bit of a lower level at work forms. Whereas actually what we're realising now is that they…they have all of those skills that actually probably placed it at more of an advanced level". (OL/E)*

Her counterpart in Australia has mentioned the aspect of variance in expectations mainly keeping GPs as the focal point but emphasised that it is a new role and needs time to allow pharmacist to develop a professional relationship. In her views, some GPs are proactive to create this trust, and some are slow to build this bond leading to miscommunication and mismatch between expectations and performances.

One of the nurses mentioned mismatch of expectations which has improved over time. She was expecting broad job specification role for GPP at beginning which they would get on with straight away as already trained professionals.

With some reservations about patients' consultation, pharmacists had also performed some duties which she was not expecting them to perform. She thinks now she has an idea of what to expect from any new GPP who joins the clinical team.

Views of pharmacists from both countries slightly differ regarding the expectations of their roles. The pharmacist from England reflects an element of mismatch of expectations while pharmacist from Australia said that her expectations were fairly matched with no initial reservations at both ends, mainly because she knew what surgery was looking for and fortunately the requirements were her strong points.

> *"Some GPs had over expectations with the impression that as pharmacist we should be able to do anything or everything, but some GPs were very cautious" (GPP/E)*
>
> *No, the expectations were fairly well matched. They wanted someone who could champion the prescribing and that was the area of my PhD. So, it was fairly well matched and the principal GP and I had fairly similar interests and skills, so we were able to work at programmes together which were then discussed with the broader team. (P/A)*

4.5 Reservations by Key Stakeholders

Following are the main sub-themes that have emerged from the interviews.

- Lack of training
- Medicolegal issues
- Role overlapping with Nurses
- Patient facing role
- Patients' acceptance

Pharmacist, in general, has been seen in England and Australia mostly in a dispensing role so there were initial concerns if they have been well trained to integrate into general practice, raising some interesting reservations from the participants.

For England's' pharmacist, the main one was clinical knowledge with an element of anxiety while talking to doctors to make sure he sounds professional whatever he says, while giving his clinical opinions. Australian pharmacist did not mention any reservations as she was very confident with her role specifications and the clinical knowledge, she had to fulfil her role.

Nurses also did not mention any specific reservation from the role and were very positive.

> *"No, not at all, I always think the more people you've got with a difference of experiences, the better it is" (Ns1/E)*

GPs did not mention of any significant reservation regarding the pharmacist's role, though due to the lack of job specification and training, above mentioned concerns were reflected in the interviews. They attributed it towards the strong supervision system that has always been implemented at practice to train and supervise the initial phase of pharmacist integration.

> *"No reservation, because we have quite a robust system supervision. So confident that, that is effective" (GP2/E)*

4.6 Pharmacists' Skillset

One of the main themes that have emerged in this study is regarding "what should be the role of GPP". As mentioned earlier, there is no specific job description set by any regulatory organisation for GPP. Every organisation has a job description based on its population and practice demands.

Following are 3 main sub-themes that emerged from this study:

4.6.1 Patient-Facing Clinical Role

One of the expectations from GPP is to perform a patient-facing role by running clinics or in the form of performing medication reviews either in surgery or during home visits. Community or hospital pharmacists both are in practice to face patients but with different skills set. Any pharmacist while working as GPP must make sure to be equipped with strong communication and clinical skills. GPs and nurses both are confident that pharmacists can be successful in a patient-facing role but needs to have professional training and development with continuous support and supervision.

> *"I think yeah, they are getting there. It's all about training and development" (GP2/E)*

Nurses believe pharmacist have got good patient-facing skills when doing medicine reviews, as reflected in patient feedbacks and comprehensive consultation notes, but to run clinics they are not well trained as it is not a part of their professional study. Hence to have competent pharmacists, they should shadow nurses and GPs to improve the skill.

> *"I think medication reviews and all the other reviews, home visits where it's a few minutes; they're really good at that right at the beginning. But face to face it needed time to build up. So I think what they will benefit from like other pharmacists is maybe to sit in with the nurse a little bit" (Ns2/E)*
>
> *"Well, what I see, the patients' feedback or the consultations and it's just another way to make sure patients are having the right medication, another way for patients to understand and therefore increase…improve compliance and the consultations are always*

> *really quite comprehensive and the patients' feedback has been good as well" (Ns1/E)*

Pharmacist participants have highlighted the need for supervision for patient-facing role especially in the initial phase. Sametime, the pharmacists, should make sure they are involved in continuous professional development by attending courses or regular training session. The same aspect was highlighted by organisational lead that mentorship and consultation audits are essential to train and supervise pharmacists in the patient-facing role.

> *"Yeah, so I think there needs to be a level of doing that under the clinical supervision first. So having clinical supervision within the practice is very, very important and having the GP on board for that". (GPP/E)*

One pharmacist mentioned the need for making strong rapport with patients along with consultation skills and documentation to ensure competency in this patient-facing role.

> *Yeah, it's not just the clinical knowledge, though, it's also that ability to build that rapport and get that information and how do you synthesise that information. (GPP1/A).*

Organisational leads from both England and Australia believe that patient-facing role is something that will be eventually be an integral part of GPP job description. It is at an evolving stage, and with the skills and expertise, pharmacists have, sooner or later specific clinics which are at present been run by sole nurses would be delegated to pharmacists as part of multi-disciplinary settings.

4.6.2 Prescribing Role of GPP

Prescribing annotation is one of the competencies where not all the participants are on the same page. It is also most probably the main difference in job description between GPP in England and Australia.

In England, Non-Medical Prescribers (NMP) qualification as an independent or supplementary prescriber has been awarded to pharmacists for past few years after completing the specific non-medical prescribing course. Afterwards, they must make sure that they would prescribe within their competency based on their prescribing p-list. On the other hand in Australia, this aspect has not been approved, though it has been discussed by keeping NHS England as a model, it is evident from participants' views that it is not something that will happen in near future as GPs are not very keen to allow pharmacists to starts prescribing.

> *"No, they just think it's a GP role, they wouldn't support it". (GPP1/A)*

> *"I think it would fit quite well but it's- we're not mature enough in that area yet to actually have sensible discussions with practices about that yet, that's not possible yet". (OL/A)*

Organisation Lead (Australia) believes that the way the UK initiated model of supplementary prescribing in primary care, similar type of settings will be initiated at first stage, though it is something at very initial stages and being discussed between various governing bodies but at this moment GPs are not willing to let pharmacist prescribes and this might take a long time.

> *"That will be exactly how it happened, so limitations, yeah, the doctor has to be involved in the beginning and it has to be like you say, no changes, no red flags, it's really just a repeat and things going well, and I think that we're all moving to that, but it would probably take 50 years." (OL/A)*

The same aspect has been mentioned by an English GP. In her practice, the pharmacist is not allowed to prescribe as she believes unless someone has specialist qualification like in diabetes or asthma, the pharmacist should not prescribe. Though she thinks pharmacist has got skills and knowledge to be a competent prescriber, it is they need close monitoring and supervision protocols to ensure safe prescribing practice.

> *"it's ironic isn't it because as doctors we don't receive much training I'm prescribing yet we're…we're, you know, giving free reign to a prescriber when a pharmacist will know a lot more about premedical terms you know how stuff works. So, I think it will be gradual under supervision and then expand their role". (GP2/E)*

On the other hand, GP1/E said he would be happy for pharmacists to take the prescribing role but does believe protocols should be developed by organisations to facilitate prescribing role by pharmacists and nurses. English nurses and OL believe pharmacist as an expert in medicines can perform well as prescriber as they are in an ideal position to ensure safe and cost-effective prescribing.

> *"'because they got pharmacological background. Naturally, they…the actual…the prescribing, the medication. They understand the medication better. So, definitely prescribing sits well with pharmacists" (OL/E)*
>
> *"Because they're the ones who pick up all the mistakes the doctors make, so I think they're probably better off than any one of us" (Ns2/E)*

Pharmacists from both countries emphasised the importance of strict protocols for prescribing to avoid scenarios of any medico-legal issues and setting where patients can get prescriptions without being supervised by doctors.

> *"I think as long as pharmacists are prescribing within their competence and there's no pressure on them to prescribe outside of their competence is fine" (GPP/E).*
>
> *"My reservations would include patients wanting to bypass the GP and 'just get a script'. There would need to be strict protocols in place." (GPP2/A)*

GP and Nurses from Australia did not mention anything specifically related to the prescribing role of the pharmacist.

4.6.3 Medicine Management Role

Medicine management skill is the one which all stakeholders believe is the biggest strength of GPP role. GPs and other healthcare professionals had given very positive remarks about medicine management skillset of GPP. As mentioned by organisational lead in her interview that GPs are not very confident in dealing with medicine management queries, so it was one of the expectations by GPs from pharmacists to come and help them with. GPs did highlight the increasing medicine management workload especially from hospitals where he feels the presence of GPP would be helpful. They also emphasized to have more pharmacist's time in general practice.

> *"I feel that we need more pharmacist time. I've felt that...felt that for a long time because I'm a busy GP. My idea would be that I wouldn't have to deal with as many medicine managements queries each day, maybe do more ones which need to be discussed between GP and pharmacist, that's how I would view it, hopefully" (GP1/E)*

The nurses mentioned it as the main advantage of GPP role, a quick source of medicine information helping them to ensure safe practice.

> *"Well, I think that's probably one of the biggest advantages of the role which is this safer medications and that's the area of the pharmacist". (Ns1/E)*
>
> *"Yeah, they are quite…and especially when they've done clinical knowledge as well. It works out well". (Ns2/E)*

Australian pharmacist said it's not just the knowledge about medicines, on a bigger scale it also involves analysing the requirements of patients and to help them in improving medication compliance.

> *"I think that's essential and I don't think it's just the clinical knowledge, I think it's also being able to see what patients are doing and support patients to manage their medications". (GPP1/A)*

OL/A in her interview also mentioned medicine management skills as a strong point for pharmacists' recruitment in the organization. She highlighted pharmacist maturity, experiences, patient approach and documentation aspects like writing reports for their consultations as main recruitment points when undergoing an interview for GPP jobs.

4.6.4 GPP as a Link between Organisations

With GPP integration in general practice, we have a pharmacist in all healthcare sectors like hospital, community, GP practice and at organisational levels like CCG or similar ones in Australia. It puts them in an ideal position to act as someone who can bridge gaps in all these sectors. When participants were asked their views on this, all agreed that pharmacist should be the one who can liaise with not only their counterparts in other sectors but also with GPs, nurses or medicine management department to improve medication compliance and cost-effective safe prescribing, especially when dealing with hospital discharge notes. GPs gave positive remarks about pharmacists' ability to link with community pharmacy to sort out issues like medication availability, suitable alternatives, medication usage reviews or issues with electronic prescribing. They can also guide them with queries regarding hospital only medications, unlicensed usage of any medicine or can communicate with hospitals if there has been an issue with the hospitals document or reports.

> *"Yeah. I think because pharmacists are now in each of those areas. And they can become the bridge". (GGP/E)*

> *"I think that coordinating role where decision is being made about medicines is just- it's underestimated how much improvement could be made if that role is done and done well" (OL/A)*

4.6.5 In-house GPP & Organizational Contracted GPP

Another aspect discussed during interviews was a comparison of GPP with on contract pharmacist sent to practices by organisations. Participants in England did agree that it is more beneficial to have in house GPP recruited directly by practice compared to CCG pharmacists who they believe have specific agenda of cost-saving, trying to implement changes. Sometimes these changes don't agree with the requirements of that specific surgery, population or patient creating issues at the practice level.

> *"So I think the thing is the in-house pharmacist focussed on the expectations of the practice rather than the expectations of the CCG. So CCG pharmacist may just be, you know, just focussing on cost-saving, but sometimes that can create problems within the practice." (GPP/E).*
>
> *"As I said, CCG had their remits with their pharmacists. I mean, that's the main thing. I...I don't know them very well, so I haven't got an obvious working relationship with them". (GP1/E)*

4.7 Working Collaboration

Strong Working collaboration between GPP and other team members is essential for the success of this role. Participants did reflect strong working relations with the need to improve it further with support from not only clinical staff in practices but also management staff like practice managers.

4.7.1 GPs & GPPs

Future of GPP role mainly depends on a strong working relationship between GPs and pharmacists as the main goal of pharmacist integration into general practice is to reduce GPs workloads. GPs form both England and Australia have shown improved collaboration in their views with both sides having a trust-building attitude.

> *"I think it's very positive. We're very open. We have a quite a flat hierarchy here so if anyone's got queries, you know, they're welcome to come and discuss it and vice versa". (GP2/E)*
>
> *"My experience as one of the practice principals and directly involved in the GP pharmacist role has been overwhelmingly positive". (GP/A)*

4.7.2 Nurses & GPPs

Nurses are the second most vital element of GP practice framework. Patients are in touch with nurses more than GPs, and their say on any new role within GP practice has great importance. It is, therefore, the main discussion point in this theme i.e. working collaboration between pharmacists and nurses.

Role overlapping between Pharmacist and nurses was a significant concern in the initial phases of GPP integration into the system. It was mainly due to the non-clarity of job specifications. All nurse participants have given very positive views about working with GPPs

as part of the multi-disciplinary team. They feel it has improved their scope of practice as they have an additional source of reference in the form of pharmacist whom they can look forward to as expertise in medicines. Although concerns were raised about non-clarity on role specifications especially in initial phases, however with time, it has grown on a positive note.

> *"As nurses, we don't deal a lot with medications but as we grow in our career and become prescribers, I feel that we need clinical pharmacists more than even doctors, to be honest" (Ns2/E)*

Organisational leads' views were that with demands, roles of nurses and pharmacists are changing rapidly like advance practitioners and most probably the roles will shape up similar but due to individuals' skills and preferences, one can perform better than the other due to professional expertise.

Organisational lead from Australia also mentioned this aspect and advised pharmacists to take a cautious approach at this initial stage and do not step over nurses' practice boundary. She believes, this might be in future once active working collaboration would be developed, the pharmacist can take some of the roles which nurses are performing at the moment, perhaps giving nurses more time to perform roles based on their sole expertise.

> *"I think the pharmacist is very aware of that, that that's going to be a problem solving, they're just very careful and offer- they offered to help separately but don't try to take over". (OL/A)*

4.7.3 Pharmacists' Views

Pharmacist participants have shown more like a cautious approach when answering questions about working collaboration. This collaboration as mentioned by all pharmacists has massively improved with much broader support been provided by GPs, nurses and other members of organisations and this support should be continued on the same note for prosperous future of this role.

> *"GP acceptance, trust and understanding of the capabilities of the pharmacist in GP role plays a big part in how this collaboration works. (GPP2/A)*

England pharmacist stressed on regular clinical meetings and dialogues between healthcare professionals, like a regular daily meeting where all clinicians can gather and discuss various work-related issues.

> *I think more dialogue between the different divisions rather than having people working independently, they speak regularly. (GP/E)*

Australian pharmacist expressed her strong working relationship due to her professional expertise in clinical and academic background. In her views practice will not have the same level of working relationship with anyone else and although is willing to increase her working hours but is not to recruit another pharmacist or her to mentor another pharmacist to join in.

> *Ah, it's stronger as they're used to having me there, I think that's because they trust me. I don't think that's necessarily because it's a pharmacist role that they're used to, I don't know if another pharmacist could walk into this. In fact, I've suggested another pharmacist comes and works at the same clinic and they're like, "No." (GPP1/A)*

Pharmacists' views on collaboration with nurses have been the central aspect of this theme, acknowledging the risk of role overlapping, pharmacists highlighted importance of expertise in medicine-related issues as their strong points to show their value and support they can provide to nurses.

> *So yeah, there's definitely an overlapping. I think…I think it's always when it comes to medications side I think when it's polypharmacy, when there's comorbidities, there's, you know, those kind of areas I think is where it really differentiates and even management of medication side as well is our strong point. (GPP/E)*

While Australian pharmacist, on the other hand, was very affirmative that this is not an issue she has faced as she had clarity on her job specification, i.e. someone who has purely medication-focused roles.

> *"I am very specific that I don't want to do any roles that are already being filled by the practice nurse. So, we've got that differentiation, that's not been an issue because I'm very aware of it" (GPP1/A)*

4.8 Key Performance Indicators

Discussion about KPIs was another central theme that emerged during interviews. Key Performance Indicators (KPIs) were found to be linked with participants' expectations and perceptions and is mainly evaluated against pharmacists own personal and professional development along with the professional performance.

England's pharmacist said it should be the time and money, not only cost-saving i.e. how much money a GPP is saving for surgery but also money-making as well while nurses stressed more on the quality of pharmacist's work i.e. the level of professional skills shown by the pharmacist. GPs views were also similar indicating safe practice and factors including audits for comparison between the times taken by a GP for medicine management in presence. This

also includes absence of GPP for the specific number of days which can include the number of daily queries or tasks. Organisational leads were not very sure to pinpoint any specific ones but did mention patients' satisfaction and medicine management as the main ones linked with the pharmacist's skillset.

> *"I think one of the key ones would be timing, medication reviews. Safety so safety auctioning alerts and things that you get. Ensure we're on top of any medication compliance orders" (GP2/E)*
>
> *Don't know. So, I suppose the indicators are a bit difficult to measure one…because a lot of it is about patient satisfaction, about whether the…the right skill mix has been used for the right consultation. (OL/E)*

In Australia, the main KPI suggested by participants have been the numbers and compliance of home medication review service. OL also did point out things like patient encounters with the pharmacist, clinical meetings and presentations done by the pharmacist and overall satisfaction guidance given as feedback from GPs and patients and other team members. Pharmacists' views were bit different as she believes it is tough to have specific KPI as the role of GPP varies surgery to surgery and it will not make sense to pinpoint definite KPIs due to differences in demands of GPs and population of that area.

> *"Yes, because the needs of the patient population and the needs of the GPs change so much". (P1/A)*
>
> *"The key performance indicators to analyse GP pharmacist role should include patient outcomes, clarity of medications, GP-pharmacist care plans, healthy at home- keeping patients at home and minimising risks for patients". (Ns/A)*

4.9 Evolving GPPs' Role

In this study, we have discussed various aspects linked with GPP role. This section explains the participants' views about how this role has evolved since the beginning and what they think about the present or future scope of practice for GPP.

All participants believed that this role has greatly evolved. Overall GPPs with their broad skill set have performed to high standards and have become an integral part of the multi-disciplinary team, especially in England. All participants have a common understanding that it is not possible to design a generic model as different surgeries have different expectations linked with the demands of the population. Prescribing annotation gives an extra dimension to this role.

OL/E in her interview mentioned about the change in the role and acceptance that is visible because now the surgeries are recruiting pharmacists directly as in GPPs rather than CCG ones which are more helpful from training and objective perspectives. She also mentioned medical practices taking on GPPs at pre-registration level, which reflects its importance and shaping up the future with pharmacists getting training before registration and taking it as an optional career.

> *Yeah. So, I think maybe in the two or three years there's been a change in how they avenue pap. But that's mainly because they've stopped coming out of that CCG role or coming out of pharmacists and into GP practices. (OL/E)*

Same views were given by an English pharmacist who is also working as a mentor for pre-registration pharmacists, so he believes GPP would take a supervisor role in the future. He also mentioned face to face clinics as significant evolving change which he said would not have imagined about five years ago when he first started working as GPP

> *I think pharmacists will start taking more of a supervisory role as well. I think it's evolved certainly in the face to face…there's a lot more face to face clinics and things like that now compared to before. And…and I think taken…pharmacists taken more leadership roles now as well within general practice because I think slowly, slowly pharmacists can start to establish themselves more within, you know, general practice. (GGP/E)*

Nurses from England said roles of all healthcare professionals had evolved to meet the patients' requirements. She was very positive that pharmacists with all their clinical and non-clinical skills can perform various roles and with future training pathway, they can become advanced practitioners.

> *"it is definitely evolving because so much is going into practice now, that there is just not the capacity to deal with it so everybody that's involved in general practice within their role is evolving hugely. I just I think it is a positive thing having a pharmacist within the practice and I do see the role will probably evolve quite a lot over the next few years." (Ns1/E)*

GPs supported the idea of widening GPPs' role in the form of clinics like Disease-modifying anti-rheumatic drugs (DMARDs) monitoring, though mainly focussing on medicine management and medication reviews to ensure safety.

> *"My personal views are, because I have so much medicine management already, that's almost a full-time job on its own". (GPP1/E)*
>
> *I think my reservation and that's shared by a couple of our partners is that, you know, that the core fixation of medication safety isn't overlooked. So make sure medication reviews are done in a timely way and that, that loop is closed. I think it's just going back to basics in a way and making sure that actually that, that is covered. (GP2/E)*

As mentioned earlier, in Australia, this role is in its early stage. All participants stated that it was evolving continuously with new roles to be integrated into job description however it is also linked to the availability of funding.

> *"It's changed a lot. It's continuing to evolve as we look for new programmes to initiate and develop over time". (GGP1/A)*
>
> *I feel we are still in the early stages of seeing how the role can evolve and an important part of this is improving the understanding about what services the pharmacist can provide. (Ns/A)*

4.10 Patient Feedback

Patient feedback is an important aspect to determine the present scope of GPP role as health and medicines policies are designed to achieve high-quality patient care, based on continuous patient feedback.

This study has shown some initial concerns by patients as they were not used to see the pharmacist in the general practice. It also shows a great positive change that has come up with time with patients started to realise the beneficial impact of having a pharmacist in the general practice. Different patients have different needs which cannot be achieved by implementing the same set of guidelines. The participants mentioned the importance to understand individual patients' needs and they view pharmacists in the ideal position as they have more time to contact with patients in comparison to only 10 minutes appointment with the GPs. However, this also depends on a strong working relationship between patients and pharmacists and this is based on trust and understanding.

> *"listen to patient stories and develop a plan with all their needs. I think pharmacist with more consultation time may be able to do that, but again it depends how well is their working relationship with the patients" (Ac/E)*
>
> *"Only positive stuff". (GP1/E)*

One of the GP and OL/E mentioned that as long as patients are being seen by a competent healthcare professional, they won't have any concerns.

"I think it's generally positive. I think our patients are happy to see anyone who they feel is competent and who's well supervised. So yeah". (GP2/E)

> *"Yeah, so I don't think patients really care who they see. I think that they just care that they…that they feel like they've got their expectations met. So, I don't know that describing somebody in one role and then another role really matters to the patients". (OL/E)*

One pharmacist mentioned that the initial hurdles he had seen when patients were asking to see GP instead of pharmacist. However, with the passage of time the trust has developed, and now he is running an acute clinic where patients are happy to come and see him. It was endorsed by a nurse working in the same practice who has observed that patients do come now, and they asked to see the pharmacist.

> *"they were not happy because they wanted to see a GP. But then slowly, slowly because they've started to see what I've been able to do. In the beginning I used to get a lot, oh, I wanted to see a GP, but now because a lot of them know me, they're okay" (GPP/E)*
>
> *"Yeah, do have a lot of patient feedback now. We actually have patients who will say, can I please see this person? Can I please see this person? Because they know they've been able to manage their symptoms a lot better". (Ns2/E)*

The participants from Australia also gave the same views. The pharmacist's views also show her strong relationship with the patients, while OL/A told a high score of 4.9 / 5 in a patient satisfaction survey conducted in one of her pilot practices.

> *"Most of the feedback from the patients is via the GPs or via patients contacting me again and it's been overwhelmingly positive". (GPP1/A)*

Australian academic echoed pharmacist's views that once the initial hurdle of explaining patient about their role and performing on a satisfactory level, patients start understanding the role and later prefers to be seen by pharmacists first that will then help the GP to make better-informed decisions.

> *"So yeah, once I think they got past that initial questioning about what's the pharmacist going to do and patients who understand the value." (Ac1/A)*

4.11 Future of GPP Role

The main question at present is how safe the future of GPP role and it is interesting to review participants views on it. These are divided in following sub-themes:

4.11.1 Government Policy on Funding

The financial support for this role was one of the main challenges mentioned by the participants. It is a more significant challenge in Australia in comparison to England due to financial support being provided by NHS England under GPP pilot scheme.

Governments both in England and Australia do acknowledge the pressure on the primary health care system, especially on GP practices due to lack of health workforce. It is in their plans to support injecting more funding to increase the resources. In England, GPP pilot scheme was in the same context while in Australia, there are similar pilot schemes, however it is being run on a smaller scale. The academic from England raised interesting points explaining the present workforce shortages and government proposed plans. Highlighting the workforce crisis, he said government policy would be to invest more in this sector, but it is vital to implement strategies ensuring pharmacists' recruitment with appropriate skills. He also said the grand model of care could be changed in future depending on how the government decides to delegate services to other sectors in primary care especially community pharmacy and the results of the national evaluation. He thinks, if community pharmacists get more roles, it can affect the need for GPPs. It reflects something that is happening in the Australian healthcare system in the form of Home medicine review service.

> *"NHS has not been able to recruit the number of GPs, the target number of GPs that they wanted to recruit by 2020, so there is the potential that more money will come to GP practises to recruit pharmacists. But again, whether they're able to find the right pharmacists with the right skill set who can deliver the patient care and achieve patient outcomes; that may vary" (Ac/E)*

One nurse supported the idea of injecting more funding into the GPP role because of it's overall benefits. She said if pharmacists get improved funding, it can broaden the roles they are performing. Also organisation or practice would have more confidence and trust on pharmacist's skills while the lack of funding not acting as a barrier.

> *"So sometimes what stops them against…can be the funding to do stuff and the GP practices as well because they're thinking oh, will the funding be coming out of our pocket. That makes them a little bit apprehensive as well. I think on that level if that could've been improved, it'd be better" (Ns2/E)*

Australian healthcare financial structure, as mentioned by the pharmacist, is based on rewarding doctors for the offered services, instead of other healthcare professionals. It results in role limitation or willingness of job delegation. As explained by a participant, home medication review model is being used by GP practices for their funding to employ a pharmacist in practice. She also mentioned the issues raised by the Pharmacy Guild of Australia as a conflict of interest, as they do not support the idea of GPP performing HMRS. It believes that community pharmacists should do it as it will have an impact on the overall funding for the community pharmacists.

Australian participants do not see any significant change in near future, but they do stress on the funding structure to claim for the services pharmacist provide. This is like Medicare benefits scheme for doctors to reflect on their contribution at government level.

> *"I don't think it's going to change substantially in the next couple of years, but where I'd like to see it is if there was a funding stream pharmacists could access the same sort of funding that doctors do, which is called our MBS, our Medicare Benefits Scheme, so that we could actually bill for the services that we provide. (GPP1/A)*
>
> *The main hurdle is really to sort of try and get some sort of funding mechanism because we really need to make sure these dedicated funding for pharmacists to provide that service. (Ac1/A)*
>
> *"so that's how the government seems to get involved because there's only a certain amount of money and the government has to use that as best, for the best of the country." (Ac2/A)*

OL/A believes strong efforts are being made at government or organisational levels with about 20 pilot schemes being run for this role giving support to surgeries by creating a workforce model. This also includes reviewing barriers and facilitators for this role. Pharmaceutical Society of Australia (PSA) has also created a training path so she believes things will improve in next five years. However, the main hurdle or deciding factor would be the support from the government in the form of funding.

The figures have also been quoted in few studies giving an estimate of cost-savings o, but it is must at government level to recognise positive impact of GPP role and provide additional funding incentive. This is in addition to home medication review service.

> *"I think a critical thing would be how is it going to be remunerated if the government can see that this would save them money, they may provide some incentive funding to practices to have practice sessions there has been a sort of a cost benefit analysis done for to try and influence government on this, so we worked out that every*

> *dollar invested in the role of the GP pharmacist would transfer to a saving of a $1.56 costs to the health system."*

GP from Australia has also raised the same concerns i.e. funding for GPP role once the pilot scheme is finished.

> *"My only reservation for this role and future is how it will be funded beyond its current pilot programme" GP/A*

Despite funding issues, GPs in England have stated that they would continue with GPP role once the funding is no more available from government, though it will need a review on the roles to make sure that task delegation is appropriate with all healthcare professionals fitting in nicely in general practice healthcare framework and there is no role overlapping.

> *"So it may be prudent to, you know, look at roles and make sure that the most appropriate people are doing the most appropriate talks. So yeah, we'd continue with it yeah, because it's embedded, it's part of our team" (GP2/E)*

On the other hand, OL/A showed serious concerns about the sustainability of the role if health organisations paying the money to practices for pharmacist stop funding, as it was still not very clear if pharmacists have done enough to convince GPs to continue with them as part of their clinical team and pay from surgery's budget with no funding to support them.

> *"so organisations like us getting often paid, give the practice the money to pay the pharmacist, but when we step away if they can't see that there's enough value to continue that themselves with perhaps what they can generate from home medicine reviews, it's likely to diminish, it's likely to be an eight hour a week role" OL/A*

4.11.2 Training & Job Description

Future of GPP role depends on how well the pharmacists are trained whether it is the training before taking on this role or continuous professional development during their career. All participants do agree on the importance of training requirements that need to be implemented by healthcare organisations as well as by professional bodies.

As mentioned earlier, one of the main barriers is how well the pharmacists had been trained both emotionally and clinically to face this challenge. Academia said NHS should work more closely with universities and develop relevant training programmes and modules. He also mentioned that there couldn't be a one generic training module as it would vary depending on the pharmacist's background and experience. They also highlighted the need of a mentor

in practice primarily in the start and developing short courses to help pharmacists to get trained as per practice expectations.

> *"And there is a potential role that the universities should work more together with the NHS to develop appropriate training programmes for pharmacists. So they're up-skilled to a level that they can deliver better patient care, and pharmacists themselves should be prepared to take up those additional roles, develop confidence, build clinical skills" (Ac/E)*

Australian participants gave similar views. In their opinions, training module can vary depending on the requirements, but only highly skilled professionals should join this role with well-developed clinical, patient-facing and inter-professional skills. Both pharmacists from Australia have said that current level of training does not prepare pharmacists to take this role and it is their strong clinical background training that had helped them to take on this role with success.

> *"Current pharmacist training in Australia does not fully prepare you for this role, though there are programs being implemented now through the Pharmaceutical Society of Australia (PSA) to address this. Being an experienced pharmacist working in both hospital, retail, manufacturing and Home Medicines Reviews gave me a good foundation for the role of GP pharmacist" (P2/A)*
>
> *"Not specific training, because it depends on what sort of practise specific needs there are and patient specific needs at that particular practise, But I do think it needs to be a highly skilled pharmacists going into the role. I don't think it's an entry-level position". (P1/A)*
>
> "I *don't think any new graduate might have, they might have the clinical skills, but they may not have the communication and the system skills to moving to that role. So, I do think it needs additional credentialing". (Ac1/A)*

OL/A was more focussed on the importance of practical experience that pharmacists gain once they join the practice. In her views, training modules have an influence, but due to variance in role specifications or practice expectations, the actual role can be different to what the pharmacist was trained for. This could be due to differences in the requirements at surgeries. It reflects the importance of mentorship during the initial phase of the role who can train and supervise GPP.

> *"I think you can do that sort of training but nothing will substitute actually working in a GP practice, so you might have done a whole lot of training about general practice, and then, in reality, they're all different, they all go about things slightly differently, and they are private businesses here and there so they've got a bottom line, they've had expectations, I think the opportunity to experience working in a general practice alongside the theory training will be a very important." (OL/A)*

In England, pharmacists' views were endorsed by GPs that the training should be focused on clinical skills. He said training or courses like prescribing course are more focusing on skills like communication or leadership but not that much on clinical skills which do leave a gap once pharmacists join this role. He also mentioned that the pharmacists could be trained at the pre-registration level that's where they could be more helpful from the training perspectives.

> *"Yeah, but I think mainly the focus should be on the clinical knowledge as well for a lot of pharmacists because, you know, either rusty or it's not their strong point. And a lot of the courses like prescribing I feel there's a lot of emphasis on like the non-clinical aspects" (P/E)*
>
> *"So lots of things like clinical reasoning, decision making, how to improve the competence and confidence of venerable ones by doing that". (GP2/E)*

4.11.3 Future Research

All participants endorsed the importance and the need for future research.

Ac/E emphasis was to conduct both qualitative and quantitative research studies to evaluate the scope and implementation of subset of services. His primary focus was the importance of national evaluation or to assess the impact on a bigger scale. In his views, there can be so much variance in quality or nature of services being provided. These services are mainly dependent on competence of pharmacist along with the requirements of organisation. In his views, a careful selection of pharmacists should be made on a larger scale for national evaluation and then further decisions can be made regarding future funding.

> *"So, there is a need. Whether pharmacists can fulfil the need or not, that's the question that needs to be answered. And that's why I believe that the national evaluation will be critical, will be very, very,*

> *very critical in determining the future of GP pharmacist workforce" (Ac/E)*

Other participants from England echoed similar views highlighting the importance of research which would reflect the overall impact of pharmacist role in an evidence-based manner.

> *"Yeah, hard factual evidence on the impact that's been made by pharmacists because I think that will allow more documentation. (P/E)*
>
> *I suppose if you want to show your effect as a pharmacist, you probably need to have some research probably done about the...the workload you do and the reduction in workload for GPs (GP1/E)*

One nurse said that pharmacists don't get much recognition for the role they play in practice especially as advocates for patients and more research is needed to document their practices.

> *"We never thought of them as advocates, but that is what they are. I think research into that and actually giving them at recognition would be really good for them." (N2/E)*

Not much research has been done in Australia about the overall impact of GPP. This is because the role is new and not many surgeries having a GPP working for them as highlighted by a pharmacist. In her views, there is a need for research in this area and ideally this should be done on a larger scale.

> *"I think it would be really valuable to have a lot more research over multiple practices on the GP practise role. I mean, there's hardly any to date and it would be useful to see how it changes the appropriateness of medication therapy. The only reason we haven't done that is because we're limited to one practice and choosing outcomes is challenging." (P/A)*

Australian academic mentioned the requirement of research on barriers and facilitators for this role along with role specification and inter-professional working collaboration. They believe that this can help to structure the required training and future funding for this role. While working together GPs and pharmacists can have mutual benefits.

> *"So there's more research needed because that can help inform whether there are special training required for a pharmacist working in GP practices and also they could have been informed potential future funding models so certainly I think there's a lot of research needed (Ac1/A)*

> *"I would like to see how positive results or the sharing of positive results and experiences can actually impact and encourage people to explore more interprofessional work because there is much good that could be done for the benefit of patients when GP's and pharmacists work together" (Ac2/A)*

Giving her views about future research, OL/A raised the concern of funding as she believes the present funding is not enough to keep pharmacist working in practice for a period where the actual impact of interventions on patient care or aspects like polypharmacy could be evaluated. Hence any research that can demonstrate patient benefits or how much money was saved by GPP role would be helpful.

Chapter No. 5

DISCUSSION

This section explores and evaluates views of key stakeholders on GPP role in England and Australia in view of results of this study. All themes that have emerged have been discussed in detail.

5.1 Gaps in General Practice Framework & Role of GPP

All stakeholders have agreed that there are gaps present in general practice framework which are getting bigger due to staff shortage, polypharmacy, due to complex medical conditions, doctors not opting to choose general practice as future career and present GPs opting to move overseas (Beech et al., 2019). This scenario has created a big gap, risking the quality of patients' health care leading to discussion of having additional clinical staff, including GPPs, which can help to reduce GPs workload.

The participants of this study have reinforced the idea of GPP, as stated by one of GPs, "it is a no-brainer to have a pharmacist in practice" shows the GPs' confidence on GPPs. It reflects statement of study (Williams, Hayes & Brad, 2018) in which the authors suggested GPP as medical expert and GPs and patients would not choose to work without them. At the same time, the participants have shown concerns mainly regarding job specifications which should be addressed to make the role successful.

***Australia*:** In comparison to England, GP workforce crisis is not as severe as in Australia as shown by figures published in a report by RACGP (General practice: Health of Nation 2019). Most GPs work in urban areas with GP: patient ratio decreases in remote areas. It means there are fewer GPs per person in regional and remote settings. Our study participants believe that like England, pharmacists can take on the role of GPP in Australia to facilitate GPs in their workload but unfortunately, however this is moving on a slow phase. As can be seen that only 13% of GPs told their practices that they have GPP working for them (General practice: Health of Nation 2019), This is because of limited funding from the government (Freeman et al., 2016). As mentioned by an Australian pharmacist in our study, currently there are not many GPPs, mainly due to lack of specific funding for this role. It makes GPs very reluctant to recruit a GPP, and this is also being discussed in the literature (Baker et al., 2019). On the positive side, the feedback that has come from all Australian's participants is very promising, acknowledging the positive impact of GPPs on the overall healthcare system.

5.2 GPP Skillset / Job Description

One of the objectives of this study was to explore pharmacist skillset and training requirements accordingly. The views of participants on this are one of the central themes that have emerged in results. It is accepted nationally, both in England and Australia, that there is need to strengthen workforce to fill the gaps present by the shortage of GPs and nurses, but the question, i.e. has the pharmacist got the skills to fill in this gap remains open for discussion. This has been also raised in various studies (Ryan et al., 2018) (Nabhani-Gabara et

al., 2020) and NHS England valuation report (Mann et al., 2018). Initially GPs were not very clear about the role description of the pharmacist and the same is reflected in views given by participants in our study. However, at the same time GPs believed that it has created an opportunity for the pharmacist to develop themselves in a role with diverse dimensions enabling them to mould themselves in a job description as per organisation expectations and requirements.

The results of our study emphasise that no two practices can be alike so the role of GPP should be flexible to meet the needs and expectations of that specific practice and in accordance with the demands of the local community as explained in a study by (Freeman et al. 2018) .

5.2.1 Medicine Management Role

England: One of the main concerns presented by GPs was the time they had to spend on medicine queries from patients, pharmacies and tasks like hospital discharge notes. So, GPP coming in and taking this work away from GPs was the main objective which would enable GPs to spend more time on patient-facing roles. This was mentioned by one of GPs during his interview in this study.

The GPs participants in our study believed that aspects like updated medication records, medication reconciliation with hospital discharge notes, close monitoring of repeat prescription protocol and the source of contact for patients to discuss issues about medications to improve medication adherence, are some of the roles which GPPs have taken on. This has reduced workload on GPs. These views reinstate the findings of (Benson, Lucas & Kmet, 2018) that pharmacists are experts in medicines and their knowledge about medicine indications, side effects, contraindications and dosage make them an ideal source of reference to be contacted by GPs and other healthcare professionals regarding medication queries. It also reflects the role presented by the WHO in 2003 report about low medication adherence by patients and how it can be improved by involving pharmacists (WHO, 2003).

The participants in our study also mentioned the positive impact GPP could have on medicines wastage/ This could be done by reducing medicine wastage directly or indirectly by improving medication compliance and by managing the repeat prescriptions. It also reflects the role description of GPP in a study done by Truemaan et al. (2010) which shows that GPP can play an active role in reducing medicine wastage. This is an important a factor in lowering primary care medicine wastage cost which is estimated to be in the range of £250-300 million in England (Trueman et al., 2010)

Our study also reflects the value of GPP in a central position to link and bridge gaps between the hospital, community pharmacy, healthcare organisations like CCG in England and general practices. All participants in our study believed that with evolving role and pharmacists working in all these organisations; it is an ideal network where GPPs can coordinate with their colleagues for a fast and reliable exchange of information. So, dealing with queries about hospital discharge notes, unlicensed medication usage, medicine shortage and alternatives or to implement prescribing protocols set by local medicine management department, are some of the daily tasks in an evolving GPP role.

Australia: The participants from Australia also gave similar views. Although at the moment due to lack of funding, GPPs are mostly involved in-home medication reviews, but the capabilities of GPP in a medicine management role is acknowledged and is the part of evolving job description, mainly depending on available funding as highlighted in the studies (Freeman et al., 2012e) & (Freeman et al., 2014).

5.2.2 Patient-Facing role

The patient-facing role has also become the central part of the evolving job description of GPPs as said by GPs and organisational lead in this study. Their views show that initially, GPP role was dealing with medicine management with GPs and nurses running clinics, but this scenario has changed in the past few years (Deeks et al. 2018). As there is a shortage of GPs and nurses, the demand for other healthcare professionals is increasing. This is very pertinent in the roles as advanced practitioners, where pharmacists and nurses could do so in patient-facing roles (Barnes et al., 2017). In our participants' views, this has also led practices to get pharmacists to involve in patient-facing roles like running specific clinics, medication reviews and home visits etc.

This study shows the importance of professional development required for pharmacists to enhance their clinical knowledge and patient-facing skills to perform well in such roles. The participants of our study do believe that GPP has clinical skills to run clinics like managing chronic conditions or minor ailments but to polish them in a patient-facing role while working in surgery needs training and development. It also highlights the need for mentorship where GPP should work in shadow with either GP's or nurses, especially in the initial phase, to learn and adapt skills, required to run such clinics. This has been also mentioned in the NHS evaluation report (Mann et al., 2018).

Australia: The participants of our study think that Home Medication Review Service (HMRS) provides the platform as the primary patient-facing role for GPP and with better resources and available support, medication reviews performed inside the clinic would improve the timeliness and completion rate. This viewpoint has also been supported by studies (Freeman et al. 2012) and (Tan et al., 2013). All participants in our research from Australia do firmly believe that pharmacists who do join GP practice as GPP have the skills to take on such roles due to their training. This is required for HMRS accreditation and with more funding options available in future, GPPs would take on more patient-facing roles in clinics as a part of multi-disciplinary settings (Deeks et al., 2018).

5.2.3 Pharmacist as a Prescriber

Like patient-facing role for pharmacists, additional qualification of prescribing annotation for GPP is gaining more importance and demand by organisations. The views of our participants who support GPPs' prescribing role are also in line with the study by Gerard et al., 2012, which demonstrate that patients do value pharmacist prescribing role as an alternative to doctor prescribing.

Our study reflects the difference of opinions among participants. Although all stakeholders do agree on the benefits of this role, there are obvious concerns about required protocols. Governing bodies in England have set up guidelines for Non-Medical Prescribers (NMP) with a structured course and then to ensure all NMPs would prescribe within their competency level (Royal Pharmaceutical Society, July 2016) & (GPhC accreditation criteria, 2019). The central theme that has emerged from the views of participants especially GPs in our study is the need for strict protocols for pharmacists to prescribe under supervision. They believe that it could be beneficial for pharmacists to help GPs in their workload of managing repeat prescriptions, as a GPP can review repeat requests and address any safety issue before signing it off but it needs to be done under protocols and pharmacists should know the limitations. Similarly, participants think that if the pharmacist is running clinics like minor ailment or medication reviews, prescribing qualifications can be helpful as pharmacists can prescribe to treat any minor condition or if they want to titrate dosage (Ryan et al., 2018 and Stewart et al., 2009).

In Australia, at present, only GPs can prescribe. Although, participants of this study do believe it is something that can be a part of the future role but at present GPs are not willing to accord this to pharmacists (Australian Medical Association, 2008). According to views of organisational lead from Australia in this study, healthcare organisations are looking at prescribing model of NHS England for independent and supplementary prescribing perspectives. She believes a similar model can be implemented in Australia wherein initial phase, once the diagnosis has been confirmed and the treatment plan is finalised, the pharmacist can then join the team and take over repeat prescribing (Baker et al., 2019). However, it is still in very early stage and it will take a lot of effort and consultation to develop the trust among GPs and governing bodies to commence this exercise.

5.2.4 Comparison between In-house GPP and Contracted Organisational GPP

Due to the funding aspect involve in this role, there are different models regarding how the pharmacist could be integrated into general practice. In England, there are models like Clinical Commissioning Group (CCG) pharmacist or pharmacist employed by a private organisation (Organisational Pharmacist) who later integrates into practice on a contract basis with specific tasks or agenda. Also, there are a GPP, who are directly employed by the practice as an in-house practice pharmacist. Our study compared the benefits of such models. All participants from England agreed having an in-house pharmacist is much more beneficial than having an organisational pharmacist which is sent over on to do a specific task or agenda in most cases to save money by stopping or changing medications.

Our participants believed that In-house pharmacist develops personal rapport not only the clinical team but also with the patients. It is also helpful to establish strong rapport among team member, and this is also a view supported in a study by Blondal et al., 2017. This also helps GPP to adapt under the requirements of surgery which is not the case with organisational pharmacists. Although, members of this study do believe that organisational pharmacists are an excellent resource, but an in-house pharmacist is a better option to form a closed team network.

In Australia, although practices have recruited GPP directly as an in-house pharmacist, however it is not a common practice. Healthcare organisations are running pilot schemes where they are helping practices to recruit pharmacist but again like England, they are short of funding. One difference which came up during this study was the recruitment procedure. In England, organisational pharmacists were appointed in practices without much consultation with general practices, but in Australia, general practices do the interviews for pharmacists and have a say on the final decision.

5.3 Working Collaboration

Our study shows that GPP role is in its evolving stage, and it needs support, based on a strong working relationship from all key stakeholders as suggested in the study by Mercer et al., 2020. In primary care settings, the relationship between pharmacist and GPs has never been on ideal terms due to lack of communications and funding issues for services (Bradley, Ahcroft et al., 2018).

Nevertheless, the GPP role opened a new dimension in this scenario as it provided an opportunity for pharmacists to bridge this gap and to involve in direct patient care. But at the same time, according to the participants of our study, there are concerns or barriers which pharmacist needs to cross and build a robust, trustworthy and respectful relationship. This study endorses the facts found by (Ryan et al. 2018), which reported that though there were barriers for GPPs in initial phases, mainly due to hierarchy and jurisdictional tensions, the working collaboration has increasingly improved.

The views given by participants in our study are very positive and it shows positive relationship, which has not only improved between pharmacists and GPs but also with the other healthcare professionals like nurses, health care assistants and clerical staff of organisations. This shows the acceptability of GPP as an integral part of daily working routine, which is essential to facilitate transition from non-clinical role to patient-facing role as elaborated in a study conducted at Sheffield primary care (Marques et al., 2018). It is essential to understand that this relationship is not something that can develop overnight; it is a slow process and it is aided by the willingness of all sides to interact, communicate and to develop a strong understanding.

Also, it is not only limited to clinicians, a strong working bond with clerical staff of organisations at a micro or macro level is also vital helping to delegate the tasks to right clinician with most appropriate clinical skills. This is also suggested by (Hampson, 2018) which has suggested tips for both GPP and practice to build strong working relationship.

Looking at views of organizational leads in this study, it is evident that organisations have started to develop more trust in GPP acknowledging their professional expertise, especially in England. The scenario in Australia seems to be different where this is in the initial phase and pharmacists are trying to create an initial strong impression. As mentioned by Australian organisational lead in this study, she has experienced a few pilot projects where due to lack of initial support and guidance by organisations, the whole idea failed miserably. It also

highlights the importance of consultation work, that needs to be done before a GPP joins a surgery. It includes discussing the support that is required by GPs as well as by GPPs in the form of robust working collaboration among healthcare professionals (Polasek et al., 2015).

Also, the pharmacists must understand the expectations of a specific organisation where they are working. It is also important to note that there are no one rules for success in this role, every GP organisation and population has its own demands. The best way is to take a collaborative approach.

5.3.1 GPs & GPPs

This study shows that GPP working along with GPs in medical practices has made the base for strong future working collaboration especially once the initial phase of expectations started to match with actual roles. This could lead to better understanding, training to improve professional skills (Nabhani-Gebara et al., 2019) and to reduce GPs workload (Ryan et al., 2018). In England, looking at GPP pilot scheme, GPs and GPPs' relationship was not a major concern as it was a win-win situation for both sectors with GPs knowing they were being supported by pharmacist integration to reduce their workload and being funded by the government, while for pharmacists it was a new career option (NHS England, 2015).

In Australia, though GP has shown support for the GPP role, due to funding issues and non-clarity on the role, the views of some participants of this study reflect the struggle a GPP had to build a relationship with the clinical team.

The pharmacists' views from Australia in this study indicate a strong working collaboration. This was built on strong professional relations with clinical lead due to strong clinical background and this perhaps facilitated to fulfil practice expectations, as highlighted in another study (Mercer et al., 2020). However, our study shows that this is not the case with every GPP as few GPPs struggled to build a strong professional relationship.

5.3.2 Nurses & GPPs

The views in our study by nurses and pharmacist have shown a great improvement in this working collaboration with both sides getting a better understanding of each other roles. Especially this is evident from the comment from the nurses. This has also been supported in an NHS pilot review report (Mann et al., 2018). However, there are concerns from nurses that pharmacists are stepping on their shoes and taking on the roles that have already been offered by them (Nabhani-Gebara et al., 2019) but nurses in our study have mentioned that they feel more comfortable and confident with their scope of practice especially prescribing role as they can always go and check with the pharmacist to clarify any doubts about prescribing a medicine.

Overall view of participants in this study showed that pharmacists and nurses are a part of a clinical team, been led by GP, and sometimes the roles can be very similar, as stated by one of the GPs that they are developing the working of a clinical team rather than an individual one within the practice. Hence any member of that clinical team with appropriate skillset can

represent and answer the query. It is also supported by feedback and input from other professionals, if required. Hence, it is all about to acknowledge and complement each other roles as stated in a joint report published by RPS and RCN (Royal Pharmaceutical Society & Royal College of Nursing, 2015). The results of our study reflect that nurses can always help the pharmacist in learning clinical skills while pharmacist can be a source of reference for all medication-related queries like drug interactions, dosage, contraindications and side effects. If it works out correctly, both professions can have a very positive impact on each other's scope of practice (Mann et al., 2018).

Australia: The comments by Australian participants show that there is an element present in GPP mind that they can or should perform duties which are at present being done by nurses, more like a "taking over" factor as mentioned by an organisational lead. Any such actions can directly or indirectly damage the working relationship and ideally should be avoided, especially at an initial phase. This was highlighted in the views of Australian pharmacist during this study that pharmacist should perform well within their expertise. So, any possibility to expand their roles should be done together with a mutual understanding with GPs and nurses, as highlighted in the study by Dennis et al., 2009.

5.4 Medicolegal Issues

The pharmacist's expertise is another focal point while discussing the job specifications. Ideally, as mentioned by one GP in this study, it should neither be crossing the line nor to be scared of taking actions within your scope of practice due to factors like role overlapping or indemnity insurance. In our study, although no other participant has mentioned any specific comments related to the medicolegal issue, the concerns have been raised mainly by organisational leads.

The results of this study showed that in England, GPPs are performing a comprehensive role in comparison to Australia, which is in the process of broadening up the scope of practice. The main concerns raised by participants in this research were prescribing annotation of GPP and if it could lead to any medicolegal matters. This study reflects a robust proposed level of confidence on prescribing skills but at the same time, it also emphasized that GPP should only prescribe from their own approved P-formulary under strict protocols. It should not be taken as granted with the understanding that as NMPs, they are responsible and accountable to their prescribing as highlighted by the study (Gerard et al., 2012).

The supervision by GPs or other senior healthcare professionals is vital with regular appraisals as mentioned by one of the GPs during the interview. An important message given by one of the GP during is not to pressurise pharmacists to perform duties which they don't feel comfortable to, as there is a possibility that sometime pharmacists when given a task which is out of their scope of practice feel scared to report it back without any action, thinking it might impact their relationship. To avoid such scenarios, there should be a direct line of communication between GPP and clinical lead with set job specifications. If there are set boundaries which both pharmacist and other members of clinical team know there is a reduced risk of any medicolegal issue to be raised.

In Australia, as mentioned earlier, GPPs' role is in the initial phase and mostly linked with medication reviews either at home or in the clinic. All respondent pharmacists in this study have mentioned an active working collaboration within the team with a good understanding of their roles as well as limitations. Understandingly, in some cases, the pharmacist, with a strong clinical background and work experience, had developed a strong rapport with clinical staff and patients which is evident from the confidence and trust of lead GP.

5.5 Key Performance Indicators

This study reflects the difficulty to list down specific and a generic model of KPIs for GPP roles, mainly because it varies from surgery to surgery as well as with the population demands. It demonstrates the statement given by (Karampatakis et al., 2019a & Karampatakis et al., 2019b) about the difficulty faced by GPP to measure and record their impact in general practice.

Following are the main KPIs worth discussing from this study:

5.5.1 Cost-Effectiveness

This study emphasises the importance of the cost-effectiveness aspect of GPP as this has been suggested by the various participants in this study. This is also reflected in NHS pilot scheme review report (Mann et al., 2018). Although, organisations or practices are seeing pharmacist as the role to fill in the gaps left by GP shortages, at the same time issues like funding has been raised by participants especially from Australia, whereas practices get reluctant to recruit pharmacist (Avery, 2017).

The results from this study show that GPs would like to review how much time a GPP has saved on daily or weekly basis. This is to show a marker for the overall cost-effectiveness (Deeks, Kosari & Naunton, 2018). Only the use of GP hours saved by GPP would underestimate the overall impact pharmacists have hence it is vital to document various clinical and patient health outcomes to measure the value of GPP.

5.5.2 Medication Reviews

Medication review have been mentioned by all participants in their interviews. This study indicates that shortage of GPs and nurses along with pharmacist expertise in medicines put GPPs in a good position to conduct medication reviews. Hence the numbers of medication reviews performed by a GPP on a weekly or monthly basis can be a good key performance indicator and this is also being highlighted by GPs in this study.

5.5.3 Home Medication Reviews Service (HMRS) in Australia

As evident from views by Australian participants in this study, due to the funding issue, the focus has been on number and quality of HMRS, and it can be used as a KPI in Australia. The organisational lead mentioned that it's a complicated process where GPs need to refer patients to pharmacists for review, so by improving the workflow the quality and numbers of home medication reviews can be increased. This would show perhaps the positive impact of

having a GPP to perform in-clinic medication reviews, as suggested in the literature (Tan et al., 2014a). The literature also shows that reviews or consultations done by pharmacists located in health clinics were more effective in resolving medicine-related problems, receiving better feedback from the patients as well as improving the timeliness and completion to conduct medication reviews (Freeman et al., 2012c).

Same time as per views of Australian participants in this study, it should not be the sole KPI. Every GP surgery has different requirements or expectations which are mostly based on population demands, so it is crucial to review GPP's role in Australia at a larger bigger scale. Also, according to participants, HMRS is already been performed by accredited community pharmacists so organisations should also focus on additional roles, which a pharmacist can offer. It is a funding issue as GPs want to use HMRS funding for GPP roles but looking in bigger picture GPPs can save money by decreased workload, decreased medications error, improved patient safety, improved patient service and reduction in practice drug budget (Baker et al., 2019).

5.5.4 Medicine Management

Improvement in medicines management is another main KPI mentioned by our participants. It is a difficult one to measure as many aspects of medicine management hasn't got the numerical figures (Karampatakis et al., 2019a) but as suggested by a GP participant in our study, comparison between the time taken by GPs or other healthcare professionals to complete daily medicine management, in presence and absence of GPP, can be a good indicative measure. Overall, the data reflects that organizations expect GPP to play a major role in reducing the time that GPs spend on medicine management. This includes hospital discharge notes, action on safety alerts, dealing with the patients and pharmacy medicine queries and be a central figure to communicate in between different sectors of healthcare system. This is also discussed in more detail in pharmacist skillset section.

5.5.5 Evidence-Based Practice

Another essential aspect in KPIs is the quality of work being done by pharmacists which is more important than just the numbers or figures. As mentioned by nurses in interviews, there should be measures to make sure whether the recommendation being made by the pharmacist for patients is backed up by evidence-based practice. It also reflects the need to have continued professional development by the pharmacist. This could help pharmacists to keep them equipped with the latest professional skills (Mann et al., 2018). Some activities that have been mentioned by respondents of this study are attending regular clinical meetings in surgery and on other forums with the active participation in the forms of presentations and written reports.

5.5.6 Patients' Satisfaction

Patient satisfaction can be another vital key performance indicator. This might be the one having the most effect on the overall role. As said by one of the nurses in the interview, it is all about GP's and patient's satisfaction. So, results from this study shows that to evaluate pharmacist's performance, patients' satisfaction surveys can be performed, asking patients

to give feedback about their interaction with the GPP (Pharmaceutical Journal, 2016), . This is also being mentioned by Karampatakis et al., (2019a) that there are limitations of any such surveys, and they should be reviewed before reaching to any results. The limitations of these surveys are as sometimes feedback given by patients does not reflect the actual insight of pharmacist contribution.

5.6 How GPPs' Role has Evolved in the Last 5-10 Years

The GPP role is evolving at a high pace with more input from different sectors in the form of reviews and research. This study reflects the views of key stakeholders reflecting on how this role has developed in the last 5-10 years. This is with the support provided by government in the form of pilot schemes. As reflected by view of this study participants, GPP role is evolving on a positive note, creating an opportunity for GPP pharmacist to develop, grow and train. This is also being observed by Anderson et al. (2019) that GPP to be successful, they need to be visible, communicate well, be flexible and they must be innovative.

England: This study shows that GPP's role has become a crucial part of general practice framework in England. In the initial phase, the position has been funded by the government under a specific GPP pilot scheme (NHS England, July 2015) and due to the positive impact during pilot scheme, organisations are willing to recruit GPP without a significant part of their salary been funded from the government. While discussing the role description, views of participants indicate that initially most of the pharmacists were performing non-clinical role including medication management, but recently the role has evolved in more towards a patient-facing one with pharmacist getting more involved in running clinics and home visits. These views are also supported from the literature (Ryan et al., 2016). All participants from England in our research do believe that pharmacist have got the clinical capabilities and skills to take on this challenge and with prescribing annotation, pharmacists are in an ideal position to show their value (Stewart et al., 2009). Same time, it also highlights the importance of continuous professional development for GPP to keep themselves updated with the training requirements. This was also mentioned in the pilot scheme review report (Mann et al., 2018).

This research also shows the growing role of GPP to work as a supervisor as mentioned by some participants in this study. In England, practices are recruiting pharmacists at the pre-registration stage to train them as GPP for the future. It is a very positive step as it shapes the future of this role and it allows GPP to act in a supervisor role not only for pre-registration pharmacist but also for the other staff members (Girvin & Wilson, 2018).

Looking at the present scenario and data collected during this study, it reflects GPP role to evolve on a positive note in the future. The GPs are looking forward to work with GPPs who can take on patient-facing clinical tasks like running specific clinics along with their medicine management role. The nurses also have a very positive attitude towards GPP, acknowledging their clinical and management skills to improve overall working efficacy from clinical and time management perspectives.

Australia: Australia, in comparison to England, as described by our participants, is at the initial phase of integrating pharmacists into general practices with the support from healthcare organisations (Sake et al., 2018). It is difficult to analyse at this stage how the role is evolving although participants in our research have mentioned that it is growing with new roles and programmes are being developed and positions becoming more clinical (Deeks et al. 2018). The central theme seems to be the amount of funding required to continue with this development, as suggested by Freeman et al., (2016). A flexible model is needed on the basis of individual skills of GPs and pharmacists which could allow structuring as per specific population needs.

During this study, participants from Australia mentioned taking England pilot scheme as a model and to follow it up further. At this stage, it seems like the focus is mainly on HMRS, because of available funding. Hopefully, with time and improved financing, pharmacists would be able to perform roles outside of this service including medication management, running clinics and liaising with the patients to deal with any medication queries, as highlighted by Freeman et al., (2016).

5.7 Patients' Views on GPP

The patient feedback is an essential tool to analyse the performance of any healthcare professional. With healthcare organisations targeting high-quality patient care, all healthcare professionals need to understand the needs of patients by developing a strong working relationship with them. This aspect becomes even more critical when a new role like GPP is being developed.

Pharmacists in this study highlighted the impact. Traditionally patients were used to seeing the pharmacist in community sector so seeing by pharmacist in clinical roles for their medications at surgery was a new experience for the patients (Bajorek et al., 2015). As reported by some pharmacists in our study, it was the main hurdle in the start as patients were not willing to be seen by the pharmacist and were asking to see a GP. The similar concern was also observed in other studies (Karamapatais et al., 2019a).

The views given by participants in our study reflect the change in that behaviour. It shows that patients have realised that pharmacists are not only someone standing behind the dispensary in a white coat, but they are also an expert in medicines with clinical knowledge. They can be a part of the multidisciplinary team who are responsible for their care.

Our study also shows the change in the way patients are accepting GPPs on a positive note. This reflects findings in patients' feedback survey (Pharmaceutical Journal, 2016). The participants believed, in the past patients used to adamant to be seen only by the GPs for their medical issues. However, with the shortage of workforce, with some GPs appointment diary booked for almost month in advance, this trend is changing and now patients are fine to be seen by other healthcare professionals including nurses, and pharmacists. The patients are fine as long as their concerns have been addressed and the treatment is of high quality. These observations are also supported from the literature (Ryan et al. 2018)

Our study also reflects the approach a GPP should take to improve the relationship with the patients. As shown from the results in this study, the patients have their individual needs, and no one formula can fit all patients. To understand patients' needs is a difficult job which requires time. This scenario puts GPP in an ideal position to fill the communication and care gap between patients, GPs or nurses. GPs only have 10-15mintes per appointments and they don't have time to talk with the patients on factors which can have an indirect impact on patients' health. However, GPPs can fill this gap. As having more time while doing medication reviews, home visits or medicine management, they can develop a relationship of trusts with the patients, especially with those ones suffering from chronic medical conditions. This is also evident from the results of this study where GPs, nurses and GPPs from both England and Australia have mentioned positive and overwhelming response from patients. These resulted are also supported by Tan et al., (2014b) stating that a better satisfaction was noted when medication reviews were performed by the pharmacists.

According to the results from our study, in Australia, HMRS does help to build this bond. One of the participants who is managing a pilot scheme noted a very high patient satisfaction score for pharmacists. This reflects that although this service is in it's initial phase or at pilot scheme level, the positive impact of GPP is already visible.

Another critical aspect highlighted by participants was the efforts of pharmacist to improve their clinical knowledge. It is very clear that patients' needs, or demands can be different, but they expect to be seen by a skilled healthcare professionals. The patients would only trust GPP as an alternative to GPs or nurses if pharmacists have an excellent level of communications as well as clinical skills.

5.8 Training / Education

The results of this showed that the future of GPP mainly lies in pharmacist's own hands, i.e. how well they perform as GPP to bridge the present gaps in general practice framework and develop the necessary skills and understanding of the role. This has also been mentioned by Hampson, 2018. Our study also reflects the importance of training requirements that need to be reviewed to strengthen professional expertise of GPP.

Though pharmacist is a medical expert but the clinical knowledge what pharmacist acquire during their professional studies raises questions whether it makes them competent to take on this role. This is a question or concern that has emerged from pharmacists' views in our study and reflects on views given by (Barnes et al., 2017) in which a minimum of 2 years post qualification and clinical therapeutic diploma has been suggested. Our participants do agree that surely there is a need for training modules to be designed and implemented as part of this role, but at the same time it is tough to have a generic training model for this role as mentioned by Ryan et al., (2018).

The results in our study show that factors like professional background and length of experience would have a significant effect on required training and education. The central theme that has emerged from participants' views is the need to have continuous professional development for pharmacists. It does include training on both clinical and non-clinical skills.

The results show that most modules are focusing on non-clinical skills like leadership, communication skills but training on clinical skills has more importance. This is in the context, if the future of GPP role lies in more of a patient-facing role like running various clinics or performing medication reviews.

Hence, specific training on managing chronic conditions including diabetes, asthma, blood pressure and COPD etc. can be beneficial. As highlighted by one of the study participants, it would be a good idea if the government can involve universities in this initiative. The Universities can offer Non-Medical Prescribing courses and can re-structure the training by adding clinical perspectives into the modules. It endorses the suggestion of a recent study (Girvin & Wilson, 2018) & (Donovan et al., 2019) that clinical skills sections should be improved in MPharm course. Also, to enhance GPP clinical skills, there is a need to have an integration of pre-registration training in general practice.

In Australia, HMRS seems to provide the base for the training. The participants believed it is a good training programme which strengthens the clinical knowledge of accredited pharmacists and can be taken as an initial competency threshold for the GPP role. Also, the Pharmaceutical Society of Australia (PSA) has started training programmes for this role.

Although participants of this study believed that certain elements in pharmacy courses such as pathology, patient counselling and medicine optimisation are there however to perform this role an upskilling is needed. The real challenge starts when the pharmacist joins the medical practice, where the actual reflection of their knowledge and expertise is tested. The pharmacists would only be successful if they can develop the skills per the needs of the practice site. This is also supported from the literature that there is a need to upskill the newly graduated pharmacists to perform the GPP role. (Benson, Lucas & Williams, 2020)

This also highlights the importance of mentorship by GP. This has been mentioned in our study and this has also been endorsed in the literature by (Mann et al, 2018). Training modules provided by professional bodies have their value but the real knowledge and skills that a pharmacist gains while working in the clinic under the supervision of a mentor has no alternatives and nothing can substitute it. This is also supported from the literature that any organisation or practice who recruits a pharmacist must provide mentorship to review and improve their scope of practice (Butterworth et al., 2017).

5.9 Government Funding

The government funding is one of the main factors, which is going to decide the future of GPP service. This study shows that though; all participants do agree on the positive output by GPP at organisational and patient-level, medical practices depend on government funding for this role.

NHS England has changed its structure of funding and the Primary Care Networks (PCN) been guaranteed funding for approximately 20,000 additional staff including GPPs, so the funding is still available though not directly in the form for specific GPP role (NHS England, 2019). It is yet to be cleared how this would look like in the future once the funding for GPP role would be completely stopped. This has also been highlighted in a realistic review (Anderson et al.,

2019). GPs and organisational leads in our research have given positive remarks about future though understandably there would be a review of role specifications to make sure that there is no role overlapping especially between pharmacists and nurses. It is like a puzzle where you must find the right piece for the right place. It will take time but as discussed in the results of this study, if pharmacists continue to improve their clinical and patient-facing skills, there is no doubt that they have a huge role to play in future general practice framework.

Australia: In Australia, it's the initial phase of GPP role. The views by Australian participants reflect a stage where England was about 5 years back when the government started the national pilot scheme for the GPP. This study shows that the primary funding for pharmacist sector is via HMRS where the government is giving money to doctors as well as pharmacists to perform medication reviews referred by GPs. This has also been mentioned in a study done by Baker et al., 2019. The participants from Australia have shown their concerns about dependence on this funding model as it does restrict their job description. Ideally as mentioned by one of the participants, a pharmacist should be able to bill for the services they are providing like doctors (Medicare Benefits Scheme). Some other options are flexible funding model as mentioned in study by Freeman et al., 2016, or a funding model by Polasek et al., 2015, which recommend a Pharmacists in General Practice Incentive Programme (PGPIP) funding model. It will give pharmacists a chance to come forward and play a broad role which is not much tied up with the HMRS money. Results of this study suggest that although Australian pharmaceutical society and other healthcare organisations are in talks with the government about future funding models, however it is believed that not much will change in the next five years.

Chapter No. 6

CONCLUSION

This study shows the gaps as well as differences in England and Australia about expectations and perceptions of GPPs' role. Although, the study has some limitations, which have been explained in detail later in this chapter, however the points gathered are vital to provide future discussion points.

Pharmacy culture needs to change: First and most importantly, it is vital for pharmacists as a professional to bring a change in their culture. Globally, there is a change in trend of how the primary care services have been designed to counter the workforce crisis of GP. There are ever increasing opportunities for pharmacists to make their mark in healthcare sector by presenting themselves as the missing link which can bind the workforce together. But for this, pharmacists need to come out of their comfort zone of dispensing culture and equip themselves with required clinical knowledge and consultation skills to leave a positive mark and earn the confidence of the GPs.

Comparing training pathways for GPP: England lacks a training structure to prepare clinical pharmacists before they take on the GPP role. England can take a lead from Australia who requires pharmacists to complete highly skilled clinical course to get accreditation for HMRS. Similar design for such training or accreditation course in England would be helpful to improve clinical pharmacist skills and to perform at a high level, especially with improvement in clinical knowledge and patient facing roles. This is also an important aspect of GPPs' job description.

Prescribing annotation: Both countries need to review their policy on prescribing annotation. Though in England, most GPPs are acting as NMP, however taking on prescribing roles in surgery is a challenging task and a lack of protocol creates unclarity about the boundaries. On the other hand, Australia should take a proactive approach towards awarding prescribing qualification to pharmacists, as with defined protocols and closed supervision. Prescribing skill can play a big part in reducing GPs' workload, who spend a bulk of their daily time in dealing with repeat prescriptions. Also, GPPs who are running minor ailment clinics and monitoring patients with long term medical conditions can use their prescribing qualifications to enhance their credibility.

Funding for GPP: It seems like Australia now stands where England was about 5 years back when NHS pilot scheme was launched at the national level. It has been a success in England, though the workforce shortage still exists, GPP has been a valuable addition to the multi-disciplinary clinical team, endorsed by all participants in this study. Australia needs to perform further research on a similar designed pilot scheme at the national level which can facilitate GPP role in primary care, backed up with improved funding from the government. With practices using HMRS funding, it limits a GPP role and also creates friction within organisations that might prefer this role to be performed by accredited community pharmacists.

Job description & KPIs: As for England, further research should be done to design generic role description and more importantly, KPIs with the national evaluation to measure the

pharmacist expertise. Also, the government should facilitate further development for pharmacists in the role of advanced practitioners. At the same time, GPPs should realise that this is a highly skilled role which needs excellent communication and clinical skills. A fresh university graduate cannot take this role so they should continue to develop themselves professionally by taking on training courses to improve their clinical skills. Availability of pre-registration in surgeries is a positive step to provide initial training for pharmacists during qualification, something Australian healthcare can take the lead from for future education and training.

6.1 Limitations of Study

Overall, this study has few limitations, which are described below:

- Small sample size due to low response especially from Australia. As mentioned earlier, GPP role in Australia is in initial phase and number of available professionals who have experience of working as GPP or with GPP is small. Attempts were made to contact large pool of those professionals from Australia; however, it was challenging to recruit participants. Factors like time difference between England & Australia made it difficult to arrange a suitable time for interviews.
- Lack of similarity among the number of the same stakeholders' group.
- No direct involvement of the patient and the patients' feedback was based on the views of other stakeholders.
- Inconsistency in data collection as some of the participants from Australia has provided a written response which can have an impact on overall comparative data.

Due to these limitations there is a possibility of bias or lack of enough data to back up the results or conclusions. It is vital to acknowledge these limitations while synthesizing the results or conclusions, however the study offer valid points to improve the role of GPP in both countries. It also provides guidance to perform future policy and practice research in this area. Same time, it is important to understand that GPP role is fastly evolving and any qualitative input, especially when there is lack of comparative data between countries for this role, would be highly beneficial to highlight the present differences in views and expectations from GPP role and also how both countries can take steps forward to make this role successful.

6.2 Future Research

This study reflects on the importance of present research that has been done on GPP role and the need for any future research that can be beneficial to improve the future of GPP role. The participants have mentioned points on which further research can be conducted.

Qualitative research has its importance, highlighting the views of different stakeholders, but this study shows the need of more quantitative analysis which can reflect the figures of various measurable KPIs that can be used to show the overall impact of GPPs' role on the healthcare sector. Few suggestions given by participants are factors like reduction in GP visits, polypharmacy, impact on GP workload (appointments, reduction in GP time for medicine

management), the overall impact on the cost of prescribing budget, reduction in hospital admission, and reduction in risk of falls in elderly patients. It is essential to document these measures to highlight the changes that have come with the role of both performance and cost perspective. If work is not documented, then as stated by one of the participants the excellent work been done by a pharmacist can go unnoticed and won't get the actual recognition which it deserves. This study also reflects the importance of national evaluation and to review the overall impact of the GPP role at a bigger scale.

In Australia, research has been conducted on GPP role, but there is not much of quantitative work. Due to small pool of GPPs working in Australia at this moment, it is difficult to get a decent size of data or relevant results and outcomes on a reliable scale. However, there is need for future research to be planned, agreed by all participants in this study, to highlight the services been provided by GPPs. It should also include views about barriers and facilitators for this role. Ideally, research should be planned over multiple practices on a large scale to show the positive impact of GPPs with a larger sample size as highlighted in the study (Freeman et al., 2014) suggesting multicentre cluster-randomised controlled practice-based research.

This study reflects the importance of future research that can be used to structure the future training pathway and job description for GPPs in the light of collated data and views. With funding been a significant barrier, active future research would be helpful to present a strong case to the government and other healthcare organisations for future funding and to expand this role on a larger scale.

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REFERENCES

Anderson, C., Zhan, K., Boyd, M. & Mann, C. 2019, "The role of pharmacists in general practice: A realist review", *Research in Social and Administrative Pharmacy,* vol. 15, no. 4, pp. 338-345.

Austin, Z., & Sutton, J. (2014). Qualitative research: getting started. *The Canadian journal of hospital pharmacy*, *67*(6), 436–440. https://doi.org/10.4212/cjhp.v67i6.1406

Australian Medical Association. *Patient safety paramount in medication prescriptions*. 2008. Media Releases; [online]: http://www.ama.com.au/node/3358 (accessed 10 August 2019)

Australian Medical Association (2015). General GPPS-Improving patient care. [online] Available at: https://ama.com.au/system/tdf/documents/Pharmacists_in_General_Practice_Proposal.pdf?file=1&type=node&id=42083

Avery, A.J. 2017, "Pharmacists working in general practice: can they help tackle the current workload crisis*?", The British journal of general practice*: the journal of the Royal College of General Practitioners, vol. 67, no. 662, pp. 390-391

Babar, Z. 2015, *Pharmacy Practice Research Methods,* 1st 2015. edn, Springer International Publishing, Cham.

Baird, B., Charles, A., Honeyman, M. and Macguire, D. (2015). Understanding pressures in general practice. [online] Available at: https://www.kings*fun*d.org.uk/sites/default/files/field/field_publication_file/Understanding-GP-pressures-Kings-Fund-May-2016.pdf [Accessed 01 May 2019].

Baker, S., Lee, Y.P. & Hattingh, H.L. 2019, "An evaluation of the role of GPPs in Australia: a mixed methods study", *International journal of clinical pharmacy*, vol. 41, no. 2, pp. 504-515.

Bares, E., Ashraf, I. and Din, A. (2017). New roles for clinical pharmacists in general practice. Prescriber, [online] pp.26-28. Available at: https://onlinelibrary.wiley.com/doi/pdf/10.1002/psb.1558 [Accessed 10 May 2019].

Beech J, et al. Closing the gap: Key areas for action on the health and care workforce. Health Foundation, The King's Fund and Nuffield Trust; 2019 (www.health.org.uk/publications/reports/closing-the-gap).

Benson, H., Lucas, C., Kmet, W. et al. Pharmacists in general practice: a focus on drug-related problems. *Int J Clin Pharm* 40, 566–572 (2018) doi:10.1007/s11096-018-0617-9

Benson, H., Lucas, C. & Williams, K.A. 2020*, Establishing consensus for general GPP education: A Delphi study.*

Benson, H., Lucas, C., Benrimoj, S.I. & Williams, K.A. 2019, "The development of a role description and competency map for pharmacists in an interprofessional care setting", *International journal of clinical pharmacy,* vol. 41, no. 2, pp. 391-407.

Blondal, A.B.; Sporrong, S.K.; Almarsdottir, A.B. Introducing Pharmaceutical Care to Primary Care in Iceland—An Action Research Study. Pharmacy 2017, 5, 23.

BMJ 2018; 362 doi: https://doi-org.libaccess.hud.ac.uk/10.1136/bmj.k4019 (Published 25 September 2018)

Bradley, F., Ashcroft, D.M. and Crossley, N. (2018), Negotiating inter-professional interaction: playing the general practitioner-pharmacist game. Sociol Health Illn, 40: 426-444. doi:10.1111/1467-9566.12656

Bradley, F., Elvey, R., Ashcroft, D.M., Hassell, K., Kendall, J., Sibbald, B. & Noyce, P. 2008, "The challenge of integrating community pharmacists into the primary health care team: A case study of local pharmaceutical services (LPS) pilots and interprofessional collaboration", *Journal of Interprofessional Care,* vol. 22, no. 4, pp. 387-398.

Bradley. F, Seston. E, Mannall C, Cutts. C: Evolution of the general GPP's role in England: a longitudinal study
British Journal of General Practice 2018; 68 (675): e727-e734. DOI: 10.3399/bjgp18X698849
Bajorek B, LeMay K, Gunn K, Armour C. The potential role for a pharmacist in a multidisciplinary general practitioner super clinic. *Australas Med J. 2015*;8:52–63

Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. doi:10.1191/1478088706qp063oa

Bush. J, Langley. C, Jenkins. D, Johal. J, Huckerby. C. *Clinical pharmacists in general practice: an initial evaluation of activity in one English primary care organisation.* Int J Pharm Pract, 26 (2018), pp. 501-506

Butterworth. J, Sansom. A, Simms. L, Healy. M, Kingsland. Campbell. E. Pharmacists' perceptions of their emerging general practice roles in UK primary care: a qualitative interview study Br J Gen Pract (2017)

Chapman, A.L., Hadfield, M. & Chapman, C.J. 2015, "Qualitative research in healthcare: an introduction to grounded theory using thematic analysis", *The Journal of the Royal College of Physicians of Edinburgh,* vol. 45, no. 3, pp. 201-205.

Deeks, L.S., Kosari, S. & Naunton, M. 2018, "Clinical pharmacists in general practice", *The British journal of general practice : the journal of the Royal College of General Practitioners,* vol. 68, no. 672, pp. 320.

Deeks, Louise S; Naunton, Mark; Tay, Guan Han; Peterson, Gregory M; Kyle, Gregory; Davey, Rachel; Dawda, Paresh; Goss, John; Cooper, Gabrielle M; Porritt, Julie and Kosari, Sam. *What can pharmacists do in general practice? [online]. Australian Journal of General Practice*, Vol. 47, No. 8, Aug 2018: 545-549.

Deloitte Access Economics (2015). Analysis of non-dispensing pharmacists in general practice clinics. [online] Available at: https://ama.com.au/system/tdf/documents/DAE_Report.pdf?file=1&type=node&id=42083

Dennis, S., May, J., Perkins, D. *et al.* What evidence is there to support skill mix changes between GPs, pharmacists and practice nurses in the care of elderly people living in the community?. *Aust N Z Health Policy* 6**,** 23 (2009) doi:10.1186/1743-8462-6-23

Department of Health (2008). Pharmacy in England Building on strengths – delivering the future.

Donovan, G., Brown, A., Von Hatten, E., Armstrong, C. & Hardisty, J. 2019, "Introducing pharmacy students to the structure and function of general practice through undergraduate placements", *Currents in Pharmacy Teaching and Learning,* vol. 11, no. 10, pp. 1055-1064.

Farrell, B., Ward, N., Dore, N., Russell, G., Geneau, R. & Evans, S. 2013, "Working in interprofessional primary health care teams: What do pharmacists do?", *Research in Social and Administrative Pharmacy,* vol. 9, no. 3, pp. 288-301.

Farrugia, B. 2019, "WASP (Write a Scientific Paper): Sampling in qualitative research", *Early human development,* vol. 133, pp. 69-71.

Fernandes O, Gorman SK, Slavik RS, Semchuk WM, Shalansky S, Bussières JF, et al. Development of clinical pharmacy key performance indicators for hospital pharmacists using a modified Delphi approach. Ann Pharmacother. 2015;49:656–69.

Fish. A, Watson. A, Bond. C. Practice-based pharmaceutical services: a systematic review. *International J Pharmaceutical Practice*, 10 (2002), pp. 225-233

Freeman, C., Cottrell, Kyle, G., Williams & Nissen, L. (2012a), "Chronicles of a primary care GPP", *Integrated Pharmacy Research and Practice,* vol. 1, no. Issue 1, pp. 13-18.

Freeman, C., Cottrell, W.N., Kyle, G., Williams, I. & Nissen, L. (2012b), "Integrating a pharmacist into the general practice environment: opinions of pharmacist's, general practitioner's, health care consumer's, and practice manager's", *BMC health services research*, vol. 12, no. 1, pp. 229-229.

Freeman, C., Cottrell, W.N., Kyle, G., Williams, I. and Nissen, L. (2012c), Timeliness and completion of medication reviews. *International Journal of Pharmacy Practice*, 20: 395-401. doi:10.1111/j.2042-7174.2012.00213.x

Freeman, C., Cottrell, W.N., Kyle, G., Williams, I. & Nissen, L. (2012d), "Does a primary care GPP improve the timeliness and completion of medication management reviews?", *International Journal of Pharmacy Practice,* vol. 20, no. 6, pp. 395-401.

Freeman, C., Cottrell, N., Rigby, D., Williams, I.D. & Nissen, L. 2014, "The Australian Practice Pharmacist", *Journal of Pharmacy Practice and Research,* vol. 44, no. 4, pp. 240-248.

Freeman C, Cottrell WN, Kyle G, Williams I, Nissen L. Pharmacists', general practitioners' and consumers' views on integrating pharmacists into general practice. *J Pharm Pract Res*. (2012e);42:184–.

Freeman C, Rigby D, Aloizos J, Williams I. The GPP: a natural fit in the general practice team. *Aust Prescr*. 2016;39:211–4.

General Practice: Health of the Nation 2019*. The Royal Australian College of General Practitioners*, East Melbourne, Vic: RACGP, 2019.

General Practice Forward View. (2016). [online] NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf [Accessed 4 May 2019].

Gerard, K, Tinelli, M, Latter, S, Blenkinsopp, A, Smith, A (2012) Valuing the extended role of prescribing pharmacist in general practice: results from a discrete choice experiment. *Value in Health*, 15 (2012), pp. 699-707

Girvin, B. & Wilson, D. 2018, "Clinical skills training for pharmacists in general practice", *Prescriber,* vol. 29, no. 12, pp. 19-25.

GPhC accreditation criteria, 2019, Learning outcomes and indicative content for pharmacist independent prescribing programmes 2018/19. Available at : https://www.pharmacyregulation.org/sites/default/files/document/accreditation_criteria_learning_outcomes_and_indicative_content_full_programme_2018-19.pdf

Greenhalgh, Trisha & Taylor, Rod. (1997). Greenhalgh T, Taylor R. Papers that go beyond numbers (qualitative research). *BMJ 1997*; 315: 740-743. BMJ. 315. 740 - 743. 10.1136/bmj.315.7110.740.

Hale, A., Coombes, I., Stokes, J., Aitken, S., Clark, F. & Nissen, L. 2016, "Patient satisfaction from two studies of collaborative doctor – pharmacist prescribing in Australia", *Health Expectations,* vol. 19, no. 1, pp. 49-61.

Hampson, N. 2018, "Getting started with clinical pharmacists in general practice", Prescriber, vol. 29, no. 3, pp. 25-28.

Holloway, I. & Wheeler, S. 2010, *Qualitative research in nursing and healthcare*, 3rd edn, Wiley-Blackwell, Chichester

Hoti K, Hughes J, Sunderland B. An expanded prescribing role for pharmacists - an Australian perspective. *Australas Med J*. 2011;4(4):236–242. doi:10.4066/AMJ.2011.694

Jorgenson, D., Laubscher, T., Lyons, B. and Palmer, R. (2014), Primary care team pharmacist integration*. International Journal of Pharmacy Practice*, 22: 292-299. doi:10.1111/ijpp.12080

Karampatakis, G.D., Ryan, K., Patel, N. et al. How do pharmacists in English general practices identify their impact? An exploratory qualitative study of measurement problems. *BMC Health Serv Res* 19, 34 (2019a) doi:10.1186/s12913-018-3842-y

Karampatakis, G., Ryan, K., Patel, N. et al. Capturing pharmacists' impact in general practice: an e-Delphi study to attempt to reach consensus amongst experts about what activities to record. *BMC Fam Pract* 20, 126 (2019b) doi:10.1186/s12875-019-1008-6

MacRae, F., Lowrie, R., MacLaren, A., Barbour, R.S. & Norrie, J. 2003, "Pharmacist-led medication review clinics in general practice: the views of Greater Glasgow GPs", *International Journal of Pharmacy Practice*, vol. 11, no. 4, pp. 199-208.

Madan. A, Manek. N, Gregory. G. General practice: the heart of the NHS. British *Journal of General Practice* 2017; 67 (657): 150-151. DOI: 10.3399/bjgp17X689965.

Making Time in General Practice. (2015). [online] NHS Alliance. Available at: https://www.primarycarefoundation.co.uk/images/PrimaryCareFoundation/Downloading_Reports/PCF_Press_Releases/Making-Time-in_General_Practice_FULL_REPORT_28_10_15.pdf [Accessed 10 May 2019.

Malterud, K. 2001, "Qualitative research: standards, challenges, and guidelines", *The Lancet,* vol. 358, no. 9280, pp. 483-488.

Mann C, Anderson C, Avery A, Waring J, Boyd M. Clinical pharmacists in general practice: pilot scheme evaluation. The University of Nottingham 2018. https://www.nottingham.ac.uk/pharmacy/documents/generalpracticeyearfwdrev/clinical-pharmacists-in-general-practice-pilot-scheme-full-report.pdf. Accessed 15 Feb 2019

Marques, I., Gray, N.J., Tsoneva, J., Magirr, P. & Blenkinsopp, A. 2018, "Pharmacist joint-working with general practices: evaluating the Sheffield Primary Care Pharmacy Programme. A mixed-methods study", *BJGP open*, vol. 2, no. 4, pp. bjgpopen18X101611.

MARTIN, R.M., LUNEC, S.G. & RINK, E. 1998, "UK postal survey of pharmacists working with general practices on prescribing issues: characteristics, roles and working arrangements", *International Journal of Pharmacy Practice,* vol. 6, no. 3, pp. 133-139.

Matheson, C., Reid, F., Stewart, F. & Williams, H. 2020, "Development of an education and support framework for pharmacists working in GP practice", *International Journal of Pharmacy Practice,* vol. 28, no. 2, pp. 191-199.

Mercer, K., Neiterman, E., Guirguis, L., Burns, C. & Grindrod, K. 2020, *"My pharmacist": Creating and maintaining relationship between physicians and pharmacists in primary care settings.*

N, F., I, N., M, E., J, W., A, H. & Evidence-based OutReach trialists 2002, "A randomised controlled trial of the effect of educational outreach by community pharmacists on prescribing in UK general practice", *British Journal of General Practice,* vol. 52, no. 477, pp. 290-295.

Nabhani-Gebara, S., Fletcher, S., Shamim, A., May, L., Butt, N., Chagger, S., Mason, T., Patel, K., Royle, F. and Reeves, S., 2020. *General GPPs in England: Integration, mediation and professional dynamics.*

Neal, J.W., Neal, Z.P., VanDyke, E. & Kornbluh, M. 2015, "Expediting the Analysis of Qualitative Data in Evaluation: A Procedure for the Rapid Identification of Themes From Audio Recordings (RITA)", *American Journal of Evaluation,* vol. 36, no. 1, pp. 118-132.

NHS England (July 2015). New £15m Scheme to Give Patients Pharmacist Support in GP Surgeries. https://www.england.nhs.uk/2015/07/pharm-supp-gp-surgeries/ [Accessed 01 May 2019).

NHS England, 2017: *Building greater insight through qualitative research*: publications gateway reference: 06757. Available on; https://www.england.nhs.uk/wp-content/uploads/2017/04/bitesize-guide-qualitative-research.pdf

NHS England (October 2015). More than 400 Pharmacists to be Recruited to GP Surgeries by Next Year. https://www.england.nhs.uk/2015/11/pharmacists-recruited/ [Accessed 01 May 2019]

NHS England. Investment and evolution: A five-year framework for GP contract reform to implement The NHS Long Term Plan. (2019). [online] Available at: https://www.england.nhs.uk/wp-content/uploads/2019/01/gp-contract-2019.pdf.

NHS England, Health Education England. Clinical pharmacists in general practice pilot. 2015. https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/07/clinical-pharmacists-gp-pilot.pdf. Accessed 15 March 2019

Ng, J. & Harrison, J. 2010, "Key performance indicators for clinical pharmacy services in New Zealand public hospitals: stakeholder perspectives*", Journal of Pharmaceutical Health Services Research*, vol. 1, no. 2, pp. 75-84.

Nkansah, N., Mostovetsky, O., Yu, C., Chheng, T., Beney, J., Bond, C.M., Bero, L. & Bero, L. 2010, "Effect of outpatient pharmacists' non-dispensing roles on patient outcomes and prescribing patterns", *Cochrane Database of Systematic Reviews*, vol. 2011, no. 1, pp. CD000336.

Nkansah N, Mostovetsky O, Yu C, et al. (2010) Effect of outpatient pharmacists' non-dispensing roles on patient outcomes and prescribing patterns. Cochrane Database Syst Rev (7):CD000336

Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. 2017, "Thematic Analysis: Striving to Meet the Trustworthiness Criteria", *International Journal of Qualitative Methods,* vol. 16, no. 1, pp. 160940691773384.

Petty, DR, Knapp, P, Raynor, DK, House, AO. (2003) Patients' views of a pharmacist-run medication review clinic in general practice. *British Journal of General Practice*, 53.

Pharmacy Guild of Australia, 2010. The Fifth Community Pharmacy Agreement between the Comonwealth of Australia and the Pharmacy Guild of Australia. [online] Available at: http://www.pbs.gov.au/general/sixth-cpa-files/5cpa.pdf.

Pharmaceutical Journal. (2016). *Patient survey results acknowledge "huge" role clinical pharmacists in GP practices could play*. [online] Available at: https://www.pharmaceutical-journal.com/news-and-analysis/news/patient-survey-results-acknowledge-huge-role-clinical-pharmacists-in-gp-practices-could-play/20202095.article?firstPass=false [Accessed 9 Jan. 2019].

Pharmaceutical Journal. (2015). *Pharmacists in GP surgeries is a pragmatic solution*. [online] Available at: https://www.pharmaceutical-journal.com/news-and-analysis/opinion/editorial/pharmacists-in-gp-surgeries-is-a-pragmatic-solution/20068267.article [Accessed 4 Mar. 2019].

Polasek, T.M., Rowland, A., Wiese, M.D. & Sorich, M.J. 2015, "Pharmacists in Australian general practice: an opportunity for expertise in precision medicine", *Therapeutic Advances in Drug Safety,* vol. 6, no. 5, pp. 186-188.

Pope, C., Pope, C. & Mays, N. 2019, *Qualitative research in health care,* Fourth; 4 edn, Wiley Blackwell, Hoboken, New Jersey. Page 1

RACGP, General practice based pharmacist, position statement: April 2019

RACGP (July 2015). General practice supports pharmacists as part of GP-led teams. https://www.racgp.org.au/advocacy/ugpa/media-releases/view-all-media-releases/general-practice-supports-pharmacists [Accessed 12 May 2019]

Raghunandan, R., Tordoff, J. & Smith, A. 2017, "Non-medical prescribing in New Zealand: an overview of prescribing rights, service delivery models and training", *Therapeutic Advances in Drug Safety,* vol. 8, no. 11, pp. 349-360.

Rosenthal, M., Austin, Z. & Tsuyuki, R.T. 2010, "Are Pharmacists the Ultimate Barrier to Pharmacy Practice Change?", *Canadian Pharmacists Journal / Revue des Pharmaciens du Canada,* vol. 143, no. 1, pp. 37-42.

Royal Pharmaceutical Society. *Prescribing competency framework.* July 2016, Available at: https://www.rpharms.com/Portals/0/RPS%20document%20library/Open%20access/Professional%20standards/Prescribing%20competency%20framework/prescribing-competency-framework.pdf?ver=2019-02-13-163215-030

Royal Pharmaceutical Society & Royal College of Nursing, (2015). *Working together to help patients make the most of medicines.* Available at:

https://www.rpharms.com/Portals/0/RPS%20document%20library/Open%20access/Hub/rps-make-the-most-of-medicines-web.pdf

Rubio-Valera, M., Jové, A.M., Hughes, C.M., Guillen-Solà, M., Rovira, M. & Fernández, A. 2012, "Factors affecting collaboration between general practitioners and community pharmacists: a qualitative study", *BMC health services research,* vol. 12, no. 1, pp. 188.

Ryan, K., Patel, N., Lau, W.M., Abu-Elmagd, H., Stretch, G. & Pinney, H. 2018, "Pharmacists in general practice: a qualitative interview case study of stakeholders' experiences in a West London GP federation", *BMC health services research*, vol. 18, no. 1, pp. 234-13.

Sake, F., Wong, K., Bartlett, D.J. & Saini, B. 2018, "Integrated primary care insomnia management in Australia", *Research in Social and Administrative Pharmacy,* vol. 14, no. 2, pp. 170-179.

Saw, P.S., Nissen, L.M., Freeman, C., Wong, P.S. & Mak, V. 2015, "Health care consumers' perspectives on pharmacist integration into private general practitioner clinics in Malaysia: a qualitative study", Patient preference and adherence, vol. 9, pp. 467

Saw, P.S., Nissen, L., Freeman, C., Wong, P.S. & Mak, V. 2017, "A qualitative study on pharmacists' perception on integrating pharmacists into private general practitioner's clinics in Malaysia", *Pharmacy Practice,* vol. 15, no. 3, pp. 971.

Silcock, J., Raynor, D.K.T. & Petty, D. 2004, "The organisation and development of primary care pharmacy in the United Kingdom", *Health policy,* vol. 67, no. 2, pp. 207-214.

Sims, L. & Campbell, J. 2017, "Ills, pills, and skills: developing the clinical skills of pharmacists in general practice", *The British journal of general practice : the journal of the Royal College of General Practitioners,* vol. 67, no. 662, pp. 417-418.

Sloeserwij, V., Hazen, A., Zwart, D., Leendertse, A., Poldervaart, J.M., Bont, A., de Gier, J.J., Bouvy, M. & Wit, N. 2019, "Effects of non-dispensing pharmacists integrated in general practice on medication-related hospitalisations", *British journal of clinical pharmacology*, vol. 85, no. 10, pp. 2321-2331.

Stewart D, George J, Bond C, Diack H, McCaig D, Cunningham S. Views of pharmacist prescribers, doctors and patients on pharmacist prescribing implementation. *Int J Pharm Pract*. 2009;17(2):89–94.

TAMAS, E., SÖDERSVED KÄLLESTEDT, M., HULT, H., KARLGREN, K. and ALLVIN, R., 2019. Closing the Gap. *Journal of Continuing Education in the Health Professions*, 39(1), pp. 36.

Tan, E., Stewart, K., Elliott, R.A. & George, J. 2012, "An exploration of the role of pharmacists within general practice clinics: the protocol for the pharmacists in practice study (PIPS)", *BMC health services research,* vol. 12, no. 1, pp. 246.

Tan EC, Stewart K, Elliott RA, George J. Stakeholder experiences with general GPP services: a qualitative study. *BMJ Open*. 2013;3:e003214.

Tan, E.C.K., Stewart, K., Elliott, R.A. & George, J. (2014a)*, "Pharmacist consultations in general practice clinics: The Pharmacists in Practice Study (PIPS)", Research in Social and Administrative Pharmacy,* vol. 10, no. 4, pp. 623-632.

Tan, E.C.K., Stewart, K., Elliott, R.A. & George, J. 2014b, "Pharmacist services provided in general practice clinics: A systematic review and meta-analysis", *Research in Social and Administrative Pharmacy,* vol. 10, no. 4, pp. 608-622.

Tan, E.C.K., Stewart, K., Elliott, R.A. & George, J. (2014c), "Integration of pharmacists into general practice clinics in Australia: the views of general practitioners and pharmacists: Pharmacist integration into general practice", *International Journal of Pharmacy Practice, vol. 22*, no. 1, pp. 28-37

The Patients Association. *Survey of patients and carers views of clinical pharmacists based in GP practices: Report of findings*. November 2016. Available at: https://www.patients-association.org.uk/wp-content/uploads/2016/12/The-Patients-Association-PCPA-Report.pdf [Accessed May 2019}

Trueman P, Taylor DG, Lowson K. 2010. Evaluation of the scale, causes and costs of waste medicines (York Health Economics Consortium and The School of Pharmacy, University of London, York) Technical report.

Wardani, S. & Kusuma, I.W. 2020, "Comparison of Learning in Inductive and Deductive Approach to Increase Student's Conceptual Understanding based on International Standard Curriculum", *Jurnal Pendidikan IPA Indonesia,* vol. 9, no. 1, pp. 70-78.

WHO, 2003. Adherence to long-term therapies Evidence for action. Available at: http://whqlibdoc.who.int/publications/2003/9241545992.pdf. [Accessed 20/11/2019]

Zermansky, A.G., Petty, D.R., Raynor, D.K., Lowe, C.J., Freemantle, N. & Vail, A. 2002, "Clinical medication review by a pharmacist of patients on repeat prescriptions in general practice: a randomised controlled trial", Health technology assessment (Winchester, England), vol. 6, no. 20, pp. 1.

Zubin, A. & Sutton, J. 2015, *Research Methods in Pharmacy Practice*, 1st 2015. Edn, Elsevier Internation Publishing.

Chapter No. 8

Appendix

Appendix 1

Sem-structure interview guide for GPs

Perceptions & Challenges

What are your views about general practice framework; do you believe there are any gaps present in it?
What was your initial perception about integrating pharmacist into GPP's role to fill present gaps (if any) in general practice framework? (role specifications)
Do you believe there was a mismatch in the professional expectations you had from GPP's role in the early stages?
What were your initial reservations about integrating pharmacist into the clinical team? (factors like clinical knowledge, communication skills, management skill, and cost factor)
How well you believe pharmacist was professionally prepared to perform as GPP?
What were the operational challenges or hurdles you faced while working with the pharmacist (factors like lack of role specifications, room availability, working collaboration with other staff members etc.)?
In your views what should be the key performance indicators, you believe to analyse GPP role?

Pharmacist-GP working collaboration

How do you evaluate your existing working relationship with the pharmacist and how it has changed since the beginning?
Have you got any concerns related to medico-legal implications and scope of GPP's practice, (situations where you think pharmacist has gone beyond the area of expertise)?
How easy you find a pharmacist to approach and communicate?
What factors do you believe influence this working collaboration?
What steps can be taken to improve this working collaboration?
Briefly explaining, what impact a GPP has made on your scope of practice?

Pharmacist's Skills set

How you evaluate the competency of the pharmacist in the patient-facing role , e.g. to run clinics, perform medication reviews and home visits etc.

What are your thoughts about prescribing role of pharmacist highlighting any reservations you have about pharmacist working as a non-medical prescriber?

In your views, what protocols should be set up at the organizational level for prescribing pharmacist?

What are your thoughts about medicine management skills of pharmacist performing at GP surgeries?

How you differentiate GPP's role with practice nurse as occasionally it is confused to be overlapping with each other?

How do you evaluate GPP's role to link surgery with a community pharmacy, hospital and other health-related organisations like CCG?

What are your thoughts on comparing in house GPP employed directly by surgery with one employed by local health organisations like CCG?

Future of GPP

What future do you see for GPP's role in future general practice framework, briefly summarising what activities they should be involved at the patient level, clinician level and at practice level?

How do you evaluate the patient's feedback and perceptions about GP pharmacist?

How do you evaluate the cost of employing a GPP and aspects linked with it like indemnity insurance?

Based on your experiences and need of workload, do you see GPP as a part time or full-time role?

What are your thoughts on available funding options for GPP? Will you recruit GPP once GP pilot scheme funding is finished? (England only)

Based on your overall experience, what training would you like to see for the pharmacist to improve competency as GPP?

How well you believe GPP has evolved/performed as GPP impacting on overall healthcare provision and patient care at GP surgeries, highlighting practice-level benefits?

Has GPP's role changed your overall perceptions about Pharmacist?

Considering the possible barriers and facilitators for the current GPP role, what steps should be taken at the organizational level to improve GPP's role?

Briefly describe any further research you would like to see on GP GPP?

Do you have any other comments to add on this topic?

Appendix 2

Semi-structured interview guide for Nurses

Perceptions & Challenges

What are your views about general practice framework and do you believe there are any gaps present in it?
What was your initial perception about GPP's role integrated to fill present gaps (if any) in general practice framework?
Do you believe there was a mismatch in the professional expectations you had from GPP role in early stages?
What were your initial reservations about integrating pharmacist into the clinical team? (Factors like clinical knowledge, communication skills, management skill, and cost factor)
How well you believe pharmacist was professionally prepared to perform as GPP?
What were the operational challenges or hurdles you faced while working with GPP?
What should be the key performance indicators you believe in analysing GPP role?

Pharmacist-Nurse working collaboration

How do you evaluate your present working relationship with the pharmacist and how it has changed since the beginning?
How you differentiate GPP's role with your role as a Nurse practitioner as occasionally it is confused to be overlapping with each other?
Have you got any concerns related to medico-legal implications and scope of GPP's practice, (situations where you think pharmacist has gone beyond the area of expertise)?
How easy you find a pharmacist to approach and communicate?
What factors do you believe influence this working collaboration?
What steps can be taken to improve this working collaboration?
Briefly explaining, what impact a GPP has made on your scope of practice?

Pharmacist's Skills set

How you evaluate the competency of the pharmacist in patient-facing role e.g. to run clinics, perform medication reviews and home visits etc.

What are your thoughts about prescribing role of pharmacist highlighting any reservations you have about pharmacist working as non-medical prescriber?
In your views, what protocols should be set up at the organizational level for prescribing pharmacist?
What are your thoughts about medicine management skills of pharmacist performing at GP surgeries?
How do you evaluate GPP's role to link surgery with a community pharmacy, hospital and other health-related organisations like CCG?
What are your thoughts on comparing in house GPP employed directly by surgery with one employed by local health organisations like CCG?

Future of GPP

What future do you see for GPP's role in future general practice framework, briefly summarising what activities they should be involved at the patient level, clinician level and at practice level?
How do you evaluate the patient's feedback and perceptions about GP pharmacist?
Based on your experiences and need for workload, do you see GPP as a part-time or full-time role?
Based on your overall experience, what training would you like to see for the pharmacist to improve competency as GPP?
How well you believe GPP has evolved/performed as GPP impacting on overall healthcare provision and patient care at GP surgeries, highlighting practice-level benefits?
Has GPP's role changed your overall perceptions about Pharmacist?
Considering the possible barriers and facilitators for the current GPP role, what steps should be taken at the organizational level to improve GPP's role?
Briefly describe any further research you would like to see on GP GPP?
Do you have any other comments to add on this topic?

Appendix 3

Sem-structured interview guide for GPP

Perceptions & Challenges

What are your views about current general practice framework and do you believe there are any gaps present in it?
What was your initial perception about GPP's role integrated to fill present gaps (if any) in general practice framework? (job specifications)
What are your thoughts about initial expectations other healthcare professionals had from GPP, do you think there was a mismatch in their professional expectations?
What were your initial reservations about your role as GPP? (Factors like clinical knowledge, communication skills, management skill, and cost factor)
What were the initial operational challenges or hurdles you faced while working as GPP?

What are your views on an emotional challenge especially in the initial phase to such as perceived professional inadequacy and developing a clinical aptitude for patient-facing clinical skills?
What support did you receive at the organizational level to overcome all these challenges?
How well you believe you were professionally prepared to perform as GPP?
What should be the key performance indicators you believe to analyse your role as GPP?

GPP's working collaboration:

How do you evaluate your present working relationship with other staff members in an organization especially GPs & Nurses and how it has changed since the beginning?
How you differentiate your role as GPP with practice nurse as occasionally, it is confused to be overlapping with each other?
Have you got any concerns related to medico-legal implications and scope of your role as GPP (situations where concerns raised about pharmacist been gone beyond area of expertise)?
How easy you find GP and Nurses to approach and communicate?
What factors you believe influence this working collaboration?
What steps can be taken to improve this working collaboration?

Pharmacist's Skills set:

How you evaluate the competency of the pharmacist in patient-facing role e.g. to run clinics, perform medication reviews and home visits etc.
What are your thoughts about prescribing role of pharmacist highlighting any reservations you have about pharmacist working as non-medical prescriber?
In your views what protocols should be set up at the organizational level for prescribing pharmacist?
What are your thoughts about medicine management skills of pharmacist performing at GP surgeries?
How do you evaluate GPP's role to link surgery with a community pharmacy, hospital and other health-related organizations like CCG?
What are your thoughts on comparing in house GPP employed directly by surgery with one employed by local health organizations like CCG?

Future of GPP

What future do you see for GPP's role in future general practice framework, briefly summarizing what activities you should be involved at the patient level, clinician level and at practice level?
Based on your overall experience what training would you like to see to improve your competency as GPP?
How do you evaluate the patient's feedback and perceptions about GP pharmacist?
Based on your experiences and need for workload, do you see GPP as a part-time or full-time role?
How well you believe GPP has evolved/performed as GPP impacting on overall healthcare provision and patient care at GP surgeries, highlighting practice-level benefits?

Considering the possible barriers and facilitators for the current GPP role, what steps should be taken at the organizational level to improve GPP's role?
Has GPP's role changed your overall perceptions about Pharmacist?
Briefly describe any further research you would like to see on GP GPP?
Do you have any other comments to add on this topic?

Appendix 4
Sem-structure interview guide for Organizational lead

Perceptions and Challenges

What are your views about the current general practice framework and do you believe there are any gaps present in it?

What was your initial perception about GPP's role integrated to fill present gaps (if any) in general practice framework as a part of your organization's MDT?
Do you believe there was a mismatch in the professional expectations you had from GPP role in early stages?
What were your initial reservations about the role of GPP?
How well you believe pharmacist was professionally prepared to perform as GPP?
What were the initial operational challenges or hurdles you faced while working with GPP, considering expectations and reservations you had, please give views on aspects like lack of job description, management skills, communication skills, initial training, cost factor and availability of rooms etc?
What support you as the organizational lead did provide to GPP to overcome these challenges and hurdles?
What are your views on GPP's scope of practice, has there ever been any medicolegal issues where concerns were raised by yourself or other healthcare professionals about GPP's area of expertise?
What should be the key performance indicators you believe to analyse GPP role?

Working Collaboration
How do you evaluate the present working relationship of GPP with other team members of your organization and how it has changed since the beginning?
How you differentiate GPP's role with practice nurse as occasionally it is confused to be overlapping with each other?
How easy you find GPP to approach and communicate?
What factors do you believe influence this working collaboration?
What steps can be taken to improve this working collaboration?

Pharmacist's Skills set:

How you evaluate the competency of the pharmacist in patient-facing role e.g. to run clinics, perform medication reviews and home visits etc.
What are your thoughts about prescribing role of pharmacist highlighting any reservations you have about pharmacist working as non-medical prescriber?

In your views what protocols should be set up at the organizational level for prescribing pharmacist?
What are your thoughts about medicine management skills of pharmacist performing at GP surgeries?
How do you evaluate GPP's role to link surgery with a community pharmacy, hospital and other health-related organizations like CCG?
What are your thoughts on comparing in house GPP employed directly by surgery with one employed by local health organizations like CCG?

Future of GPP

What future do you see for GPP's role in future general practice framework, briefly summarizing what activities they should be involved at the patient level, clinician level and at practice level?
How you evaluate NHS response to GPP role, and do you think the government will continue this role (how you see in 5-10 years)?
How do you evaluate the patient's feedback and perceptions about GP pharmacist?
How would you comment on the success and failure of this role by highlighting possible barriers and facilitators?
What are your views on the cost of employing a GPP, how cost-effective is the role of GPP?
Will you recommend recruiting GPP once GP pilot scheme funding is finished?
How well you believe GPP has evolved impacting on overall healthcare provisions
Based on your experiences and need for workload, do you see GPP as a part-time or full-time role?
Based on your overall experience, what training would you like to see for pharmacist to improve competency as GPP?
Has GPP's role changed your overall perceptions about Pharmacist?
Briefly describe any further research you would like to see on GP GPP?
Do you have any other comments to add on this topic?

Appendix 5

Semi-structured interview guide for Academia

Perceptions and Challenges

Based on your research in the healthcare sector:
What are your views about the current general practice framework and do you believe there are any gaps present in it?
What is your perception about GPP's role and how important you feel GPP role can be in bridging gaps present in the primary healthcare system?
What barriers, facilitators and opportunities do you see in pharmacists adopting this role?
How do you compare healthcare systems of other countries (e.g. Australia/Canada, New Zealand) where the role of GPPs is already established? How do you view the role in these countries and if there are any opportunities and differences?
Why do you believe research in this area is important?

Future of GPP

What future do you see for GPP's role in general practice framework?
How you evaluate NHS response to GPP role, and do you think the government will continue this role (how you see in 5-10 years)?
How do you evaluate the patient's feedback and perceptions about GP pharmacist?
How would you comment on the success and failure of GPP's role?
Based on your overall experience what training would you like to see for the pharmacist to improve competency as GPP?
Has GPP's role changed your overall perceptions about Pharmacist?
Briefly describe any further research you would like to see on GP GPP and how it will impact to improve the quality of the healthcare system in relation to GPP's role?
Do you have any other comments to add on this topic?

Appendix 6
Participant information letter

Department of Pharmacy,

University of Huddersfield,

Queensgate, HD1 3DH

United Kingdom

Invitation Letter for participation in Research study

Research topic: A qualitative evaluation of key stakeholders' expectations and perceptions regarding GPPs' role in England and Australia

Dear Sir / Madam,

My name is Noshad Akhtar, presently working as a clinical GPP with gtd healthcare. I in collaboration with the centre of pharmaceutical policy and practice research, University of Huddersfield, UK, have planned a qualitative comparative study on the above mentioned research topic.

For that purpose, our team identified you, as an essential and influential stakeholder with interests and experienced relevant to the aim of this study and would like to humbly request you for an interview session either personally or by telephone. Below please find some information about the project.

Project Description:

The aim of this qualitative study is to evaluate the expectations and perceptions of key stakeholders in England and Australia about the role of GPP.

The objectives of this research project are to:

- compare the impact of GPPs' role on the healthcare system in England and Australia.
- determine and formulate questions regarding key stakeholders' views on barriers and facilitators affecting GPP role.

- determine questions regarding the future of GPP role
- formulate questions regarding the training of GPP

Project Procedures:

A semi-structured interview guide has been developed and a total of 10 key stakeholders will be individually interviewed. Each Stakeholder will be asked their opinion regarding their views and perceptions on the impact of GPP on the general healthcare system in relation to the above-mentioned themes, the sorts of policy-related questions that need to be answered and to explore any new themes that will emerge from collected data.

The participants are selected from a wide range of experts who has direct interests in the primary healthcare system. They can be broadly divided into the following groups:

- Healthcare professionals including GPs, Nurses and Clinical Pharmacist.
- Organizational lead
- Academics who have written on various aspects of healthcare system

The interview will be recorded, transcribed and then analysed.

Anonymity and Confidentiality

Participation in this project is voluntary; however, after taking part in the interview, it will not be possible to withdraw from this research. All audio files and electronic data will be stored in a password-protected computer at the University of Huddersfield. All paper files will be stored in a locked cabinet at the University of Huddersfield. Digital files of recordings will be destroyed upon completion of transcript approximately 7-10 days after the call, and names and other identifying information will be deleted from all electronic and paper copies of the transcript. The data will be used for writing a report and a paper and results of this project will be available through an academic publication, yet to be determined. Any information you provide may be quoted in publications or presentations; however, confidentiality will be maintained, and any references will be quoted anonymously.

The Interview:

The interview is planned to last about 25-30 minutes; either via phone or face-to-face interview.

An independent transcriber will transcribe the tapes after signing a confidentiality agreement form with the Principal investigator of this study. The transcription of your interview will be sent to you; you will be able to go through and edit it, prior to analysis and publication.

The information provided by participants will be quoted anonymously in the final report. It will not be possible to identify individual participants.

Funding:

The project has been financially supported by the University of Huddersfield, United Kingdom.

What if you decide to take part?

If you decide to take part in this study, please let us know by replying to this email as soon as possible and an interview guide will be sent to you by email, prior to the mutually agreed date for interview. If you do have any queries, please do not hesitate to contact the Principal Investigator:

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Appendix 7
Interview with GP1/England (Pilot Interview)

S1 Noshad Akhtar

S2 Dr. Simon Rushton

Timecode	Speaker	Transcript
00:00:06	S1	Oh, hi. My name is Noshad and I'm a clinical pharmacist working at Smithy Surgery and this interview is basically...is a part of my research study which is...the topic is to evaluate the expectations and perceptions of the stakeholders about the GP pharmacists' role in England and Australia. And today I am doing the interview with one of the GPs, Dr. Rushton. And we will just do on...on the basis of the semi-structured guide. I have provided a semi-structured guide and information about to study to Dr. Richton before. He will just briefly introduce himself and then we carry on for...with the interview. Hi, Dr. Richton.
00:00:47	S2	Hi, Nos had. I'm Simon Rushton, G.P. I used to be a partner here. I've been here for over 20 years and been involved in...with the pharmacists' development, hopefully a little bit here at the Smithy.
00:01:00	S1	Oh. And you have got the information about the study?
00:01:03	S2	I have.

00:01:04	S1	And you have...you're...you're giving me the consent to do the interview?
00:01:07	S2	Absolutely. Yeah, that's fine.
00:01:08	S1	Thank you. All right. Dr. Rushton, do you know the...the structure of the study which I have provided? It has a couple of sections, so we will start with the first section. Most of those questions might be overlapping, so I will skip a questions which you already have answered and then we will just carry on with the same flow. The first one is about the perception and challenges. So based your own experience on the present situation on the...of the general practice framework in England, how you feel...what are your views about the...the present situation? Is there any gaps present in the general practice framework?
00:01:47	S2	I think, if this question relates to how we get other professionals involved in general practice, in particular, pharmacists, then my opinion is that, particularly in general practice, with a lot more work coming through from the hospital with more complex drugs, a lot more discharging of complex patients, that any help we can get by our pharmacists in-house to help us with mainly...many of the medicines management issues is...is gonna be very good. I personally feel that we need more pharmacist time. I've felt that...felt that for a long time because I'm a busy GP. My idea would be that I wouldn't have to deal with as many medicine management queries each day and maybe do more ones which may need to be discussed between the GP and the pharmacist. That's how I would view it, hopefully.
00:02:53	S2	All right. That...that's fine. Yeah, just...just to...I'm having...making it a bit more specific. You know that there was a study where they say that...that most of the GPs, they are the...there is a big gap of the GPs in the present situation and not many doctors? They are looking to have the root of GP as a...that's...that's where the gap is coming between the workforce and the general practitioner.
00:03:18	S2	Yup.
00:03:18	S1	So just...just to...how do you think the pharmacists can play a bit of role to cover that gap?
00:03:25	S2	Absolutely. I think it'd be a bit of a no-brainer, really, with the...with what I've just mentioned, but with the lack of...the lack in GPs and it

		could be another five to ten years, at least, before we can turn that around, if we can at all.
00:03:40	S1	Right.
00:03:41	S2	I think of general...in general practice, it's gonna have to be much more of a...a more to a disciplinary approach, whereas in the past I think GPs have really been a little bit too...felt more overly precious over what they've let go. I think, realistic... realistically now, you have to...and quite frankly, it's better for...for patient care as well, so yeah, there's a big gap and it's getting bigger.
00:04:06	S1	All right. That's good. So are you...you have been working with the practice pharmacists for the past two, three years...
00:04:12	S2	Mm-hm.
00:04:12	S1	...so I mean, when we started...when you started with the pharmacists, do you believe there was a bit of mismatch with the expectation that you had from the pharmacists in the initial phase and what you had in the initial phase of when the pharmacists were working with you?
00:04:31	S2	This may take me a while to answer.
00:04:35	S1	This must be a...
00:04:35	S2	I...I...we...I worked with the lead clinician that initially had some monies through...through commissioning savings. So...and we knew there was an issue with the medicine management workload in general. So it was me that, in the practice, initiated having Noshad...yourself, Noshad. And then it was me doing a bit of research about what we could use you for. It was very unstructured, in retrospect, I think, unfortunately for you, maybe and I wish we'd been able to structure it a bit better.
00:05:12	S1	Mm-hm. Mm-hm.
00:05:13	S2	And I think as GPs, we should have discussed it a bit more about what belonged with you initially, what you were happy to do, because I think maybe the different GPs gave you different bits of work due to how...how structured it was and how consistent it was. So that's...that's my point of view. I wanted to make sure that you were doing things that you were happy with, that you felt comfortable with, and we didn't overload you...
00:05:37	S1	Mm-hm.

00:05:37	S2	...initially. So I think there was...my expectations, I...I just hoped that you would help...help with the workload.
00:05:46	S1	Yeah, yeah.
00:05:47	S2	But also, of course, enjoy the role and...and develop in the role. That was, sort of, my expectations and I think, in terms of your professional time here, in retrospect, we probably could have done a little bit better, but things moved on after that. But yeah, I didn't have any great, massive expectations. I just wanted to see how it went, really.
00:06:03	S1	It was more like, see how the things work out in the end.
00:06:05	S2	Yeah, yeah. I don't know if that's the same from the other clinicians here and how they send you work, but that's how I looked at it, anyway.
00:06:11	S1	That's fine. That's fine. Yeah. And did you have any initial reservations while working with the pharmacists from any perspective?
00:06:20	S2	No, very few...
00:06:20	S1	That's fine.
00:06:20	S2	...to be honest, I hoped we'd have no great issues or problems, but...
00:06:23	S1	All right. Yeah, that's fine. That's fine. That's pretty good. Okay. And having...I think you have answered the next one as well, so what...are there any operational challenges in, like, integrating that pharmacists into the team within the practice? Any...any challenges, you feel?
00:06:40	S2	I...I think the main issue probably was maybe a lack of a structured development programme for you and how we...we met up. We used to try making occasional on Friday mornings, didn't we? But from my point of view, we had...suddenly had this money, it seemed like a really good idea and it was, but it wasn't really that structured.
00:07:04	S1	Structure, yeah.
00:07:05	S2	I think...and I...whether nowadays there are more structured ways of doing it, with more protected time with the lead clinician, I hope otherwise, going into the surgery is really...wasn't...wasn't...wasn't too stressful for you with the staff as well. How we communicated

		was a bit of a...a work in progress as we weren't used to the system as well, wasn't it?
00:07:25	S1	This one, yeah. It was more like the harder things were working in...
00:07:29	S2	I think we should have had a...a pre-developed...a practice-specific pack for new pharmacists and then so you [inaudible 00:07:38] for the next three months. That probably would make sense. I wasn't for the...
00:07:42	S1	Yeah, yeah. It's all about the...how the things were working...
00:07:46	S2	Yeah.
00:07:46	S1	...and how the conditions can become in the future, yeah. Yeah, yeah. All right. We can do the next section here. We are finished with the first section. Are you okay?
00:07:54	S2	Yeah.
00:07:54	S1	Or do you want me to pause...no. Now, this is about the working collaboration. I think this...this is a bit more main part of the study, yeah.
00:08:00	S2	Yeah.
00:08:01	S1	So...and how are you related to your present working relationship? Because I think there...there are a couple of pharmacists working within the practice on this and myself in-house...
00:08:11	S2	Yeah.
00:08:11	S1	...and then I think one is coming from CCG...
00:08:13	S2	That's right, yeah.
00:08:14	S1	...so yeah. So you feel the working relationship?
00:08:17	S2	Well, I hope...and I think our working relationship is really good. And I'm sure the same with the other commissioners here with...with their share. I think with a bit of back story...when I was involved...I...I...I am no longer a...a management partner here. We've merged about 12 months ago with the folks that do the management decisions now. I...so with myself, I don't have any...that role anymore. Prior to that, I think...and I did make the point at least to attend our local allocating...that the CCG managed to get some money which was supposed be at practice level, actually, for pharmacist time. And I tried to add into our pre-existing hours. From my point of view, it made no...no sense having any other

		pharmacists in than we have already. Unfortunately, that...I couldn't swing that one. And the CCG pharmacists, who's relationship is okay, but I think they have a very different remit to your remit here.
00:09:23	S1	Our scope, yeah.
00:09:25	S2	I think the CCG pharmacist is basically looking at trying to be quality, but also trying to reduce costs a lot. While certainly your role here, I think, is...is really quite different. I mean, you...and you do have both those roles, but there's of other things that you do as well. So I think...I think...hopefully, I've explained it a bit. And so we do have at least two pharmacist's notes and...and maybe another one at some times turns up. Who...I'm afraid I don't know much about the other two, really.
00:09:54	S1	All right. Okay. So you think the working relationship has gotten stronger since the beginning?
00:09:59	S2	Oh, gods, yeah. I'm all for...all the evidence is that if you've got health professionals discussing care, it's much better they discuss it either with face-to-face as we obviously do, or at least at a level where they can discuss the case quite quickly and within...e-mail's not too bad, I suppose, but face-to-face is much better care for the patient, as well. That's where all the care evidence is, I believe.
00:10:24	S1	That's fine.
00:10:24	S2	I think practice-based pharmacists should be pharmacists should be practice-based.
00:10:28	S1	Yeah, yeah. And I'm just stretching to the next one, medical-legal implication. Have you ever followed either the in-house or CCG pharmacists crossing the boundary of...I mean, did you find that they had gone beyond their expertise, at least in CCG area?
00:10:44	S2	Difficult for me to comment much on the CCG. I think they have quite fairly strict remits. Yourself...I hope I made it clear all the way through that you must only be helping with what you are happy doing within what you are qualified to do...
00:10:59	S1	Yeah, yeah, yeah.
00:11:00	S2	...which we covered, as well. And we discussed that a few times in terms of when you were prescribing. And the last thing I'd ever do to any clinician or health professional is to form a [inaudible 00:11:09]

		having to do. You mustn't do that and I hope that's not what happened with...
00:11:14	S1	Yes, yes. Yeah, that's...so then, do you find the pharmacists easy to approach and communicate any prospective message you have got?
00:11:23	S2	Absolutely. No problems at all.
00:11:23	S1	Yeah? Yeah. That's good. Yeah, yeah. Any factors that you think that might affect this working collaboration?
00:11:34	S2	I think the best thing is that you're here three days a week already. And I do e-mail you at times, when you're not around, for advice. So I think...I think our communication channels work pretty decently, I would like to think. I just mentioned before, I think having it in-house is really important here.
00:11:50	S1	Yeah, yeah. And...and yeah, I think it's quite reasonable to have that, but if any...any steps you think might be taken or you think might be bit more time or something or any factor, anything?
00:12:03	S2	Well, I...all I would say is, I mean, more time for you to have more time here and more protected time to develop a relationship with whoever should be, maybe a mentor here now and then at the practice.
00:12:03	S1	Yeah, yeah.
00:12:18	S2	Which I suppose, there's still been a little bit, I suppose, but it's just with a unofficial role, really. I thought that another…
00:12:23	S1	And that's all pretty good. And just...just this last part of it. How you feel that working with the GP pharmacist has changed your scope of practice in past...before you were working and now? Any...any specific change in your scope of practice?
00:12:37	S2	Yeah. A lot of...my bane of my life is medicine management and also scripts coming out of hospitals which are either dangerous or in...in...not clear. And nowadays, thankfully, most of the time, I can forward these queries onto yourself where we discuss them, rather than me having to plough through the BNF or send... I write letters back to consultants at the hospital.
00:13:06	S1	Okay. That's fine. Okay. So it has...
00:13:08	S2	Frankly...
00:13:09	S1	...improved your scope of performance.

00:13:09	S2	Absolutely yeah.
00:13:10	S1	That's fine. So it...that was the second section. I'll move to the next section, right, the...about the skill-set of the pharmacists. We'll be covering both CCG and...because at the end we will just have a small question about the in-house and the CCG one, yeah. So with skill-set, now, how are you about the...the patient-facing role of the GP pharmacists? So, I mean, there is medicine management and then the patient-facing roles.
00:13:33	S2	Yup. They do some clinics and they used to do visits with me, as well. I have...unfortunately, I would say that we haven't been able to anything formal with audits or peer-review, which probably should now be more in the remit of Ghostdoc, who are now our employers. But all the work I've seen you do, I've never had an issue with what you've done, not in two years or so, actually. I think...I think...well, just about every decision you've made, I don't think about finding out if that's right or ill do that. So that face objective that I think if I had issues with what you were doing clinically, I would assume I'd have spoken to you already.
00:14:13	S1	That's fine.
00:14:14	S2	But we haven't ever formally done that.
00:14:16	S1	Yeah, yeah.
00:14:17	S2	Which is probably the...but I think that's Ghostdoc's issue now, really.
00:14:21	S1	But you're running...because the CCG pharmacists...they are working more like patient-facing roles, so you are content with their competency, as well?
00:14:30	S2	Well, again, we don't control...there's no, sort of, monitoring over a practice level...because there's no point in that, really. They must have their own competencies. They must have their own indicators and stuff
00:14:47	S1	Yeah, yeah, yeah.
00:14:48	S2	...that they have to meet. And that would be part of the commission, so it's from the CCG. If they started doing bizarre things from our point of view of GP, than we either go the pharmacist directly or deal the with the CCG and say, look, this pharmacist has come in and done this. It's really bizarre. Hopefully, they have to have government's leave for them to...

00:15:07	S1	Yeah, yeah, yeah.
00:15:07	S2	...but I know...I...the kind of the stuff they've done [inaudible 00:15:10] basically the...
00:15:12	S1	That's a [inaudible 00:15:11]. And I mean, the same perspective from the prescribing annotation, prescribing...how you feel...I mean, how do you feel? Confident to have the prescribing role of the pharmacist?
00:15:23	S2	Oh, absolutely. I think all they...that's why I jumped onto the front part pharmacists at the GP, to be honest with you. And again, I've had no issues. Oh, where's the...
00:15:32	S1	Yeah, yeah, yeah. This one. So you think they're prescribing...the role of the pharmacist is helpful within the practice?
00:15:38	S2	Absolutely, yeah. And I think GPs who don't think that are...they're being a little bit precious about their...their workload.
00:15:45	S1	Right. But any...do you have any suggestion you feel...I think we have discussed this before, as well, where there should be some protocols with the prescribing...
00:15:54	S2	Yeah, I think for everybody's benefit.
00:15:54	S1	Yeah, yeah, yeah, yeah, yeah.
00:15:57	S2	And you know, I'm still a bit...
00:15:58	S1	Yeah, this...this should be a working progress…
00:16:00	S2	Yeah, it's still a work in progress.
00:16:02	S1	Yeah.
00:16:02	S2	And they have got some, but, you know, it's a...anyway.
00:16:05	S1	Yeah, I think you did have this discussion with gtd as well, and they...
00:16:08	S2	Yeah.
00:16:08	S1	...but there is no specific role description, so that's where I think the problem comes up. Yeah.
00:16:13	S2	Yeah, that's what it is. Most of the comment to these is that we should have protocol already.
00:16:16	S1	I think you have also the next one about medicine management, what we have got at the hospital and everything, so I will skip this

		one. Yeah. All right. The next one I think might be probably just in how you see it. The...the difference of the practice pharmacists and the nurse practitioners, because I mean, there is a school of thought that the role is overlapping, it's repetitive, so what's your thoughts on that?
00:16:42	S2	It...I think it's overlapping in terms of, from the clinics you can do for Cortisones.
00:16:46	S1	Yeah, yes. Yeah, yeah, yeah.
00:16:49	S2	Yeah, I mean, again, but...again, nurses are a limited resource, as well.
00:16:54	S1	Mm-hm. Mm-hm.
00:16:54	S2	I think all the pharmasists limited resources that if not already. And we know practice nurses are good at following protocol if we have them and I'm sure pharmacists are, as well.
00:17:04	S1	Yeah, yeah.
00:17:04	S2	So I think...I don't, again, think it much of an issue, really. If you're working, roughly, to do the same thing using the same protocol if we have them or ideas, then, I...I...I suppose it's all down to an economic...economic factors in the range. Unless you're saying, do practice nurses have more contact with patients, so does that affect the consultation than the pharmacists? I don't see an issue though [inaudible 00:17:30]. I just think the train of thought's just gone overhead and won't come back.
00:17:34	S1	And that is the different scope of practice for both sectors in the end, yeah.
00:17:36	S2	Yeah, yeah.
00:17:37	S1	That's fine. That's fine. I mean, if you're just highlighting or just giving...
00:17:37	S2	Yeah.
00:17:41	S1	...info, it's about the...the link road. Because, as with myself, in working with the letters from hospital communities, so you feel that GP pharmacists can bridge the gap, like a bridge between hospital and...
00:17:54	S2	Oh, yeah. I think, particularly with you, all the communications you have with our local pharmacists...pharmacy because it has been

		invaluable for the...for the sets than we can do. So...so I'm post-dating things that aren't working, so making sure that we've got things like, at the dispensing end.
00:18:12	S1	Mm-hm. Mm-hm.
00:18:13	S2	Because you have that dispensing experience, as well. I think that's been really important, to be honest with you.
00:18:18	S1	That's fine. Really. Yeah. I think you have covered the next one, but again, I will just ask the question. If you have something comparing the in-house practice pharmacists with the CCG pharmacists, anything you want to add?
00:18:30	S2	As I said, CCG had their own remits with their pharmacists. I mean, that's really the main thing. I...I don't know them very well, so I haven't got an obvious working relationship with them.
00:18:39	S1	Yeah, yeah, yeah. So if...if...
00:18:41	S2	Yeah.
00:18:42	S1	...if given an option, you will go with the in-house pharmacists...
00:18:46	S2	Yeah.
00:18:46	S1	...or the CCG? Yeah, yeah.
00:18:48	S2	As I mentioned it before, I...I would...well, they won't offend you further, but I won't go into...I don't know why. They may not with anyone.
00:18:57	S1	Yeah, yeah. That's fine. All right. At the last part, about the future rules and how you see the future for the GP pharmacists, from your own experience. So...and what future do you see, as a GP, for the GP pharmacists and the...and the future general practice framework and any specific activity you want to see GP pharmacists doing in the future or...
00:19:22	S2	I suppose as a clinician in your own right, in a way, anything that's...well, there's quite a lot of open doors, I suppose, aren't there? Things could go about doing that or the DMAL monitoring, which is where we overlap with the practice nurse again, I suppose...of Cortisone monitoring and all of the stuff that you do already, it's quite a big area already, to be honest with you. So having your own specific clinics to see patients who are drug monitoring or is maybe...want it. My personal views are, because I

		have so much medicine management already, that's almost a full-time job on its own.
00:20:03	S1	Oh, no.
00:20:04	S2	And it may not particularly be practice, so as a...from my point of view, that's one of the really good things, that I don't have to do as much medicine management. But if I understand, it's your personal preference, isn't it, as well, and what the practice plan would say for...
00:20:19	S1	Yeah, that's fine. And have you received any patient feedback, in which work has been done by in-house or CCG pharmacists? Any patient feedback you have received?
00:20:30	S2	Only positive stuff.
00:20:31	S1	Oh, yeah.
00:20:31	S2	Only...only positive. We did have one complaint between the two of us, but it was initiated by me and was completely appropriate on the clinical grounds. I had a bit of fun with that, but that was me. It should have been aimed at me.
00:20:43	S1	All right. Just while you're listening. It was something...some medication prescribed...
00:20:48	S2	Something...some stupid man. So...
00:20:53	S1	That's fine.
00:20:53	S2	Sorry.
00:20:54	S1	It's fine. Just don't keep this thing in the recording. All right. And I mean, how are you with the cost of employing GP pharmacists and the expense, I mean, like, with everything, insurance, if...because now we are working at the gtd employer, but suppose you're facing independent practice and if you employ a GP pharmacist, you think that it is a cost-viable option to go with and complete insurance, as well?
00:21:27	S2	Absolutely, and I am arguing this. Did you...you were going to say, at first, you...you did say you were going to stop…
00:21:33	S1	No.
00:21:35	S2	No, not gonna stop.
00:21:35	S1	Yeah, no. Yeah.

00:21:36	S2	Do it for your own...again, I...I think it's in the [inaudible 00:21:39] of the public indemnity for most of us, now, anyway, so it's not a huge amount. I don't...compared to it used to be, if you max one out for the GP, it's come down significantly. It's still a lot, but, it seems to come down for pharmacists, as well. But thankfully, most of the nationwide one do you want to pause it? Come in. (Irrelevant speech) So yes, I think that's a no-brainer again. Absolutely.
00:22:12	S1	That's fine. And now, in the...based on the workload, do you feel that the future of the pharmacists can be, like, a full-time load within the GP?
00:22:20	S2	As I mentioned, we've already got 4,000 patients, well, mostly the short of GP that, well...I, yeah, absolutely.
00:22:28	S1	I think, yeah. I think you have answered the next one, with the...once the funding option does go out, run out from the NHS, you will feel that you can employ or you will employ the GP pharmacists?
00:22:39	S2	Yeah.
00:22:39	S1	Yeah.
00:22:40	S2	I don't see how we can manage our workload without the pharmacists working here in your role.
00:22:44	S1	Yeah, yeah, yeah. All right. And any specific option...and specific competence that you feel you would like GP pharmacists to improve on?
00:22:56	S2	I...I just think that depends on what you...how you want to develop really.
00:22:59	S1	Mm-hm.
00:22:59	S2	I mean, and your...your personal development along the practice on some track. I've already answered that, I think. What you're doing at the moment is fine. Very good.
00:23:06	S1	It's a...just to the point, if I say, what I'm giving...the question is more like, to have more, like, specific training, a structure for the GP pharmacists?

00:23:17	S2	Yes, absolutely.
00:23:16	S1	Yeah, yeah, yeah, yeah, yeah.
00:23:18	S2	I think, and I hoped that you might come up with that at some point, because it's been more bits of...see, you've had the stuff already since we employed you, to be honest. But...and I hope we've done alright, but it's...it's...it'd be better if it was structured, I think, for you.
00:23:31	S1	All right. That's good. All right. Yeah. I think we have done the next one. Yeah, so...and have GP pharmacists changed your overall perception about the role of the pharmacist...
00:23:42	S2	Oh, yeah, absolutely.
00:23:43	S1	...overall? Yeah, yeah, yeah, yeah.
00:23:44	S2	Yeah, yeah. This...
00:23:44	S1	I think before it was just, like, a community pharmacy. It's...now, it's the GP pharmacy, so I think that...
00:23:48	S2	Yeah, absolutely. It feels...you've fended well with...you're really doing a lot of the work we used to do as GP, which is great, really. And certainly don't think everything. A pharmacist used to be an extensive [inaudible 00:24:02].
00:24:03	S1	Yeah, yeah, yeah. That's fine. On the organisational level, do you feel any steps can be taken to improve or to facilitate this role, like the...I mean, how well have you cleared the rooms within the facility as a part of clinics.
00:24:19	S2	Yeah, I mean...I think you probably would like to know you've got your...your...this is where you are normally. And if I had enough room, you'd have your own room and then go in there if you were going to do your own clinics. Unfortunately, we are short rooms. But I think that and along with, maybe, support of the group of pharmacists within the...within the area, like a sort of a meeting room. Come in. (Irrelevant speech)
00:24:48	S1	That's fine. We're just finishing up.
00:24:48	S2	Yeah.

00:24:48	S1	Yeah, yeah. And that's fine. So we have done this one. And...and as a part of your research for the...because coming on this one and I think there was a report for the project initiatives at the moment with the team, as well. So any...any specific or more research or any section of the research that you want to be worked on more for the future?
00:25:11	S2	I suppose if you want to show your effect as a pharmacist, you probably need to have some research probably done about the...the workload you do and the reduction in workload for GPs.
00:25:22	S1	Mm-hm.
00:25:23	S2	For my point, I've already mentioned it. I can't...couldn't imagine going back to before you were here. Literally, we are one...still one GP down. Even then, I couldn't imagine...you'd have to cope with everything and all of the invested time for drug inquiries. I know how many you get through every day through reception, as well. My passes anyway, as well, sort of [inaudible 00:25:42]. And all the...the...the discharges and all other queries, yeah, I'm...I'm...I'm [inaudible 00:25:50] you.
00:25:51	S1	That's fine. And just the last one. I would say that what you think should be the key performance indicators for...for the...to evaluate...to analyse the role of the GP pharmacists, any specific key performance indicators?
00:26:07	S2	I missed KPIs. I'd have to think about that, because I think...I know, subjectively, my workload is much more manageable...
00:26:19	S1	You had mentioned, yeah.
00:26:20	S2	...and high daily workload might've...I suppose along with, I mean, you have to make sure your pharmacists do safe...are doing safe things clinically, is being productive in the practice and...which I know you are, definitely, so how to make a...a KPI out of that without it being just chasing for figures...
00:26:41	S1	Yeah, yeah. You said the figured weren't...
00:26:44	S2	I'd say, maybe, they all...discharges are reconciled by you now. Having to do up the discharge. You could do a...how many times the discharges to GP do I have to reconcile? That...you could do that, I suppose. Maybe that's one med.

00:26:57	S1	Some way we can...like the...you think might be just giving a take over, the time you think...just make a rough guess, how much time GP pharmacists has saved in your daily or weekly...
00:27:12	S2	I can audit. We can audit how much time we spend doing medicine management...which we had more to do before you started, but maybe when you're not over there, you could go back in there and see what it looked like and then that would be...could be a nightmare. You could spend your time at how much of each...each area of the general practice work, as well. The amount of queries you get every day, look at the tasks and the answers are listed there. There's a few [inaudible 00:27:37].
00:27:37	S1	That's fine, really. I think we have got all the sections. Any additional comment? Anything you want to add on?
00:27:43	S2	I don't think so, no.
00:27:44	S1	No, no. Yeah.
00:27:45	S2	It's been...it's been great having you here.
00:27:47	S1	Yeah. Brilliant, that's fine. Well, Dr. Rushton, I think we have covered most of the sections, but if anything comes up and you mind later, anything, you can always add your comments later, as well. And once we have got this ready, we definitely...I will pass all of the transcripts to you. If you want to add or remove any part of it, it's always...
00:28:08	S2	Sure, sure.
00:28:09	S1	That's fine. Thanks a lot and thanks.

(00.28.14)

(End of Audio)

Duration 29 minutes

Appendix 8
Pilot Interview with Australian Clinical Pharmacist

Speaker key

S1 Speaker One

S2 Speaker Two

Timecode	Speaker	Transcript
00:00:01	S1	Hi, my name is Noshad and this is the interview regarding my research project which is based on to explore the views and perceptions of the main stakeholders about the role of GP pharmacist in comparison to, a comparative study between England and Australia. And this is the interview being done with Mr Adnan **Gohol**, GP pharmacist in Australia. Hi, Adnan.
00:00:32	S2	Hello, Noshad. How are you?

00:00:32	S1	I'm good. Thank you. So, Adnan, you have got the interview guide which I have sent you email so what I will do, I will go through the guidance, the main questionnaire and I will record this interview as well. Is it okay?
00:00:51	S2	Yeah, it's fine. Thank you.
00:00:52	S1	Thank you. So, Adnan, you know this, the main title of the study is "The relation of expectation and perception of GP pharmacist role in England and Australia by key stakeholders". So, it is a comparative study about the role of the GP pharmacist and as you're working as a GP pharmacist in Australia so I will try to get as much as the knowledge or your views about this role. And you have seen the questionnaire. It has been divided in a few sections and the first section is "Perceptions and challenges of the GP pharmacist role". So, starting from there, what are your views about the general practice framework and do you believe there are any gaps present in the general practice framework in Australia?
00:01:57	S2	In terms of framework, yes. There is a gap in terms of the availability of, especially related to medication management and also in terms of long-term chronic disease management. So there is a crisis in terms of number of GPs in certain areas, especially in the rural or remote areas where we don't have access to GPs at a lot of times, especially in areas like Queensland where I live and other areas like in Western Australia, Adelaide. So, if you just exclude the big cities and even the big regional areas there is definitely a lack of GPs available. But there are 5,000 pharmacies and more than around 10,000 pharmacists are available which may be available in those areas and can be incorporated into a practice. And I will call it more of a health practice that may have include nurse practitioners, pharmacists, GPs of course and other **allied** health professionals. So this is what the current situation is but I mean in most cities we have availability of pharmacists and GPs very close to each other or within the same vicinity. The model which I usually, which I have **had** over the past 11 years along with some other colleagues in the similar situation and model where we have actually a big medical clinic which has pharmacy or we call it, I'll call it a dispensary because it's not as big as a normal pharmacy which you can see usually and, but it is inside the medical centre where we have between 10 and 15 GPs and sometimes specialist nurses and all other **allied** health professionals, dentist, physiotherapist, dieticians, some have diabetes educators and of course other nurses in terms of the practice nurse so there's like a whole variety of health professionals available within the same

		vicinity which work as a collaboration among each other and GP pharmacist if you call that person who liaison with the GPs and work together is what we, what's the model we are using at the moment.
00:05:02	S1	Right, right. So, this is the model where you are working at the moment, yeah?
00:05:07	S2	That's correct.
00:05:09	S1	This one, it's good. So, as you said there is a gap like there is a lack of GP availability at the moment. There's a bit of, the present situation which is also the same situation in England as well. So, based on those, this is based on this situation, what do you think, before you started working as a GP pharmacist, what were your initial perception about the GP pharmacist role? Is it something you felt that can be integrated into GP or in this framework to fill the present gaps?
00:05:52	S2	It's definitely because I work as clinical pharmacist and that's why we have a very good hospitals and we have a really good terms of relationship in terms of the gaps and in terms of scope of practice. But in tertiary care settings, it's slightly different because you have, everyone has their own role and scope of practice. But when it comes to primary care, those roles can be challenging or integrated and sometimes there is no real clarity about who will or can do what, so that is what the perception was and what type of role would a pharmacist, I do have ideas before I started working at what type of role I would be doing but it was actually, in terms of clarity, it was not clear until we start working and then we start working out what will be the specific role within the scope of practice we will be doing. And also because of, as you can see both in UK and in Australia there is a medical benefit scheme and the pharmaceutical benefit scheme and there are lots of barrier in terms of, for example at the moment still there is no medical benefit scheme for pharmacists. There are things available which is for other **allied** health professionals but there is no medical benefit schedule which allow pharmacists to have some kind of payment options to get into a practice. So, it's the same with this type of arrangement that's why within that framework it is the model which we are working currently at the moment is ideal because it does not rely on the medical benefit schedule for pharmacists.
00:08:03	S1	That's good. That's good. Yeah, when you started the role, was it always the, because it's a new role same thing in England as well so there is always a bit of doubt what will be the role, the specification,

		job description which mainly depends upon the expectations from the GPs or the clinical team where you're working. Just based on those things, do you feel that when you started and where you are now, the initial expectations from the health professionals within the team where you're working, do you feel there was a mismatch in the professional expectations from the GP pharmacists?
00:08:48	S2	I wouldn't say mismatch. I would say more of not really clear about what we can do as a pharmacist for them so I would say that GPs may not have clarity or neither do us have a clarity that what we can do to help them in this integrated big centre environment. But then as we move along and I bring all my clinical expertise in what we had in working as a clinical pharmacist previously we started working in terms of what I can do for them and then they realise, okay yeah, I need help. I will just help have to [inaudible 00:09:32], you know, to ask him what needs to be done. So this is how it evolved slowly from then onwards. So I think it was more of what our pharmacists can do for them that was more of them and so for us too in the primary care what would be my areas to help them and integrate as a one team. So that was areas which we worked on initially and then, which we use a lot of other things so that's probably might be few other questions which are coming through, I might mention that was we did.
00:10:16	S1	Yeah, yeah, so it's more like the initial expectations from them what we can do and then just bringing them in line with those expectations?
00:10:25	S2	Yeah.
00:10:26	S1	That's fine. That's good. Were there any initial reservations when you started as a GP pharmacist, like, I mean, the expectation or the transition from a community pharmacist to a GP pharmacist because there is a big change, the role, the specifications, the expectations. So, I mean were there any initial resolutions on your end like clinical knowledge?
00:10:53	S2	Yeah, on my end or other GPs in general?
00:10:58	S1	I think it's on your end when you were changing this role from community to GP pharmacist, any reservations?
00:11:07	S2	Yeah, I mean I didn't have any reservation but I was not sure how it's going to work in terms of what is our role in this situation, in this scenario or in this environment. But then it starts slowly clearing up when SB started building reports so that's one of the first things I

		usually did is to start having, talking to the general practice both the practice managers and the doctor said, I am here, this is what my qualifications are, that's what I had done in the past, how can I help? So I started doing a few things for them like in terms of having newsletter, having, coming into their meetings and presenting things about different topics so this is how yeah, it was reservation in terms of if it's not clear, I will be actually offering them in this type of system.
00:12:10	S1	Alright, great. That's good. I mean were there any initial organisational hurdles or barriers? Because at my end if I just share my experience, because it's a new role and when I started there was some, not from the GP level but something on the, like availability of the room or presenting yourself as a team member within the team so on those levels, did you face any organisational hurdles?
00:12:44	S2	We did, yes. So we did in terms of because the organisation structure for both the medical centre and pharmacy and other are different like it's like independent roles. It's not integrated as per say but it was, I will say it was, we have to talk to their or more like medical centre like legal practice manager has limited responsibilities. It was more controlled through head office which is in Sydney and they have like forty different centres and every centre have different types of structure. So we have to go and talk to their GP liaison officers or development managers and things like that or regional or state managers of those organisations.
00:13:44	S1	Hello?
00:13:45	S2	Hello.
00:13:46	S1	Hi, you can hear me so, can you hear me?
00:13:51	S2	Yeah, yeah, I can hear you.
00:13:51	S1	Yeah, sorry. I just think there was a little beep. That's fine. You want to carry on or should I already move on?
00:13:59	S2	I'm fine. I think I did finish. (Overlapping Conversation).
00:14:02	S1	I think you have already answered the next question which I was going to ask about the emotional challenge. I think you have already answered a bit. It was a part of the initial setup and all those. Do you want to add anything else for that question or should we move on?

00:14:18	S2	No, I think it's always when you start those types of things, you try to develop confidence and deal with different personalities so of course not everyone has a similar attitude or personality towards promises or availability or things like that. So that was a challenge to individually actually talk with different doctors and nurses and other **allied** health professional to see what their individual needs are and how can I look after every other, every one person's needs to keep them in the same loop.
00:14:58	S1	Yeah so just to bring yourself as a part of the clinical team. Because I have gone through the same process so yeah, I can see where you're coming from so that's good, that's good. And I mean you have mentioned about the, a bit of hurdles or a bit of difficulties **in the start time at** organisational level. I mean just going through that, what type of support did you get to that level to help you out in the initial phase? What type of…?
00:15:30	S2	So, we did as a I said we did, I've individually spoken to the regional managers and the state managers and the GP liaison officers who actually are responsible to talk to the whole GPs. So we talked to them and then we individually talked to the GPs so that we can be on the same level so the organisation have a clarity about whatever roles are and also the individual GPs also. So that was, and that's the support we got, it's usually the support from our perspective, from our end, we got the support from overall like our organisation. We used to have a bigger group and we have liaison person who used to go and talk to the state managers and things so we feed them our feedbacks on them and they spoke to their manager and their managers spoke to them and then this is how it's usually worked out.
00:16:30	S1	I mean when you are passing the message on to the managers, were you getting the support, what you were expecting at their end?
00:16:39	S2	I think so, most of the time, we did, yeah. We did get understanding and level of support in terms of they can understand what actually they want to achieve and what we can offer them so it did become clear after we have a lot of communication back and forth.
00:16:57	S1	Alright, then that's good. And I mean just analysing the whole picture so if you just analyse it and if I ask you that looking at those hurdles at the initial phase of how well you were prepared to take that role on. And just analyse, if you want to analyse.
00:17:18	S2	I think I have skills because I have experience in working in different international and local domestic settings like I worked at different

		hospitals so then I deal with a lot of different situation in terms of being a part of pharmacy and therapeutic committee, part of the other pharmaco vigilance committee so I did have skills in terms of how to deal with different type of organisational challenges so if it was like a person who didn't have much experience in those type of setting, I would've said that they would find it really hard and that's what happened with other pharmacists who subsequently come in and have interactions with the GPs. They have some kind of conflicts and things like that with them instead of having more of, you know, so that's because they didn't have much experience of working in those type of environment and situations and settings so it did help me being a bit more experienced pharmacist.
00:18:34	S1	Yeah, so just to summarise this, but I think you have answered my next question [inaudible 00:18:36]. For you, based on your experience, it was easy for you to get yourself in the loop but if it would have been someone like not newly qualified but which hasn't got that background or the previous experience, it would have been difficult for him or her to understand or integrate themselves into the system.
00:19:00	S2	Absolutely, yeah. They may not have enough confidence also and skills to really see how can they assess the situation and then integrate themselves so it's really important that if you are going into those types of roles, you do have good experience behind you because otherwise, it will not be feasible and it will be hard to stay around in that situation for a longer period of time or have sustainable type of models so it is imperative. I mean I know pharmaceuticals are recommending but they need to really upskill pharmacists to get into, I mean they're recommending in general. Pharmacists should be available but there is a lot of training and experience required before you go in those type of situations.
00:19:55	S1	Yeah, I think….
00:19:55	S2	But otherwise, it may be a failure or they may not be able to cope or integrate themselves very well.
00:20:02	S1	I mean there will be another question later but because this topic has started, I mean, if I just get the question from there. What do you think will be the basic training aspects? What your recommendation will be if anyone wants to apply for this role and has started this role? So, what do you think they should be, some

		training aspects for that person before or in the initial phase to start this role?
00:20:32	S2	I definitely think a bit of clinical knowledge about different disease **types** and also how the system work is very important like in terms of you know the nitty-gritty of the system, how like in terms of GP softwares, in terms of all these types of training because all those trainings when we are doing the pharmacy courses or even afterwards so it's important to know the programs, important to know the medical benefit schedule. It's important to know how does it work and of course clinical knowledge is imperative. So definitely if you have come across and have you work in settings so for example people who have in pharmacies in terms of, let's say, community that it needs to be pharmacies were offering a lot of professional services and have been under the mentorship of good experienced pharmacists, especially for, you know, so it definitely needs to be upskilled in terms of those before you joined those type of practices.
00:21:43	S1	So basically we just summarise, you think the basic thing will be the clinical skills, yeah.
00:21:47	S2	Yeah.
00:21:47	S1	And understanding of how this [inaudible 00:21:52] working, a bit of pre-type of preparation before you start to get a bit more knowledge about how the thing is working along with clinical skills. That's good.
00:22:00	S2	And of course, the basic, good communication skills and interactive and how to deal with different situation is imperative for pharmacists who are planning to work in GP practices.
00:22:16	S1	That's fine. So, moving on, I mean just based on your experience, what do you think should be or will be the key performance indicators to analyse how the GP pharmacist role is moving ahead. Any specific key performance indicators?
00:22:35	S2	In terms of KPI's?
00:22:36	S1	Yeah, yeah.
00:22:36	S2	The key performance so yeah definitely. I mean it will be a combination of things in terms of both the financial aspect which you can, pharmacists can bring in, in terms of providing, for example, in terms of very specific Australian environment when you have a lot of benefits for starting or initiating services like chronic disease

		management plan which you get paid for. So it will bring a lot of financial incentive if the pharmacists knows what areas they need to focus on especially chronic disease management. And of course, medication reviews will be a major part of that. So definitely those type of indicators in terms of the revenue generated or the cost saving in terms of preventing medications' adverse effects and misadventures so that is definitely will be two or three major indicator for pharmacists working in GP practices.
00:23:49	S1	That's fine. That's good. Alright, that's fine. We will move to the next section which I think is basic or the main section of how the working collaboration based on my own experience I can see that the stronger the working collaboration is within the team, the better your role is analysed or highly valued so we will move to that section. So based on your experience we will go through, yeah. So, you know the clinical team within the GP practice is basically based on mainly GPs, nurses, healthcare assistants and a few other members that chip in for different roles. So how do you value your present working relationship with those healthcare professionals and has it changed since the beginning?
00:24:38	S2	Yeah. So in our environment, in our settings, we have GP definitely are the main thing and then we have other where we call them admin staff plus of course the nursing staff and other allied health professionals so in terms of, so the GPs definitely in Australian environment, GPs definitely the focus and they are the one who initiate and authorise things which is important. And this is where the pharmacist can give them a really good feedback or response to how to initiate different things you know which a lot of time they're not aware of or don't know how to go ahead. So we have been in for example the nurses on our centres are only responsible for example administering vaccines and other type of work like wound dressing and all those types of things. So they are strict to that, restricted to that. They are not involved in any other type of, and most of them are enrolled nurse. There is one RN, one or two RN's. And that's mostly they run their treatment room which is do different variety of things and help the doctors in arranging or assisting. So we don't have physician assistant in Australia as yet. Well, we do have them but we don't have as many. We have nurse practitioners but they are mostly based, most of them are based in treasury case settings, very few in primary care. At least in our centre, we don't have any nurse practitioner. We do have other allied health, like dentist and physios and dietician and of course they also rely on the GPs to give

		them different type of plans and treatment plans and other things. So, it is easy. I mean we haven't had any issues. It was quite good integration between who was actually doing what so it's clear now. And it wasn't initially clear also but, because of the fact that the GP is definitely the main person who… we worked it out. And of course, then we got administrator like as we discussed before that, practice managers and they're also like more of a liaison type of jobs. They do between different aspects of their running the business as the practice.
00:27:37	S1	So, you think that the working relationship, I mean it is in a good condition or should I say in a good working collaboration system with your role and the GPs, yeah?
00:27:52	S2	That's correct, yes. At the moment it seems to be running well with all different members of these healthcare settings.
00:28:00	S1	And would you feel that it has got stronger since you have started with the time, much stronger?
00:28:05	S2	Yes. So, as the year goes by it's become more and more stronger as we move. And of course, there's always the turnovers in terms of people left and then you have new people so there is a very high turnover in this practice. And in general, I think a lot of practices have these type of issues in terms of staffing going in, **and** staffing because every time there is new staff start, you have to go and elaborate your role and who you are, introduce yourself so it's just an ongoing process every time there is a change in the management.
00:28:49	S1	I think you have answered the next question basically. As you said that the nurses… Because in England, the nurses have got a broad role in the primary care with running the clinics and doing the reviews. But you're saying that in your centre the nurses they are just merely dealing with the wound management or those type of treatment clinics, yeah?
00:29:11	S2	That's correct, yes. In our situation, in our setting, we have enrolled nurse and then we have registered nurse. So they're mostly are just focused on running the treatment room and maybe doing the care plans also and then we, the practice manager is not a nurse and they have more of administrative job to coordinate between the GPs in other like rosters and schedules and they do their running of the business.

00:29:52	S1	Is it the **general** design of your practice or is it something which is overall like a situation for the nurse role in the tertiary care?
00:30:04	S2	In community primary care setting that is usually most of the nurses' roles are.
00:30:10	S1	That's fine. But then if we go to the tertiary role then yeah, the role broadens up, yeah?
00:30:15	S2	That is right. In most primary practices around Australia, the nurses have very similar role of just helping the GPs in designing those things. Like we have nurse practice managers and things like that but in terms of most of their duties are restricted to those types of work.
00:30:40	S1	It seems to give you like the, I mean quite a good opportunity for the pharmacists to bring in the clinical skills they have. I'm just citing a few comments from my side, sorry, just because over here the role like medication reviews, the clinical, running clinical, small clinics, they are being done by the nurses but if there's not the role or **what being done** in Australia that gives you a big opportunity to chip in and give, provide that role, isn't it, in Australia, isn't it?
00:31:16	S2	That's correct. Yeah, it does in those type of setting and that's what we have done over the years that we have involved ourselves in a bit more broader roles which we can offer in help because of the fact that the nurses they employ and have a bit more of restricted role.
00:31:37	S1	Because over here it's always a bit of concern that we are overlapping our role with the nurses by offering the same thing what already **being** offered by the nurses. But yeah, that's good. In Australia it's not the case but yeah, [inaudible 00:31:51].
00:31:51	S2	But that's, yeah, that is where some kind of [inaudible 00:31:53] type of things happen. But in general, most of the surgeries around the country are very much similar. I mean I know there are surgeries who have, where nurse training and reviews and things like that but it's not as common and of course those reviews are not as reliable in terms of what they can offer really. That's very simple basic things so.
00:32:20	S1	That's good. That's good.
00:32:20	S2	Because that's not their expertise and skills to do those type of things anyway.

00:32:27	S1	That's good. Alright, just a small topic, you know the medical legal implication sometimes you know the boundary or the red line will be, other healthcare professional they draw what the expertise of the GP pharmacist. Have you ever experienced any scenario where there has been concerns raised by any healthcare professionals especially GPs where they see the GP pharmacists has crossed or has gone beyond their expertise in any scenario?
00:33:04	S2	Yes. So I've done things because we both know what our scope of practice are like the practice within the medical legal framework of what is our role is which is basically more of collaborative approach. We have no autonomous type of prescribing or dispensing roles which we, so in our centre environment, we have never crossed any line in terms of what actually our roles are. And there never has been any question raised about the validity of what pharmacists can or can't do or they, I think, on both side that is very clear what is our roles are, and then we remain in that scope of practice.
00:33:59	S1	That's good. But I mean just generally I mean based on your experience with your other colleagues who have been working in another practices, do you, I mean have you come across from any other colleague, any issue…?
00:34:13	S2	I don't think so. Because I mean I think it maybe and there are certain avenues available which is for example continued prescribing which is [inaudible 00:34:24] pharmacist in certain areas which we do like if a person you know have been on some or a contraceptive pill or starting and they are unable to see GP they needed so we can initiate those type of continuous prescribing or continuous dispensing which is what most pharmacists are aware of and GPs are also. Some who don't may have questioned that why this person was given this but I think most of the GPs are aware that there is a continuing of supply arrangement or prescribing arrangement which pharmacies can do within their scope of practice.
00:35:11	S1	That's good. That's good. I will just summarise the next three questions in one and yeah, so I mean within your practice you find yourself easy to communicate or other healthcare professionals it's easy to communicate with yourself and I mean any suggestions to improve this overall situation or collaboration based on your experience?
00:35:32	S2	Yeah, it's definitely a regular constant talking and presence of pharmacists is necessary to have realisation that we are there, available all the time. That is important. And that's what we try to

		do. Other pharmacists and myself that we always have some kind of conversation with the GPs, all the time. So that is imperative because I can see people who have done it in the past and they're not communicating or they're having some kind of communication issues with the GPs or with more of like a conflicting type of situations where they were unable to resolve issues or they have, refer them to the AFRA which is the body so those type of things. So I know they have situations or maybe not going along well with the practice managers so it is imperative that we not indulge ourselves in type of conflicting situations or a lack of communication where you're not communicating with the other health professionals which I have seen and experienced with other pharmacists or my colleagues in the past or recently.
00:37:06	S1	This was, I mean this is like a continuous discussion with those people around and within the team, the continuous discussion or the communication you think is the main thing to improve yourself as a part of...
00:37:24	S2	Yes.
00:37:24	S1	Just to discuss overall situation, yeah.
00:37:28	S2	Yes, definitely. If there is a conflict **arises**, it's always good to resolve it within… as soon as possible instead of letting it go or building it up and then the communication have stopped or you're not talking to the person. I mean that doesn't really help.
00:37:50	S1	That's good. So, you think - just moving away from the question - overall, you think that the admin team or the non-clinical team in your practice, they have accepted pharmacists as a part of the practice, overall practice team, yeah?
00:38:08	S2	Definitely, yes, so our non-clinical people who are either involved in the administration or, for example, the secretaries or the reception staff, they definitely know that we have a pharmacist here who we can refer to and that they do, a lot of the time they just refer to us especially in this situation where they don't have any answer. They kind of communicate with the GPs or the GP doesn't know so we always get those type of queries coming to us. And the staff knows who they need to contact when those type of situation arise. So, they always are good and the reason why is that, we're always there communicating with them and telling them if you have any issues just ring me and we will try to solve this.

00:39:00	S1	Yeah, that's good, that's good. I think that's the situation basically over here as well. The time that communication improves they know that they can always come to the pharmacist and it's easy to approach and [inaudible 00:39:15].
00:39:18	S2	Yeah, there shouldn't be any barriers there for the non-clinical staff to approach the pharmacist. This is what I will be emphasising.
00:39:26	S1	Yeah, that's good, that's good. Alright, that's fine. I'm moving to the next section. It's more like the pharmacy skill set and how well they are prepared to take this role. So different sections of it. Do you know the different section like patient facing role and non-patient facing role? I mean if you just compare them if you are having a patient facing role based on your own experience, how you valued your competency in both roles whether they are patient facing? I think you are quite experienced so it will be quite interesting to know and how confident you feel in the start, from the beginning and now in the patient facing role working as a GP pharmacist?
00:40:17	S2	Yeah so definitely because as I said I did have good experience previously so it was not really hard for me to directly interact with patients or you know having some kind of check-up whether it's blood pressure or any other type of light clinical type of interactions. So because we have done that in the past possibly with a lot of new pharmacists which we employed they were reluctant to have that type of interaction. They were not sure whether they can do it or if they're not, they're not sure how to do it so we have to really train them to have a bit of confidence develop in them. For example, we do applied replacement programs so we have to train them to see, assess a patient if they're intoxicated or not you know how to talk, what to ask them, how to respond to those type of, if there are some kind of behaviour happening in terms of patient turning up to have the replacement doses and they are not, they're intoxicated or not feeling well. So it is imperative that we need to prepare the staff and pharmacist to deal with those situations and this is why we have things in place for people who go and do trainings where they do it locally, whether you train them on how to do the different things, in house training which we call them or send them to external training opportunities which we also had with different organisations.
00:42:06	S1	Alright, fine. That's good. Based on, seeing your experience, it was easy for you or easier now to have the patient facing role but do you think the newly or the new ones who haven't got that experience on

		their part it will be a bit difficult for them to have that patient facing role. They will be more [inaudible 00:42:24] on patient facing role.
00:42:22	S2	That's correct.
00:42:25	S1	But you have got the framework for the training to provide them that confidence, yeah, if I'm getting it right.
00:42:30	S2	Yes, that's right.
00:42:33	S1	Alright, that's fine. And I mean you know the prescribing role for the pharmacist, I'm not sure how it works up in Australia so can you just highlight or give a bit more explanation about the prescribing role of the pharmacist. I mean do you still need reservation of that prescribing role within that sector?
00:42:54	S2	Look, I mean we don't have a very clear, first of all we don't have pharmacist describing autonomous as yet in Australia. So, it is still in the work in progress so we are still having discussion and collaboration in terms of what will be the role of like, how it's going to go about. I know in UK you have a lot of pharmacy prescribing, autonomous pharmacy prescribing available. But in Australia, we're still working on it. The work I was referring to before was more of we call as continuation of medication in terms of certain classes of drug which we can continue with the patient was on it previously and they can't see the general practitioner in the timeframe when they are actually going to miss out on medications. So, it's more of a continuous supply and prescribed. We can call it prescribing because you have to initiate for people who have done it, who were on it before. You **can't** initiate it for a new person. So, it is already for people who are, for example, if people were on contraceptive pill and they run out of prescription which is what we have. We have prescription only or a contraceptive pill. And they can come to a pharmacist or pharmacy to have a supply given to them for three months, between one to three months, or whatever the previous quantities are and then they can go and see the GP. So these provisions are available under the law so they are, which is a frameworks of the medical legal situation. Pharmacies can do that for certain classes of drugs. So, at the moment, it's only two which is the statins and oral contraceptive. But autonomous pharmacist prescribing for certain variety of medication, unlike UK, we're still working on it. Like, for example, in UK, you can prescribe a statin after, initiate a statin as, and then some other medications you can. But in Australia you can't still.

00:45:24	S1	So, is it something working it's been considered within those the main organisations, they are considering this role like…?
00:45:34	S2	Yes, so we are having a discussion paper was just released a couple of months ago and it's still, it's just waiting for the feedback from different organisation by the pharmacy board of Australia. And so they were asking for what type of model we should adopt or recommend to the government to be a part of the medical legal situation where what pharmacies can do so it's in the discussion. It doesn't have any outcome as yet but I will say, there will be some kind of outcome coming out probably at the end of the year or maybe next year.
00:46:16	S1	So just getting, I mean, from your experience if somebody ask you your views on this role, what are you going to tell what your views are and how, is it something that should be coming up like **in** England and…?
00:46:35	S2	I think so. I think I'm quite pro about pharmacist prescribing and various model. I don't really want to stick to one model. There are organisation for example Pharmacy Guild of Australia want to go with the autonomous model whereby pharmacists can initiate any pharmacists who have a certain qualification, minimum qualification or upskilling has been done, they can initiate whatever for example initiating a urinary tract infection antibiotics. So they want those type of autonomous prescribing compared with the pharmaceutical society who are more work on collaborative prescribing or supervised prescribing which may work in a tertiary care setting but it will be a bit more harder to have it in a primary care unless of course we have more GP pharmacist type of positions available which we don't because there is no funding for it. There has been trial going on. So it needs to be sorted out what will be that reimbursement and how they want to incorporate those things within a GP practice.
00:47:59	S1	Right. That's fine. You have mentioned the trial or the funding so at the moment, there is a trial. Because in England at the moment, GP pharmacist role is being funded like in a pilot scheme where 60 or about 60% of the role, the cost of it is being funded **under** NHS. So, is it something, the same trial been going on in Australia as well?
00:48:27	S2	Yes, so it is a very similar trial. I'm not exactly sure how much it's been funded through the government trial like how many. I know there are operational medical centres so a medical **person** who have been given funding to employ a pharmacist in the practices. I think it

		is all funded. I don't think it's part funded. It is all funded through the trial program and they are mostly doing it in the outer regional or remote or rural areas whereby there is definitely a shortage of GPs. So, and I think it is fully funded within that budget of that program.
00:49:14	S1	And is it like a trial or is it something?
00:49:16	S2	Yes, it is definitely a trial which is going on since last year. And I think it's going to go on for another 12 months and then we'll get the results and see what impact it had and then whether it's going to be then rolled out to other areas or other primary care practices whether that funding will be available at some stage but we are not sure.
00:49:40	S1	And that funding is basically for GP pharmacist role, yeah?
00:49:44	S2	Yes, that is correct. That funding is just to employ our pharmacist in a GP setting. That's right.
00:49:51	S1	GP setting. So just to summarise if I have got it right, the trial is going on for a GP pharmacist role in remote areas, yeah? And it's being funded by NHS, oh, by the government.
00:50:06	S2	The Medicare, yeah.
00:50:07	S1	And for the prescribing role, it's still under the review and how they can bring one or different models to give the prescribing annotation to the pharmacist.
00:50:21	S2	That's correct.
00:50:23	S1	That's fine. Brilliant. That's good. So just a final, the last questions, I mean, you know the GP pharmacist role linking the GP with the community pharmacy and other healthcare organisation, how you see that role and I mean you know with sometime the pharmacist is being provided by different organisations who can get the funding **through** different sources and then they provide that pharmacist, in England it's happening. It might be not in Australia but just to have a bit of, and there is one pharmacist who is in-house GP pharmacist and some pharmacists who are being provided by different healthcare organisations. Is it something happening in Australia as well?
00:51:12	S2	Not at the moment. So, it's basically very independently being, it's very independent, like GP practices have rent out and have pharmacists employed, have some kind of arrangement with them because they don't have funding but they just have their own type of

		setup available to employ and just like they employ other allied health professionals. So, there is more, it's no cohesive type of arrangement. It is more independently organised between the practices and pharmacists itself.
00:51:52	S1	And if you just want to highlight a few things about the medicine management of the GP pharmacist and then we will move on.
00:51:59	S2	So definitely it is one of those roles which will be the key in terms of being a GP pharmacist which is what we are trying to achieve by having, reviewing all patients which are do require, I mean anyone who prescribe a medication should be reviewed anyway. But of course there are certain criteria which we follow in terms of whether it's adherence issues, whether it is in terms of how many medications there are, whether they have other complex comorbidities, there is definitely, either the patient which need to be identified and worked through by the GP pharmacist through medication reviews or home medication reviews whereby you can go to people's houses and see how they are dealing with their medications in general. And then brought those type of feedback, give feedback through the GPs what needs to be done in order to improve those if they are not doing it well. So those type of medication management is definitely the main areas which we will be focused on in terms of a presence of pharmacist in a GP practice.
00:53:26	S1	That's good, that's good. Yeah, I think we have quite good, [inaudible 00:53:29] **quite a lot** of information from that perspective, so thanks, Adnan. Right, moving on just the last part, future of the GP pharmacist role, I think you have brought a few questions from this section but I will just quickly go through one by one and if you want to just, I mean if any additional, [inaudible 00:53:55] with those sections anyway. So looking at the future of the GP pharmacist role in the present general practice framework, I mean briefly summarising what activity should be involved for the GP pharmacist role. Hello?
00:54:22	S2	Sorry, sorry. I think you got…okay. Now it's good. What I will want to see, can you hear me?
00:54:28	S1	Yeah, I can hear you.
00:54:30	S2	So what I will like to see is the role of a pharmacist in a GP practice is definitely include medication management and medication misadventures to prevent medication management and misadventures and prevent people from hospitalisation which is,

		which has a massive cost and being in a surgery, in a GP practice, a pharmacist can easily prevent and save a lot of cost by reviewing the patient medications and following them up at their home in terms of adherence issues. That is definitely will be the major areas where pharmacy should be focused on in terms of being in a GP practice. The other areas which we can work on is definitely areas like in terms of chronic care models, having feedback or following up people in terms of their overall management of chronic diseases, not only just from the medication perspective, but overall management like how they are coping and all those type of things with their chronic diseases and then refer over to, and then GP can refer to them if the pharmacist can identify areas where there are issues, they can request GPs to refer them to the other health professionals like gynaecologist or psychiatrist or physios and any other so I mean I can say that some nurses will be able to do that. But there is a limited scope of nurse practice then GP pharmacists can actually do that very well because of their scope of practice and their experience of dealing with different variety of patients. So that is definitely a role which we need to expand. There is also, especially in the rural and remote areas where you have issues in terms of GPs not readily available or they, even we have situation in Australia where we have in, fly-in and fly-out GPs who comes only for a day or two a week and then they get out and then some new person comes in. So in that situation, pharmacists can be readily available to do autonomous prescribing of mild to minor illnesses so that will be a role of GP pharmacists to initiate those type of treatment maybe along with the nursing personnel to help and then of course they can also do immunisation if there is a lack of availability of even nurses there so they can with the practice, they can administer vaccinations to the people being in a GP practice. So those definitely type of role which need to be evolved and accepted by the various health settings in a primary care.
00:58:00	S1	That's good, that's good. Brilliant, brilliant. All right. And you have already answered this question, as I said, we have discussed it **next** time but again, coming back to the training, anything additional came up in your mind about the training that can be given to the pharmacist, especially I mean considering that prescribing is being considered as a part of the future role?
00:58:19	S2	Yes, so definitely **will be** extended, I'll say, I mean that the current course **and** structure of pharmacy which is in Australia still four years - they are not five years like UK - so that needs to be, I believe, needs

		extension. And those type of prescribing, once it's approved, must be included as a part of the normal pharmacy course. Those skills, and for those who have already graduated and working, there needs to be for example for medication reviews, you have to be an accredited pharmacist and that required, in Australia you have to have minimum a certain year of experience before you apply. I mean it used to be a bit more harder but they have relaxed it a bit like for example when I applied to become accredited pharmacist there was a minimum of two years of post-study experience that does not include the internship but now you can actually apply to become accredited pharmacist while you're doing your internship. So that has been watered down I will say a little bit. And that's why we have, we definitely need extra clinical skills especially for primary care pharmacist who have not experienced in community pharmacy setup those clinical skills which the pharmacist or clinical pharmacist in hospital have, all have gone through. So definitely those type of clinical skills needs to be done whether it's a six-month to a year course of post-graduate course which needs to be done as in clinical pharmacy or prescribing or whatever. Without that, I don't think it would be possible to have some kind of acceptance from, especially from GPs lobbyists, and GPs themselves if you don't have those skills.
01:00:32	S1	Yes, all right, that's good. Just to clarify you know the accreditation you've mentioned, is it the medication review accreditation you said?
01:00:38	S2	That is correct, yes. So home medication review is a separate type of accreditation which every, it is not part of normal registered pharmacists jobs so you have to accredit with Australian Association of Consultant Pharmacists which is a course you can do after, after you graduate, while you're doing internship. You can do a course which is only a day or two course really and then you can apply to sit in the exam and do case studies so you have to do 50 NCQ's plus 4 case studies before you can get accreditation to conduct medication reviews and get reimbursed through the medication system.
01:01:32	S1	So just this, just getting off from the subject but is it the GPs who recommend you for the medication reviews or is it…?
01:01:41	S2	That is correct. The GPs are the initiators so **our** pharmacists cannot initiate a review on its own. They can request a review and then that can be initiated by a GP because this is how it works in the Australian system that it needs to be initiated by GP and then pharmacists can

		go and do the review and then report it back to the GP about what changes or situation needs to be done.
01:02:13	S1	That's good. So I mean just making like a model where you can do the reviews and if you have got a prescribing annotation, prescribing, I mean you can prescribe as well, so it looks like an ideal situation where you can go, do the reviews and if there is anything you want to change…?
01:02:31	S2	That's correct, yes. So, in terms of a real model our pharmacist in a GP practice, if they are accredited, they can then initiate the review on their own. That will be the ideal situation. They don't have to **wait** or rely on GP to get their permission. In a GP practice and accredited pharmacist but prescribing rights would be able to initiate the review, do the review and if there is anything missing, they will be able to initiate that treatment within their scope of practice.
01:03:08	S1	Yeah, definitely. It looks like a big gap which can be definitely be filled by all these additional accreditations by the pharmacists. That's good. That's good.
01:03:18	S2	That's right.
01:03:19	S1	It's a really good knowledge which I'm getting just comparing the system which is working here and in Australia. It's good. So, moving on, yeah, sorry. We have covered quite a few aspects from the organisational and the clinical team. How you find the patient's feedback about this role, I mean the patient which you come across? (overlapping conversation) normally get.
01:03:49	S2	Yeah, I think the patient really appreciate it because they can see the value of the expertise and knowledge of the pharmacist. And they really appreciate that they are getting not only a good feedback from pharmacist but when they go and see their GP, their GP also tell them, oh yeah, yeah, we discussed this. So, the collaborative effect it has on the patient is really good, not only in terms of improving their situation, but they really enjoy that interaction which they had both with GPs and pharmacists. So, it has been really positive from every angle that they don't see that this is not our scope. They don't question that that why pharmacists are doing this. They think most patient and of course there are certain patient who will query then why you're asking that many question with them because they are not used to those type of situation where most commercial based pharmacies where they go which are not in a practice where they are in a shopping centre or something where there are no GPs. You just

		take a script and the pharmacists just dispense it and give them the information on how to use them instead of inquiring more about their health and in general but then they come to us in our GP practice. So some of them who never had that experience found them quite amazing that the pharmacists are more interacting with them instead of just covering to a pharmacists system giving them this script and then taking it back and take **that** into **the** house.
01:05:35	S1	That's good, that's good. So, it's always positive feedback from the patient once they [inaudible 01:05:39] the roles and once they know that it's a part of the overall healthcare, then it's always a good **thing**.
01:05:49	S2	Yes. That is correct, yes.
01:05:51	S1	Brilliant. Alright. I will summarise all the last few questions in one statement because most probably you have answered these questions before so I mean the GP pharmacist role has evolved since you have begun, right? So, believing or considering what you have experienced in the back **or** your years, I mean, any possible barriers or facilitators you think were in the start and now still present and how you feel those barriers can overcome for the future role?
01:06:30	S2	Yeah, so barriers are definitely more of the way the settings are, so I don't think so there are many settings like what we are in. It's still in the very early phases. So that's why it always, when the new GPs comes in, they are not really aware of that that's happening in these settings. You understand what I'm saying? Because they haven't experienced them in the past of their practice so that's always a barrier in the past and in the future and in going forward also then you have new patient, new GPs that allied health professionals started the practice then you have to explain it to them what your roles are and how they can be benefited in them and in general and the patient in general. So that's always a barrier because of the fact that these practices are not common. So once in the future, they will start getting more common then we will not have those type of barriers of not knowing what actually the roles are.
01:07:41	S1	Yeah, yeah. That's good, that's good. And getting in the system and getting the points where you're coming from definitely, that's good. And I mean based on all this structure you can see that in the future there will be a fulltime GP pharmacist who will, **it will be practiced** within Australia.

01:07:58	S2	Well, that would be ideal and that will be the situation if, depending upon like, for example, if you have two GPs, I can see there will be any [inaudible 01:08:09] pharmacist in those type of practices. So you're looking at a minimum of between eight GPs to have a practice pharmacist available. So I think anything under that would be probably may not be financially sustainable for any of, or I don't know whether it will help in general but I say between six to eight GPs minimum, minimum six, I will say, if they are fulltime and the practice is open five days a weeks at least from eight o'clock until five o'clock doing their normal business hours which is what probably will be more slightly the scenarios available for most GP pharmacist and practices. There's not many after-hour practices available even in Australia, you know, it's very few like, one hours **it's** after hours, because we're open until 10 o'clock and open at 7. And we're open every day but that's not the situation for most practices, GP practices in Australia where they're only open between Monday to Friday and maybe some Saturdays or very small hours on Saturdays and most of them are closed on Sundays.
01:09:26	S1	Okay, okay. So just to clarify this point you have said only two or three or less GPs you feel that there won't be much role of the GP pharmacist in that practice if I'm right?
01:09:41	S2	I said so because it may not, the GPs may not be seeing that number of patients to have a viable pharmacist available for between, let's say, Monday to Friday. But that is my understanding based on the numbers of patients a GP see in every day in those type of settings.
01:10:11	S1	But there might be some role, like a part-time role, for medicine management?
01:10:15	S2	Yes, definitely in a smaller practice there will be definitely a role of two or three days a week for GP pharmacist to be available to do those reviews, medication reviews and other plans need to be done if they don't have a fulltime practice manager or a practice nurse. And that can be, it can then be taken by the pharmacist.
01:10:42	S1	But for the fulltime role, you feel that they should be at least a practice with six to eight weeks?
01:10:45	S2	Six, yes, that's correct. That's based on the current number of patients seen by GPs. So definitely a role for part-timers but ideally they should be fulltime available between five days a week at least.

01:11:05	S1	Five days a week, which can do both the reviews and medicine management role at the same time, right?
01:11:09	S2	Yes.
01:11:17	S1	That's good, that's fine. Brilliant. Okay. And you feel the GP you know the perception for the overall perception about the pharmacist is changing with the studies coming up, with the new roles being **started** within the healthcare professional, you feel the perception has improved about this role?
01:11:34	S2	I'd say so, over the years it has gotten a bit more acceptance from the primary care practitioners, primary care GP practitioners. And of course, in Australia it's still in very early stage. I mean we have been doing it for the last 10, 11 years but it is still evolving and it's still not as common as it would have been ideally in those type of settings. But it is definitely evolving.
01:12:07	S1	It is evolving. I mean from all these discussions, to be honest, I can see that there is a big scope of GP pharmacists and I think most probably this would be studied within the healthcare system and not much about the whole things that are working but I can see that there will be studies. There will be research team going on about this role. From your side, do you feel that more research needs to be done? Any specific part of this overall role?
01:12:40	S2	I think definitely more research and it needs to be collected of the effectivity of our pharmacists in the practice and how much saving they can do to overall health system and being available there.
01:13:00	S1	Right, right, that's good. And I mean you know the topic of this study, how important you feel this study might be for this whole scenario?
01:13:09	S2	Yeah, it will be good to have that what is happening currently in both Australia and England in terms of comparative studies so what's happening in GP pharmacist area in UK and what's happening here, what lessons we can take from UK or what lesson you can take from situations here. I would say it would be more lessons for us from UK because I can say that it might be more, I'm not sure. I mean you're probably the best person to know that whether it is more commonly happening there compared to here in Australia.
01:13:55	S1	I mean from my own experience I can see that prescribing might be a more like a game changer to be honest because that's what has happened in UK with the role taking a bit of workload off from the GPs with the prescribing role especially the repeat prescribing. I'm

		not sure how the repeat prescribing works in Australia but yeah, prescribing and patient accreditation might be a big game changer for the GP pharmacist role in Australia so I will definitely have a bit more read through on this how the things in Australia and yeah it will be a major part of my writing discussion at the end of this study so that will be good. [inaudible 01:14:42]. Just a final step, any additional that you want to add based on our discussion what we have done before?
01:14:53	S2	No, I think we covered most of the thing which your study is covering. And then of course my opinion about what I will see in my experience so far. So, I think it's definitely what is, I can add more, not more than anything else.
01:15:12	S1	Yeah, you have brought loads of [inaudible 01:15:15] and quite a new information to me as well so brilliant. If anything comes up in your mind later which you find or you feel that might be useful for this study, you can always let me know, yeah?
01:15:30	S2	Yeah, definitely. I will send you an email regarding and I will probably also will see whether my other colleagues which are in the similar setting they would like to have a session with you. I will forward you, if you can the email you forward me previously, I believe that is the same still about the scope of the studies and all those thing because I did receive an email from you about what you're doing so I can forward that to them and then they can contact you.
01:16:03	S1	Anyone who wants to have additional from (overlapping conversation)
01:16:06	S2	I will CC it to you so you can know who they are so in case, you know, if they're not sure, you know, how to contact you, you can contact them then.
01:16:18	S1	Yeah, yeah. I mean, it will be interesting to find the views from the GPs and nurses or, you know, the practice manager how they are taking this role and definitely once I have done the interviews with them it will be interesting to know their end as well and it will be really interesting to compare the views from both ends, both sides, yeah. Alright, brilliant. (Overlapping conversation).
01:16:44	S2	No worries.
01:16:45	S1	Thanks a lot, and it was helpful. And I will look forward to have the transcription of all these and I will share once I get the notes and it

		will be interesting to find how the comparison is coming between England and Australia. Thanks a lot.
01:17:04	S2	No worries. Thank you.
01:17:06	S1	It was really helpful. Thank you.
01:17:09	S2	Okay. Thank you.
01:17:11	S1	Thank you.
01:17:10	S2	Okay. Bye.
01:17:12	S1	Bye.

[01.17.13]

[End of Audio]

Duration 77 minutes and 13 seconds

Appendix 9
Interview with GP2/England

S1 Interviewer
S2 Respondent

Timecode	Speaker	Transcript
00:00:02	S1	Hi, my name is Nosha Abenda , and I'm a GP pharmacist as well as I'm working on a master research project to evaluate GP pharmacist role in England and Australia. Today I'm doing the interview with a GP working in one of the practices in Manchester area just to get her views about the GP pharmacist role. I would like to…please introduce yourself and then we'll carry on with the interview.
00:00:28	S2	Sure. So I'm doctor Haria Amed. I'm a GP partner here. I've been since 2017. So coming on to two years now.

00:00:41	S1	All right. Dr. Amed, You have got basic information about this study?
00:00:45	S2	Yup.
00:00:45	S1	Yeah. And you're giving me the consent to do this research interview?
00:00:49	S2	Yeah.
00:00:51	S1	Oh thank you. Basically this research is to evaluate the GP pharmacist role and this interview guide…this interview guide is divided in four sections. Hopefully it's gonna take about 20, 25 minutes. If you want to skip any question or don't want to answer any question, please let me know. And at the end of the interview this interview will be transcribed. If you want a copy of it I can provide you a copy and if you want to add something you can always let me know. All right. You're okay for me start?
00:01:21	S2	Yeah.
00:01:20	S1	All right. As I said it has got four sections, the first one is about perception and challenges about the GP pharmacist. So what are your views about general practice framework at the moment? Do you believe there is any gap present in the general practice framework?
00:01:39	S2	I'm not familiar with the GP framework, I'm more familiar with the long term plan now. The five year forward view. So…so I know more about how they are looking to expand and diversify the GP workforce even more. So it was more the workforce even more. So not just pharmacist, but physician associates, paramedics, practitioners, et cetera, so.
00:02:04	S1	All right. What was your initial perception about integrating pharmacists into GP pharmacists' role? If there was any gap in general framework, but your initial perception when you started working with the GP pharmacist?
00:02:16	S2	So I've been fortunate, I think throughout my training even we've always had a pharmacist in the practice. So I've been open to them they've been really helpful. So instead of having to, you know, call up a pharmacy for advice from your pharmacist colleagues so that there's someone always at hand to answer all your queries.

00:02:38	S1	All right. Right. And did you believe there was any mismatch in the professional expectations you had from the GP pharmacist role in the early stages?
00:02:47	S2	No.
00:02:51	S1	Okay. And any initial reservations you had about the GP pharmacists as a part of your clinical team like clinical knowledge, communication skills, management skills, qualifications?
00:03:01	S2	No because we have quite a robust system supervision. So confident that, that's effective.
00:03:11	S1	That's fine. Okay. And how well you believe pharmacists was professionally prepared to perform as a GP pharmacist. [Inaudible 00:03:12]?
00:03:17	S2	So they have a good understanding of the, you know, the role of primary care and where they sit within that role. So I think they've been mostly been well prepared.
00:03:30	S1	Okay. Any operational challenges or hurdle you faced while working with the pharmacist?
00:03:35	S2	No. I don't think so. I think particularly our practice were quite innovative and we're expanding and reviewing roles quite often. So for example, you know, we had our pharmacist review blood results. We've had them actually seeing acute patients, the ones who are, you know, who are trained at advanced practitioner level. So it's just a case of trying and seeing how…seeing how it goes.
00:04:07	S1	Okay. Okay. And in your views, what should be the key performance indicators you believe to analyze GP pharmacist role?
00:04:13	S2	I think one of the key ones would be timing, medication reviews. Safety so safety auctioning alerts and things that you get. Ensure we're on top of any medication compliance orders and things like that.
00:04:37	S1	Okay. Okay. That's fine. That was the first section. The second one is about the working collaboration between the GP pharmacist and yourself as a GP. So how you value your present working relationship with a GP and has it changed since the beginning?
00:04:53	S2	No, I think it's very positive. We're very open. We have a quite a flat hierarchy here so if anyone's got queries, you know, they're welcome

		to come and discuss it and vice versa. If I've got medication queries I'm more than happy to ask them.
00:05:04	S1	All right.
00:05:06	S2	And here the benefit is that our pharmacists are trainees as well. So we have…yeah, we're really open to development and training here.
00:05:16	S1	But has it been proved since the beginning, you think so?
00:05:18	S2	The perception yeah, probably I think. Particularly with having trainees on board too, seeing their development over the course of their placement as well. It's definitely positive. So they're willing to learn.
00:05:32	S1	Have you got any concerns related to medical, legal implications in the scope of GP pharmacists, situations like where the pharmacist has gone beyond their expertise?
00:05:43	S2	No, I think it is about just emphasizing, you know, make sure you work within your limitations because ultimately they are working on the supervision and it's just a case of reminding and make sure they undergo regular appraisal.
00:05:59	S1	All right. But do you have any experience in any situation where you think that oh that pharmacist should not have done this?
00:06:05	S2	No. It's probably in the reverse where I think maybe they could've done a bit more like amending someone's blood pressure medication for example.
00:06:16	S1	All right. Okay. Okay. That's fine. How is you find pharmacists to approach or communicate?
00:06:20	S2	Fine yeah.
00:06:22	S1	Fine, yeah, yeah. Any factor you believe can influence this working collaboration?
00:06:32	S2	No, I think maybe as we have dug the work force further as how to clarify the pharmacist role alongside the role of say a physicians' associates. For example, they're new to our team, how can we make sure that all the roles and functions are covered among the whole team.
00:06:55	S1	Okay. Okay. And they're just the same thread of questions, what steps can be taken to improve this working collaboration, do you think?

00:07:00	S2	I think it's just clarification of roles. So to make sure the most appropriate people are doing the most appropriate things. So for me a priority is that medication reviews are done in a time because it'd be a shame if GP pharmacists aren't meeting their duty in that respect, but are then expanding their skills, you know, say in terms of seeing clinical patients, acute patients. So that's…that's one issue that we do have here. I don't think were on typical medication reviews. That's more of a function of, oh this is partnership, looking, reviewing roles again and making sure that, you know…
00:07:39	S1	Because this thing about the medication reviews, how we collect the data for the patients who are due for their medication reviews, is it something that a receptionist or other teams do?
00:07:52	S2	Yeah, so it is. So admin. They will, they'll send a reminder saying, so you know nudging the patients' medication review, but it's those that don't. It's how they then, you know, second or third attempt and they still fail. And looking at you know, patients' medication list or have loads that are, you know have four-six of three issues for example. And we've done a lot of work recently with one of our trainee practice pharmacists who's put quite a few patients onto the pre-dispensing. So hopefully that will improve things as well. But it is just a bit more improving the system there. I think it still needs review, yeah.
00:08:30	S1	All right. That's fine. Okay. And briefly explain what impact a GP pharmacist has made on your scope of practice. On where you were working before you started with GP pharmacists and now when you are working with GP pharmacists.
00:08:44	S2	So it's great in terms of you know, we have pharmacists that see acute patients. So it's reduced our workload there. They are pharmacists, so they did used to review our blood results and record them and they still do cover if a physician services can't do that. So obviously there's that workload that has been moved, shifted to them as well. So they definitely help with the workload and they help in terms of just being on site to ask for clinical clinician queries.
00:09:17	S1	Just…just again, I mean has pharmacists worked on his own when there is no GP in the practice or if there's…
00:09:23	S2	No, there's always.
00:09:25	S1	That's fine. Okay. Thanks, this was our second section. We are just moving to the third one which is about the pharmacist skillset. How the…how you would see the pharmacist [inaudible 00:09:33] point of

		view. So first one is about the patient facing role. How you see the competency of GP pharmacists in doing the patient facing role like around clinics, meds reviews, or doing the home visits?
00:09:49	S2	So I think yeah, they get in there. It's all about training and development. So they do…so they do all of that, off clinics, do home visits and stuff. I think probably some do need a bit of support in time management, but they're always willing to ask if they're unsure, we're always willing to help them.
00:10:11	S1	But you feel that they are…with the time they are getting more competent or they are competent to do the patient visits?
00:10:20	S2	Yeah, definitely.
00:10:20	S1	Okay. About the pharmacist as a prescriber, what are your thoughts, any reservation you have about prescribing them, what are your thoughts on describing them?
00:10:31	S2	Yeah, so it was…as a policy we've decided not to allow them to be independent prescribers at the moment. Unless they have…so say there some who are specialist qualifications in diabetes so they can do diabetes drugs especially some are specialist in asthma, so they can do asthma prescribing, but beyond their scope we're not…we're not keen to allow them.
00:10:53	S1	Okay. So they are not doing like a repeat prescribing…singing of the repeat prescribing. It's more like a…if they have the expertise, they will do it.
00:11:04	S2	Yeah, exactly. I mean we will probably move towards that.
00:11:06	S1	Okay. That's fine. All right. I mean it goes with the next section, but yeah, in your views what protocols should be set up at an organizational level or practice level for them to work as a prescriber?
00:11:19	S2	Yeah, I think…I think it's reviewing their competence. They will need close supervision to start off with because you know obviously it's ironic isn't it because as doctors we don't receive much training I'm prescribing yet we're…we're, you know, giving free reign to a prescriber when actually a pharmacist will know a lot more about premedical terms you know how stuff works. So I think it will be gradual under supervision and then expand their role.

00:11:49	S1	All right. Yeah, yeah. All right. The second part about the medicine management skills, how you see them working on that kind of the workload as a medicine management.
00:12:00	S2	What do you mean, sir?
00:12:01	S1	Medicine management, when dealing with the [inaudible 00:12:01] from the pharmacies, from the patients.
00:12:06	S2	Yeah, so they're very good at that. Yeah, they do that anyway and actually because we've got trainees, the trainee pharmacists do that very well. Yeah, so it's…
00:12:13	S1	This is something which you are confident they can do.
00:12:13	S2	Yeah.
00:12:17	S1	Yeah, yeah. All right. Brilliant. Okay. Most of…what I have learned from my own experience as well, there's always a bit of confusion about the practice performances and the nurse practice role. So how…it's obvious that there might be the overlapping of the roles between, you know, professionals. How…in your views how…where we stand in this practice in your own views?
00:12:41	S2	I think they work very well, it helps that they're, you know, very friendly together. You know, they respect each other. So they…you know, nurses and pharmacy clinics and they divvy up, you know, things like home visits. So I think it works well.
00:12:56	S1	But you don't think there is any overlapping coming up in the environment.
00:12:58	S2	No, no.
00:13:04	S1	That's fine, that's fine. Okay. And how you evaluate your GP pharmacist role to link surgery with community pharmacy, hospital and like organizations like CCG?
00:13:12	S2	I think that there's probably more that could be done there in terms of including cross organizational cooperation. Yeah.
00:13:21	S1	All right. Yeah. But do you think they…are there any letters that's coming up, are they…the person who is giving most of the care.
00:13:30	S2	It is, yeah. So any…anything related to medications just go to pharmacies or the nurse and they action it. So already doing that. Yeah.

00:13:39	S1	It is yeah, so any…anything related to medications does go to pharmacists or the nurse and they action it. So they're already doing that, yeah.
00:13:39	S1	What are your thoughts about on comparing the in-house pharmacist like the ones you have and the one which come from CCG or the like organizations?
00:13:49	S2	I think it varies. So I'm relatively new here, but I know from my colleagues the experiences that it is quite variable. They tend to be quite skill achieved. This is due to pharmacists.
00:14:01	S1	All right. Yeah.
00:14:03	S2	But it's figuring out who…who's the good ones and who…who'd want to support us further.
00:14:07	S1	All right, yeah, yeah.
00:14:09	S2	Yeah, as with a lot of things, it just depends.
00:14:12	S1	It depends.
00:14:13	S2	Yeah.
00:14:13	S2	Yeah, vary**.**
00:14:15	S1	Okay. Yeah, this is the last part. It's about the future of GP pharmacist role which you can just how you see them. So what future do you see for GP pharmacist role in future general practice framework. Any activities there you think that should be warded patient of clinical level?
00:14:33	S2	I think we're…you know, we're quite an intense practice. So they're already doing a lot of in terms of, you know, some have done the advanced practitioner course and is seeing acute patients. Some are, you know, they're dealing with blood results, home visits, queries. I think my reservation and that's shared by a couple of our partners is that, you know, that the core fixation of medication safety isn't overlooked. So make sure medication reviews are done in a timely way and that, that loop is closed. I think it's just going back to basics in a way and making sure that actually that, that is covered.
00:15:14	S1	But generally you see that in the future like in five years or something, do you see pharmacists working in the general practice? Fulltime?
00:15:14	S2	Yeah, definitely. Yeah.

00:15:27	S1	Okay. How you evaluate patients' feedback. Have you received any patient feedback about the GP pharmacist role?
00:15:26	S2	I think it's generally positive. I think our patients are happy to see anyone who they feel is competent and who's well supervised. So yeah.
00:15:40	S1	Have you ever received any negatives from anyone?
00:15:47	S2	No, no.
00:15:44	S1	Okay. That's fine. Okay. And how do you evaluate the cost of employing a GP pharmacist and [inaudible 00:15:52] like indemnity insurance?
00:15:56	S2	It's reasonable, yeah. I think. Because at the moment. I think as I've mentioned before, as our workforce diversifies further, you probably will…we probably will have to look at value for money. So for example a physician is associated coming through, they are by nature they've trained in clinical reasoning and how to see patients and things. So it may be prudent to, you know, look at roles and make sure that the most appropriate people are doing the most appropriate talks. So yeah.
00:16:34	S1	Okay. Based on your experience and need of workload, do you see GP pharmacists as part time or fulltime role?
00:16:38	S2	So we have two-part time pharmacists, yeah.
00:16:45	S1	And…
00:16:43	S2	It works well.
00:16:43	S1	It works well.
00:16:46	S2	Yeah.
00:16:47	S1	[Inaudible 00:16:50] one fulltime. Is it better for you to have two fulltime pharmacists?
00:17:01	S2	I think it's nice to have a bit of diversity.
00:17:06	S1	What are your thoughts about available funding options for GP pharmacists? Will you recruit a GP pharmacist once all the funding is not available anymore?
00:17:17	S2	I think yeah, we'd continue with it yeah, because it's embedded, it's part of our team yeah.

00:17:22	S1	All right. And based on your overall experience, what training would you like to see the pharmacists to improve their competency of the GP pharmacist?
00:17:30	S2	It would be interesting for whoever's in charge of the training to look at programs like the physicians' associates training and you know, consider how we can kind of work together to integrate elements. So lots of things like clinical reasoning, decision making, how to improve the competence and confidence of venerable ones by doing that.
00:17:54	S1	How do you believe practice pharmacists has evolved the performance of GP pharmacists impacting overall healthcare provision in highlighting any practice level planning bits. Have they evolved since you have seen them from where they started and where they stand now?
00:18:14	S2	I think quaff work is when we've probably seen most benefits, you know, quaff clinics, stuff that can be easily protocolised. So it can follow [inaudible 00:18:29].
00:18:32	S1	As a healthcare professional…have they evolved positively. I mean…
00:18:33	S2	Yeah, definitely. So they always, they're opened to, you know, expanding the role and always open to developing themselves.
00:18:41	S1	Brilliant. All right. And have GP pharmacist roles changed your overall perception about pharmacists? Because most of the GP's they might be…they have the perception or they had link with the community pharmacist before, but since this role has started you are more close with the pharmacists as a healthcare professional. So has it changed your role of perception about the pharmacists?
00:19:01	S2	Yeah, I think so. And like I say I've been fortunate, I've worked and trained and practiced the hazards in house pharmacists anyway. So they're a core part of our team so we've…we're lucky in that respect.
00:19:14	S1	All right. That's fine. And considering the possible barriers and facilitators [inaudible 00:19:18] GP pharmacist role, what steps should be taken or can be taken at an organizational level to improve GP pharmacist role?
00:19:26	S2	I think just be open. I think we know that there's a shortage of GP's so it's just being open that actually there are all the health professionals who can support within our workloads so it's just being

		open and being honest about the challenges that we face as a primary care workforce.
00:19:50	S1	Okay. All right. Yeah. Just last two questions, summarizing them up. Any future or further research you would like to see on GP pharmacist role in England?
00:20:01	S2	I think I forwarded Zeeshans…a study that showed, you know, make sure that pharmacists are embedded with a routine well enough for their recommendations to be implemented, you know, otherwise, you know, they'll do all this excellent work and then it's just ignored, it just sits at the bottom of a pile. So it's to make sure that you know the work they do is truly integrated into the work they practice.
00:20:25	S1	All right. Is it research that has been done in UK?
00:20:31	S2	It is yeah. I'll try and forward it. I did email Zeeshan, I'll ask him to forward it to you, yeah.
00:20:37	S1	All right. Yeah, I think that covers up all our sections, but just a final question, any other comments you want to add up or say about this whole process about GP pharmacists for this interview. Anything you want to add?
00:20:50	S2	No, that's fine. Thank you.
00:20:52	S1	That's fine. Thanks Dr. Amed, that was really helpful for the views and hopefully it will lead up to good data about our study. Thank you.

(00:21:04)

(End of Audio)

Duration 21 minutes

Appendix 10
Interview with GPP/England

S1 Interviewer

S2 Respondent

Timecode	Speaker	Transcript
00:00:01	S1	Oh hi my name is Nosh Akhtar and I'm a master research student in Huddersfield University and today I'm doing the interview with Zeeshan and Zeeshan is a GP pharmacist and he is giving me the interview about my study which is to value the expectation and perceptions of GP pharmacists all in England and Australia. So thank you Zeeshan. Zeeshan, do you have…just introduce yourself.
00:00:29	S2	Okay. So my name is Zeeshan Raghmani. I've been working in general practice for about five years now. I've done the prescribing course and I've also done one year of the advanced practitioner course as well. So I do many face to face role within general practice.
00:00:52	S1	Zeeshan, do you have got the basic information sheet about this study and you are giving me the consent to do this interview?
00:00:57	S2	Yeah.
00:00:57	S1	Thank you, Zeeshan. So Zeeshan you know this study is basically about the relation of the GP Pharmacist and its competitive study about this role in England and Australia? So the interview is gonna take about 20, 25 minutes and it is divided in four sections. Perceptions and challenges, GP pharmacists working in collaboration with health care professionals, pharmacist skillset and future of GP pharmacist role. So any views you want to share you can give in your interview. This interview is being recorded and then at the end of the interview this will be transcripted and if you need I will pass you a copy about the interview. So starting with perception of challenges, you're okay for me start?
00:01:40	S2	Yeah.
00:01:40	S1	Yeah, yeah. So starting with perception and challenges you are…you started working as a GP pharmacist. So what are your views about…around general practice frame work. How the general practice framework is working and do you believe there is any gaps present in the general practice framework?
00:01:59	S2	So what exactly is it that you're referring in the general practice framework?
00:02:01	S1	Just general…yeah, general practice GP you know the primary care. The general practice is the main step stone of the primary care. So how the things are working in the general practice framework, is there any gaps like where there is increased work pressure on the

		health care professionals and that can be build up by any health care professional?
00:02:28	S2	Yeah, I think in terms of the…the gaps, obviously there's more pressure. I think there's the…the expectations of pharmacists, you know, compared to what pharmacists can actually do. I think there's a bit of a gap there. And I think there is a need for kind of more training to make sure that pharmacists are fully competent in filling those roles.
00:03:02	S1	It feels more like, you know, this role has just started about four, five years ago. So if it goes *back about four, five years ago, there is always the perception or there is always in the news or in the media or that the general practice framework is under the pressure of the workload of…and we need to include…the *homes of GP's, nurses and other healthcare professionals so that it leaves a bit of [inaudible 00:03:33].
00:03:36	S2	So I think…I think that's happened. There's been…there's been definitely a massive influx of pharmacists of nurses and others. But I think the other thing is as well that we've always had is we've had a lot of GP's leaving as well. And the issue is…is that you have one GP and you have lots of other healthcare professionals. It's making sure that those healthcare professionals are being able to operate safely with sufficient like supervision as well. And I think sometimes general practice they…they misunderstand the role of a pharmacist and what pharmacists can do and what they can't do. So that's why I think to make sure that pharmacists are, you know, fully competent in that role.
00:04:23	S1	Yeah, yeah. I think you did at least do my next question then. I mean would you been working yourself as a GP pharmacist role. So what were your initial perception about the GP pharmacist role when you started this role? What was your perception…that what roles you're gonna play within the GP practice?
00:04:42	S2	So initially mine was just…it was a desk role.
00:04:43	S1	All right. Okay. Is that your perception, what you got?
00:04:48	S2	I think that was…I thought my role would be very limited.
00:04:55	S1	All right. Okay.
00:04:56	S2	Based on what I could do before. So I think my perception was, you know, I would be kind of doing just within a certain…

00:05:06	S1	More like a management type of role?
00:05:09	S2	Yeah, medicines management type things, audits and doing hospital discharges, things like that. I thought maybe basic face to face, but to think…five years ago to think I'd be doing like the normal walk in clinic…
00:05:25	S1	Yeah.
00:05:27	S2	Yeah, I didn't think that would happen.
00:05:28	S1	Yeah, yeah. And what are your thoughts about the initial perceptions of other health care professionals especially GP's when you started this role? What was your *expectations if you remember, what they were expecting from you and do you believe there was any mismatch of expectations in the initial phase?
00:05:53	S2	So going back like five years ago I think the perception varied between from GP to GP. Some GP's I think would have over expectations. They think that you can do everything. And some GP's were very wary. I think they were very wary almost as if you, you know, when it feels like someone's stepping on your toes.
00:06:10	S1	Yeah, yeah, yeah.
00:06:15	S2	So I think there was a bit of…
00:06:18	S1	What was more in this practice, what did you find more?
00:06:23	S2	I think even within this practice I think some GP's were quite, you know, you'll be able to do XY and Z. And some were…
00:06:33	S1	Yeah.
00:06:32	S2	Yeah, but generally speaking I think I was always given lots of support to develop in this practice.
00:06:40	S1	So just to summarise I mean you do believe that initially you do believe initially there was a bit of expectations between the expectations.
00:06:44	S2	Yeah, yeah, yeah.
00:06:49	S1	That's fine. Yeah, yeah. And what were your initial resolutions about this role. I mean when you started this role, your personal resolutions like you feel comfortable from medical sides of view?

00:07:00	S2	I didn't feel so confident with my clinical knowledge because I was working in community for like either years before I came here. So I didn't feel that confident giving clinical advice.
00:07:11	S1	What about communication skills?
00:07:12	S2	Communication skills I think generally speaking community pharmacists are…communication skills were always quite good. So I wasn't too fussed about the communication skills. I think it was…there was a bit of anxiety about, you know, dealing with doctors.
00:07:34	S1	Yeah, yeah, yeah.
00:07:35	S2	You know, not wanting to appear like stupid or…
00:07:37	S1	Yeah, *makes sense, makes sense. Yeah. I think it's…the general idea which I'm getting is more they were confident about the communication and management skills, but yeah, the clinical knowledge because they were not very much aware of what they are gonna face in the GP practice.
00:07:55	S2	Yeah.
00:07:58	S1	That's what the reason was here. Yeah, yeah. And was your initial operational challenges when you came here?
00:08:04	S2	Operational challenges?
00:08:06	S1	Just give an example like how comfortable it was for you to deal with the practice scene apart from the GP's and availability of the rooms or the task allocation. How are the…
00:08:23	S2	I think practically yeah, practically speaking I think it wasn't so much of an issue…
00:08:30	S1	All right, all right.
00:08:31	S2	…really. I think there was some issues where certain things I wanted to do. So it was basically what…it was a balance of what I wanted to and what the practice wanted me to do. The practice needs and my needs were more admin type tasks which I didn't really want to do. I wanted to do more of the clinical work.
00:08:52	S1	[Inaudible 00:08:53] like the rooms?
00:08:54	S2	Rooms wise yeah, we've not had any problems. Yeah, yeah.

00:08:56	S1	Okay. And what about the views on the emotional challenges in the initial phase like…I mean so just perceived professionally in [inaudible 00:09:06] and development and clinical [inaudible 00:09:08] for patient facing clinical skills?
00:09:10	S2	Yeah.
00:09:10	S1	It's more like from the clinical side.
00:09:14	S2	Yeah, I think there's obviously that anxiety about…
00:09:17	S1	Maybe emotional.
00:09:16	S2	…being out of your comfort zone.
00:09:24	S1	Yeah, yeah, yeah. All right. And what school did you receive an organisational level.
00:09:31	S2	Sorry, what was that?
00:09:34	S1	What support did you get from the organisation level?
00:09:37	S2	So I think the best thing was that I was assigned a clinical supervisor. One of the GPs was my clinical supervisor. He was my go-to person for clinical queries.
00:09:44	S1	Okay. Okay.
00:09:46	S2	And I think every day whenever I had a clinic patient facing, I always had one GP that I knew would be available for me to answer clinical questions as well. That made it very, very easy, yeah.
00:10:00	S1	Brilliant. And I mean I think you have answered everything, but if you want to add something…how well you believe you were professionally prepared to perform as GP pharmacist?
00:10:08	S2	To be honest, I was just thrown in the deep end.
00:10:11	S1	Yeah, yeah.
00:10:13	S2	I just had to find my way.
00:10:17	S1	Okay. From your experience now, what do you think should be the key performance indicators to value the role of the GP pharmacist?
00:10:28	S2	So I think it should be time, how they're saving time to the practice. Money, I think so cost savings in terms things like the management. But also cost making as well. So for example [inaudible 00:10:42] and standards. We have Manchester standards which shows you can make money on. So being able to audit those things and how much

		money that perhaps someone brought into the practice. And then I think it's yeah, really, the time and the...and money and pressure. How much…
00:11:07	S1	How much time you're saving for the GP ?
00:11:07	S2	Yeah.
00:11:10	S1	Listen using emails?
00:11:14	S2	Yeah.
00:11:12	S1	Okay. That was the first section, yeah. Yeah, that was the first section. So we're gonna move now to working collaboration within the GP practice now. So how are you valued at your present working relationships with the staff members?
00:11:28	S2	Very good.
00:11:29	S1	And do you believe that it has changed since the beginning?
00:11:36	S2	Yeah, I think they value my employment a lot more now.
00:11:38	S1	Yeah, yeah. So they know how the things are going now.
00:11:41	S2	Yeah, they know.
00:11:43	S1	Yeah, yeah. So how do you differentiate your role as a GP pharmacist with [inaudible 00:11:46]? That's a very common theme. That's something [inaudible 00:11:50]. So how do you differentiate your role and latest things?
00:12:02	S2	So yeah, there's definitely an overlapping. I think…I think it's always when it comes to medications side I think when it's polypharmacy, when there's comorbidities, there's, you know, those kind of areas I think is where it really differentiates and even management of medication side as well is our strong point. And then there's other roles as well which...so I mean even now I know there's a lot of advanced practitioner, nurses that do the same things that I do, but you know, I also have the added thing of hospital discharges acute prescription queries and things like that.
00:12:45	S1	So you think in the start there was a bit of the concern, yeah, like you said they're stepping on their toes or something.
00:12:52	S2	Yeah, yeah because I mean in the beginning I was doing a lot of the nurses' job because the nurse went off…the nurse was on maternity job for year just after I started five years ago. So I ended up doing

		everything the nurse was doing right from baby clinical to everything, you know. So there was a lot overlap at that time.
00:13:08	S1	But now you think that there are some specific roles that [inaudible 00:13:14]?
00:13:13	S2	Yeah, yeah, yeah.
00:13:15	S1	That's good, that's good. So have you got any concerns related to medical legal implications and scope of your… as a GP pharmacist in situations where it concerns about pharmacists going beyond their area of expertise?
00:13:29	S2	Yeah, definitely. That's always a worry. About the…the worry of risk of litigation is always a…is always a worry.
00:13:38	S1	Is it mostly coming from the nurse or is it coming from the GP or is it coming from the GP or which like any medical legal implication?
00:13:44	S2	So I think it's from patients more.
00:13:46	S1	Patients.
00:13:46	S2	More like yeah, like making a mistake when it comes to the management of patients I suppose. Most likely.
00:13:54	S1	And how is it you find post communicate?
00:13:57	S2	Oh yeah, very good. Very good.
00:13:59	S1	It has improved?
00:14:01	S2	Yeah.
00:14:01	S1	Yeah.
00:14:02	S2	That's fine.
00:14:02	S1	And any factors, specific factor you believe that influence this working collaboration?
00:14:08	S2	That was…sorry?
00:14:10	S1	Any specific factors you think that can influence this working collaboration?
00:14:14	S2	Infuse, what do you mean?
00:14:17	S1	Any specific factors that can influence this…
00:14:20	S2	Oh, influence?

00:14:18	S1	Yeah, yeah. So any…
00:14:24	S2	Yeah, I think multidisciplinary meetings which we do is a really good way to do that. Because we have…so even now they have a huddle every day.
00:14:35	S1	Okay.
00:14:34	S2	Where we…the nurse GP's, pharmacists, we all get in one room and we discuss patients and what's happening and things like that.
00:14:40	S1	Any steps that can be taken to improve within this general practice…are they willing to improve this collaboration apart from…
00:14:50	S2	I think more dialog between the different divisions rather than having people working independently, they speak regularly.
00:14:55	S1	More like a meeting.
00:14:58	S2	Yeah. [Inaudible 00:14:59].
00:15:02	S1	Right. That's fine. It covers over second part. So moving up to third one, pharmacist skillset, yeah? Mostly it might be that you've have given the answers a bit in the back, but it's just more specific on skillset now. So how do you value your competency of pharmacists in patient facing role for example clinics, medication reviews or home visits?
00:15:24	S2	Yeah, so I think there needs to be a level of doing that under the clinical supervision first. So having clinical supervision within the practice is very, very important and having the GP on board for that. And this is the thing, problem where sometimes GPs assume that you can just do everything because you're a pharmacy, you're competent, but that doesn't work like that. Over here I've had a GP supervise me for a long period of time before they…before working independently.
00:15:51	S1	Yeah, yeah.
00:15:55	S2	And then the other thing as well is actually gaining some credible, professional qualifications as well like prescribing courses like advanced practitioner qualifications, other weekend courses, things like that.
00:16:07	S1	Improve the patient facing.
00:16:09	S2	Yeah.

00:16:07	S1	That's fine. And what are your thoughts about prescribing role of pharmacists? Highlighting any relations you might have?
00:16:15	S2	I think as long as pharmacists are prescribing within their competence and there's no pressure on them to prescribe outside of their competence is fine.
00:16:21	S1	Yeah. It's more about the outcome yes. Yeah. And have you ever felt that pressure from anyone in the organisation that you have to do the prescribing or to be prescribing?
00:16:32	S2	No, never.
00:16:34	S1	That's great. Yeah. So in your views, what protocols should be set about organisational level for prescribing [inaudible 00:16:39] like they knowing what you can prescribe.
00:16:45	S2	Yeah, the GPs knowing info.
00:16:46	S1	Yeah. Have you ever worked on your own like an on-call clinician?
00:16:53	S2	Not on my own, no. Always with a team leader.
00:16:57	S1	Okay. And what are your thoughts about medicine management skills of the pharmacist?
00:17:03	S2	Yeah, I think that's…
00:17:03	S1	That's [inaudible 00:17:04]. That's more like the easy…
00:17:04	S2	Yeah.
00:17:05	S1	…main part of it. All right. So how do you value your GP pharmacist role to link surgery pharmacy, hospital or like CCGS. Do you think it can bridge the gap?
00:17:19	S2	Yeah, definitely. I think because pharmacists are now in each of those areas. And they can become the bridge.
00:17:31	S1	So they can be the link between all that. Yeah, yeah. And is what the staff over here are expecting from you as a part of your role?
00:17:38	S2	Yeah, I think so to some degree yeah.
00:17:42	S1	All right. And what are your thoughts on comparing in-house practice from to the one employed by healthcare organisations like the CCG pharmacists.
00:17:53	S2	So I think the thing is the in-house pharmacist focussed on the expectations of the practice rather than the expectations of the CCG.

		So CCG pharmacist may just be, you know, just focussing on cost saving, but sometimes that can create problems within the practice…
00:18:15	S1	Okay.
00:18:15	S2	…for GPs and you know, for example when they like stop medication, things like that. Or change plans and just send a letter to the patients…that patients then get happy with that then come back and…whereas within in-house pharmacist you get to know your patients well. So I know in advance sometimes. So what they'll do is they'll send me a list of things that need changing. And sometimes I know those patients are not gonna be happy with certain things. So I'll speak to them. So patients I'll know they'll be okay with the changes so I can change it.
00:18:43	S1	I think the more with the in-house pharmacists now where in the past it was like more like the organisational pharmacists.
00:18:51	S2	Yeah, yeah.
00:18:52	S1	Yeah, yeah. that's fine. So just the last part now, Zeeshan. It's about the future of GP pharmacists. So it depends on or based on your experience in your organisation. So what future do you see as a GP pharmacist in the present and future general practice framework?
00:19:13	S2	I think pharmacists will start taking more of a supervisory role as well now because they're kind of establishing themselves slowly. I think they'll start to see more people coming. So for example over here for the last…this is the second year now, I've been taking on pre reg pharmacists here now. So we now for the last like two years we've had in-house pre-registration pharmacists as well full time. So that's a new role. So it's taking on…like supervising them. Supervising physicians' associates. Training of the healthcare staff.
00:19:47	S1	I think from next year onwards you can…the pharmacist can do it as BMD as well.
00:19:52	S2	Yeah, yeah, yeah. So…yeah, yeah.
00:19:57	S1	Be intresting. So yeah, you think there is…pharmacists will be a major part of the GP practice in the future yeah?
00:20:06	S2	That's right.
00:20:06	S1	Based on your overall experience, what training would you like to see to improve the competency of the GP pharmacist?

00:20:09	S2	Training. I think hands on. Sort of…so yeah, facilitating that hands on experience. So you're not actually seeing patients and being able to consult with a GP or pharmacist after that.
00:20:32	S1	All right.
00:20:35	S2	And that kind of training.
00:20:35	S1	Clinical knowledge training.
00:20:38	S2	Yeah, but I think mainly the focus should be on the clinical knowledge as well for a lot of pharmacists because, you know, either rusty or it's not their strong point. And a lot of the courses like prescribing I feel there's a lot of emphasis on like the non-clinical aspects like leadership skills and you know this skill and that skill, constitution skills and communication skills. Sometimes I feel there's a bit too much emphasis on those and not enough emphasis on clinical skills, yeah.
00:21:05	S1	It's more on the part, Yeah, yeah. All right. And how you value admissions feedback and perceptions about GP pharmacists?
00:21:13	S2	So initially the patients were really like…even doing acute now like now I see acute clinic initially patients were like…they were not happy because they wanted to see a GP. But then slowly, slowly because they've started to see what I've been able to do. In the beginning I used to get a lot, oh, I wanted to see a GP, but now because a lot of them know me, they're okay.
00:21:39	S1	Okay. You have a good relationship with the patients that come in.
00:21:41	S2	Yeah, definitely, yeah.
00:21:46	S1	Okay. And based on your experience and need of workload, do you see GP pharmacists as part of…or fulltime role?
00:21:51	S2	Fulltime role.
00:21:54	S1	Yeah, yeah. Okay. That's fine. And how will you believe practice pharmacists has evolved perform as a GP pharmacist in the present framework.
00:22:02	S2	I think it's evolved certainly in the face to face…there's a lot more face to face clinics and things like that now compared to before. And…and I think taken…pharmacists taken more leadership roles now as well within general practice because I think slowly, slowly

		pharmacists can start to establish themselves more within, you know, general practice.
00:22:27	S1	And it is giving a bit more benefit to…at the organisational level as well.
00:22:30	S2	Yeah.
00:22:32	S1	Yeah, yeah. That's fine. Brilliant. Okay. Considering the possible barriers and facilitators for current GP pharmacist role, what steps should be taken at an organisational level to improve GP pharmacist role? Considering any barriers of facilitators, you had in the past or at the moment?
00:22:51	S2	Barriers. Do you mean within this practice or generally?
00:22:54	S1	Generally. I mean generally you might have or seen somewhere…
00:23:00	S2	So I think the barriers would be to…sometimes it's the…the admin side becomes a barrier because they'll get pharmacists stuck into the admin stuff. So they're just like doing, you know, they'll be busy doing med *reviews over the phone or the hospital discharges or all these kind of things which means it limits the pharmacist working within their full potential I think and expertise. In terms of the solution to that I think preregistration pharmacists are certainly a solution because it's helped here where I will delegate a lot of the…a lot of work to pre-registration pharmacists.
00:23:41	S1	What are your thoughts about advanced practice pharmacist?
00:23:46	S2	So yeah, advanced practice pharmacist I think definitely is a…it's allowing us to do a lot more, but then I think there's other things like, you know, you've got physicians associates who are a lot cheaper for general GP's then…then pharmacists to employ who can also do acute clinic and things like that and [inaudible 00:24:08].
00:24:10	S1	That's fine and has GP pharmacists' role changed your overall perception about pharmacists?
00:24:15	S2	Yeah.
00:24:17	S1	The role when you doing a community pharmacist, your career development?
00:24:23	S2	Yeah, definitely yeah, I think career development is…because I start to get bored within community so definitely from a career development and job satisfaction point of view, definitely yeah.

00:24:33	S1	Yeah, yeah, yeah. Okay. Just last few questions, any further research or work you want or thing that should be done on GP pharmacist at policy level?
00:24:44	S2	I think yeah, research on the impact made…
00:24:46	S1	Yeah.
00:24:50	S2	Yeah, hard factual evidence on the impact that's been made by pharmacists because I think that will allow more documentation.
00:24:56	S1	To document how the things are working.
00:24:58	S2	Yeah.
00:24:58	S1	That's fine. All right. Just last one. Do you have any other comments to add to this topic? Anything on your experience, anything, anything you want to add?
00:25:07	S2	No, nothing else.
00:25:07	S1	Thanks Zeeshan, that fills up our full section. So basically this is about…it's about a 20, 25-minute interview. It will be transcribed. If you want to add anything else apart from this, you can always contact me and I look into it. So thanks for your time.
00:25:27	S2	No problem.

(00:25:22)

(End of Audio)

Duration 25.5 minutes

Appendix 11
Interview with Organizational Lead/England

S1 Noshad Akhtar, male interviewer

S2 Naomi Miller

Timecode	Speaker	Transcript
00:00:01	S1	Hi, my name is Noshad Akhtar. I'm doing a Masters' research thesis program based on the GP pharmacist role in England and Australia. And today in the seminar, guys, I'm doing an interview with an organisational lead of **Coatato** in Manchester area. I'm doing an interview with Ms. Naomi Miller. I have given her the forms based on…for this year. There is an interview guide based on which I will do the interview and I will carry on based on that interview guide. So, I will just quickly introduce. It's Ms. Naomi Miller, and an MP in our government organisational lead in Coatato. Hi Naomi.
00:00:45	S2	Hi.
00:00:45	S1	Hi. Can you just quickly introduce yourself?
00:00:48	S2	Yes. So, I'm Naomi Miller. I'm an advanced nurse practitioner and a clinical lead for GTD Healthcare.
00:00:56	S1	All right. Naomi, you have got the…the interview that I have given you for the interview?
00:01:02	S2	Yeah.
00:01:02	S1	Yeah, yeah. And you are not arguing with the consent to carry on with this interview?
00:01:05	S2	Yeah.
00:01:06	S1	Yeah, that's fine. Thank you. So, Naomi, basically this study is based on the perception and expectation of key stakeholders that have been Australia for the GP pharmacist role. And I want your variable views on the…on this perspective. I have divided the interview in four basic teams, perception and challenges, working collaboration, pharmaceutical setting, and future of the GP pharmacist role. So, we will start with the first section, which is perception and challenges. So…I mean, you have got the experience of working in the general practice. So, looking at the present general practice framework, do

		you feel there are any gaps present in the general practice framework?
00:01:48	S2	So, there's gaps with GP's, so GP's are no longer coming into the profession. So, we're having to fill that with wards disciplinary team. I think there's probably gaps with training. So how we get members of the multi-disciplinary team trained to take on…some are previously…roles previously done by GP's.
00:02:12	S1	All right. That's fine. That's good. And admin…you have mentioned about the GP board, was in a bit…in a manner that there is not many GP's coming into it. So…I mean, how do you feel the indication of GP pharmacist role to fill the present gaps? How do you see the GP pharmacist role in this…in this perspective?
00:02:33	S2	Yeah. So initially, I think that I thought the pharmacist would come into the practice to do more of the medicines management audit type work. But actually, having experience, now pharmacists are coming into general practice. It's sort of we're realising that actually they are best placed because they're used to primary care to also take on some clinical skills. Take consultations because it works really well in conjunction to their…sort of the multiple medications that patients are on or tend to come with…when they come for those presentations.
00:03:11	S1	That's fine. Because it has been a few years since the GP pharmacist role has started in current scheme, from your time do you feel at an organisational level was there any mismatch in the professional expectations in the standard when you took on this role?
00:03:28	S2	Yeah. So, I think they were used as sort of a bit of a lower level at work forms. Whereas actually what we're realising now is that they…they have all of those skills that actually probably placed it at more of an advanced level.
00:03:42	S1	All right. All right. And was there any initial reservations when you took on the pharmacist and entered the organisational loop?
00:03:51	S2	Yes. So, I think initially…'cause I…'cause it was awhile ago now, I think I'm…I'm probably a little bit biased in the fact that I know it works. So initially, yeah, there probably was reservations and, yeah, whether that role would be needed. But now we know that it…it is.
00:04:09	S1	Any specific reservations from a clinical perspective?

00:04:13	S2	So, I'd always see a GC pharmacist initially. So, we…they were sent with a specific agenda. Sometimes I think that's…some we felt were drug company driven.
00:04:25	S1	Okay.
00:04:26	S2	Which was a little bit of a reservation in the beginning. Or the patients weren't gonna be treated with an…with an individual type of approach. It was gonna be a…everybody's going to stop this medication and it's gonna be cheaper to put them on that medication. It was almost…felt like it was a little bit money driven by the CCG's.
00:04:45	S1	And how well do you believe the pharmacist was professionally prepaid to take on this role? Training-wise or knowledge-wise? What…they had the etiquette training with them when they took on this role?
00:04:58	S2	So, I think pharmacists actually took this on really well. So, do you mean did they the training?
00:05:04	S1	I meant when did you let them in the start? Did you feel that they were ready to take on this role?
00:05:10	S2	No, I think that they probably could've had some more training prior to now.
00:05:16	S1	That's fine. Yeah. That's…that's the general training coming.
00:05:18	S2	Yeah.
00:05:18	S1	Yeah, yeah. Okay. And then on the organisational level, what…what the initial operation or challenges or hurdles you feel whilst working at the GP pharmacist, considering expectations and reservations you had?
00:05:31	S2	Yeah. So…so I think initially it was to do with lots of different people doing lots of different sections of work. Maybe a bit I've perceived a little bit more complicated. Patient expectations, I think, is probably one that we probably didn't do very well in the beginning. Maybe still not doing very well. I don't know whether patients understand who they're seeing. Space. Space is always a problem. We've got lots of…so four or five people do one job of a GP.
00:06:05	S1	Yeah, yeah.
00:06:05	S2	But different…with a different role. So that's always a…a challenge.

00:06:10	S1	Cost factor?
00:06:12	S2	So, cost. So, cost effectiveness. I think pharmacists are very cost effective. Yeah. So obviously it's cheaper than a GP. It's probably very similar to an advanced nurse.
00:06:26	S1	But was the cost…because in the buyers scheme there was a sheer burden being done by imagists. And some of them has to come from the organisation.
00:06:35	S2	Yeah.
00:06:36	S1	So how…how it was taken from organisation. Did the leader share their burden? Was there some reservation to share their burden?
00:06:42	S2	So, I think us as an organisation, there's wasn't.
00:06:45	S1	There wasn't.
00:06:46	S2	Yeah, 'cause I think we saw it as a cost-effective way as opposed to not.
00:06:51	S1	That was brilliant. Yeah. What support was given on an organisational to the GP pharmacist to overcome these challenges and hurdles? Was there any specific training available at this time?
00:07:05	S2	So, no, this is alone on the job type of things. So, I don't think that anything that small…probably most organisations do really badly. So, we've got all these different skill mixes. And actually, I'm from a specific skill mix. So hopefully I'll have a preconceived idea of what other people do. And so, think as we've used them that's where I…our training has become more appropriate. Yeah.
00:07:31	S1	That's fine. Okay. I think you have gone to the next answer, that…or did you become a scope of practice? And…but…but just stretching the medical legal issues, did you remember any…any medical legal issue raised by any GP or nurse or anyone, where a GP pharmacist has crossed the boundary where you feel from clinical perspectives?
00:07:54	S2	So, I suppose it's the prescribing. Plus, we've discussed sometimes as a…a difficulty in understanding the scope of practice of a pharmacist compared to a…a…'cause we're all customers not medical prescribers. So, I suppose it's just…yeah, maybe just that. Yeah. And then I suppose when they're moving into clinical skills, have they got the relevant qualifications to back up that…you know, actually doing the clinical skills.

00:08:23	S1	Yeah, yeah, that's fine. Okay. And on an organisational level as a lead, when you are including or when you're making the multi-disciplinary team, what should be the key performance indicator you believed in a GP pharmacist's role? So, any specific pharmacist indicators? Do you think so?
00:08:42	S2	Don't know. So, I suppose the indicators are a bit difficult to measure one…because a lot of it is about patient satisfaction, about whether the…the right skill mix has been used for the right consultation.
00:08:55	S1	Like reviewing something like how much time is being spent for the GP's or something like…
00:09:02	S2	Yeah. Medicine management. Yeah, we could do that. Or, you know, cost-effective nurse of…of drug regimes, that sort of thing, could be measured.
00:09:09	S1	Yeah, yeah, that's fine. All right. Naomi, that was…thank you. We are moving to the next section. Just looking at collaboration. Yeah, it's a bit…because it has been a game…I'm seeing, based on the experience of past three-four years, the policy team has been running as well. So how your present working relationship with GP pharmacist, whether they're members of your organisation, and has it changed since beginning?
00:09:35	S2	So, yes. So, my experience is that GP's welcome pharmacists because the medicines management asset of being a GP is the bit that GP's don't want to do.
00:09:49	S1	All right.
00:09:49	S2	Or that's the bit that they feel less confident to do. So, I think that it was probably was welcomed. Now, I think it's changed because pharmacists are taking on other roles other than pharmacy roles. So, yeah, much broader range of…of skills that they've got.
00:10:07	S1	And did you feel that that working collaboration, working relationship, especially with the GP's…and you said, it has improved since the beginning. [Inaudible 00:10:15] coming in.
00:10:16	S2	Yeah, 'cause I think that…it's probably changed because they're more employed within the practice as opposed to somebody coming in from the CCG. It's just a…a person that comes in. They're…they're part of the team now.

00:10:28	S1	Part of the team. Yeah, yeah. That makes a big difference definitely. Yeah, yeah. All right. Just the next **question** relates to your profession of it as well. So how your different shape practice pharmacist role be the practice nurse it is confused to be overlapping with each other?
00:10:44	S2	Yeah. So, I think we're still working on that. Yeah. So…so there is an overlap.
00:10:50	S1	Yeah, yeah.
00:10:50	S2	And I think that the roles of nurses are also changing and the roles of pharmacists are changing. And I think eventually they probably all going to be very similar.
00:11:01	S1	Yeah, all right.
00:11:01	S2	Yeah.
00:11:02	S1	Yeah, yeah, yeah. But at the moment, there is a different feeling. A feeling with the…
00:11:09	S2	Yeah. There probably is a little bit. I don't know whether that's because people protective as opposed trying to see that, actually, some people are better at doing one thing than another. 'Cause we've all got different skills and preferences.
00:11:25	S1	Yeah. It's more like the person on the other end, how they are taking this slowly, especially the feedback from patients or other stuff. Yeah, yeah. That's fine. And how is it you find GP pharmacists to approach and communicate?
00:11:40	S2	Yeah. Well, I always find them…really, it's yeah.
00:11:42	S1	Yeah, yeah, yeah. That's good.
00:11:44	S2	Yeah.
00:01:45	S1	Okay. Any specific factors that come in? You mind that they can infuse their working collaboration?
00:11:51	S2	So, yeah, definitely being part of the practice team. It's probably really, really important that we do some training that involves some mentorship with the actual GP's nurses that they're working with helps. So rather than just introducing a member, like a pharmacist, into a team as a pharmacist, I think it needs to be a proper induction so that they work with all the different members of the team. And then actually everybody understands what that really is.

00:12:23	S1	I think you help them with the…the next steps as well, so, yeah, we'll skip this question. All right, let's move to pharmacist skill set now. Okay. How do you evaluate competency of pharmacists in patient-facing role? Like running cleanings, medication reviews, or home visits?
00:12:40	S2	So, I suppose we evaluate competency by their qualifications. So, mentorship. Maybe some shadowing.
00:12:49	S1	Okay.
00:12:50	S2	And then obviously by consultation audit.
00:12:53	S1	Okay, okay. And you feel they…the present role or what they are coming after three-four years with the training availability, showing good competency to do these skills (overlapping conversation)?
00:13:02	S2	Yeah.
00:13:03	S1	Yeah, yeah. That was brilliant. And what are your thoughts prescribing role of pharmacists? Any reservation you have about working with any of these?
00:13:12	S2	No. They do much better than us. It's…
00:13:15	S1	Okay.
00:13:16	S2	'Cause they got no…'cause they got Pharmalogical background. Naturally, they…the actual…the prescribing, the medication. They understand the medication better. Whereas nurses work off protocols more with prescribing. They're…they're not prescribing 'cause they that medication will work better. They're prescribing because the guideline tells them to prescribe it. So definitely prescribing sits well with a pharmacist.
00:13:45	S1	That's fine. Any specific protocol used? Things should be set up for the prescribing roll at the organisation level? Any specific protocols? Anything? Check and balance type of things?
00:13:55	S2	Lots about that. No, I don't know that. Can't answer that one, sorry.
00:14:01	S1	All right, that's fine. And what about the medicine? I think you have given the answer to that now. They had medicine management?
00:14:09	S2	Yeah, yeah, medicine…it's that, yeah. That's some really good rule for pharmacists.

00:14:15	S1	Again, how your [inaudible 00:14:19] perferoms is what links it to the pharmacy, hospital, or any other health organisation, like CCG?
00:14:22	S2	Yeah. So…so they can obviously help with minor illnesses, being able to direct patients to the pharmacy. 'Cause obviously, we can…they can see it…pharmacists can see it from the other side as well. Sort of costs for CCG's and knowing what alternatives there are. But, yeah, definitely the role of encouraging patients to use pharmacists more is easier when you understand…when you've worked with a pharmacist.
00:14:50	S1	That's fine. All right. That's fine. All right. I think you have answered this one, but just to remember. What are your thoughts on comparing the in-house practice pharmacy directly like **ECG** with one employed directly like health organisation like CCG?
00:15:05	S2	Okay. So, at…yeah, completely different.
00:15:07	S1	They're really different. Yeah, yeah, yeah. It's much better to have the emails.
00:15:10	S2	Yeah.
00:15:11	S1	That's fine. Brilliant. All right, future GP pharmacists. This is the last section, so…yeah. And so what future do you see for GP pharmacists' role in the future general practice framework? Any specific activities they should be more at patient level?
00:15:24	S2	Yes. So, I see the role of a GP pharmacist to at the same, similar level as a [inaudible 00:15:31] practitioner. So that they're doing patient-facing roles as well as medicine management roles.
00:15:38	S1	Hm-hm, that's fine. Okay. How are your [inaudible 00:15:45] GP pharmacist role? Do you think a woman will contribute in this role? Have you seen 5-10 years?
00:15:50	S2	So recently there's been a good response, hasn't there, from the NHS. That they provided…I don't know what they call them, where the pharmacists come out at pre-reg level and work within the GP practices and the pharmacists.
00:16:04	S1	Okay.
00:16:05	S2	So that's been a new move. I don't know if that…I think that's been a new move. So, I think that…moving forward I think the NHS is probably realising the potential.

00:16:15	S1	Potential. The NHS is in the plans for the next…
00:16:17	S2	Yeah.
00:16:18	S1	Yeah, that's fine. And how do you think about the patient peak and perceptions? Have you ever come across any…any patient…
00:16:27	S2	Yeah, so I don't think patients really care who they see. I think that they just care that they…that they feel like they've got their expectations met. So, I don't know that describing somebody in one role and then another role really matters to the patients.
00:16:46	S1	As long as they are getting the…
00:16:47	S2	Yeah.
00:16:48	S1	…care. Yeah, yeah, yeah, all right. That's fine. How will you comment on success and failure of the rule by letting impossible barriers and facilitators and the success of the GP ballot scheme…
00:17:03	S2	Yeah. So, I think that the barriers are cost 'cause of training. So, if there was some scheme where actually employers could get free access to training and some back film to provide that, then that would help. Obviously, a success. Failure, I suppose, is time. So obviously the GP's, I think they want pharmacists within their practices. But actually, having the time to mentor and shadow them and provide them with the training is the most difficult bit.
00:17:35	S1	Yeah, yeah, yeah. That's fine. We're going to go over the next question. We're gonna skip that one, yeah? So, will you recommend the GP pharmacists when the GP pharmacists scheme funding is finished?
00:17:45	S2	Yeah, right. I'm sold. I'm a GP pharmacist.
00:17:49	S1	That's fine.
00:17:50	S2	Yeah.
00:17:50	S1	Okay. How do you feel GP pharmacists has evolved impacting on overall healthcare provisions? You see that they have [inaudible 00:18:00] much better since the beginning?
00:18:03	S2	Yeah. So, I think maybe in the two or three years there's definitely been a change in how they avenue pap. But that's mainly because they've stopped coming out of that CCG role or coming out of pharmacists and into GP practices.

00:18:18	S1	Very clear. Yeah, yeah, that's fine. All right. And what about departing a full-time role. How see it about the surgeries.
00:18:28	S2	So that will depend on the size of the practices, I suppose, yeah.
00:18:33	S1	That's fine. Okay. Based on your whole…whole experience, what training would you like to see for the pharmaceutical competency as GP for any specific expectative training you do?
00:18:44	S2	Yeah. It's more the face-to-face training. So, it's some communication consultation skills, clinical skills. Yeah, it's mainly I think that…and actually advanced practice where they become more…do some leadership management. You know, change…some change based on, you know, maybe some protocols and all sorts of things. Yeah.
00:19:12	S1	All right. Has GP pharmacist role changed your overall perception about pharmacists?
00:19:16	S2	Yes.
00:19:17	S1	Yeah, yeah, yeah. That's good. All right. Any further research you want to be done on this…on this area for the GP pharmacists?
00:19:27	S2	I don't know. Can say…
00:19:32	S1	No, that's fine. Any other comments you want to add?
00:19:36	S2	No. Just that.
00:19:37	S1	Just that?
00:19:37	S2	Yeah. All my experience has been positive with the pharmacists.
00:19:43	S1	All right, thanks Naomi. It was really nice speaking to you and hopefully it will be really…a regular addition to the…to my study.
00:19:50	S2	Thank you.

(00.19.52)

(End of Audio)

Duration 20 minutes

Appendix 12
Interview with Academia/England

Speaker key

S1 Speaker One

S2 Speaker Two

Timecode	Speaker	Transcript
00:00:02	S1	Hi, my name is Noshad Akhtar. I am a GP pharmacist and at the moment, I am working on a research project. The topic of the study is about the evaluation of expectation and perceptions about GP pharmacist role in England and Australia by key stakeholders. Today, I am doing a qualitative interview with Dr Abdul Hadi. Dr Abdul Hadi is a senior lecturer in pharmacy practise and policy in University of Birmingham, and he will share his views about the topic in a qualitative interview. Hi, Dr Hadi.
00:00:47	S2	Hi.
00:00:49	S1	Hi. Doctor, can you just briefly introduce yourself please?
00:00:54	S2	Thank you very much, Noshad, for inviting me to your research study. I'm Muhammad Abdul Hadi. I'm a senior lecturer, currently working as senior lecturer in pharmacy practise and policy at University of Birmingham. Previously, I've held academic positions in previous universities including an Australian university and Saudi university and a couple of other UK universities before joining University of Birmingham.
00:01:28	S1	Thanks, Dr Hadi, for giving your time and definitely your views will be really valuable for my study. So now, Dr Hadi, you have got—I have sent you an email with the semi-structure interview guide about the study and you have received it, yeah?

00:01:48	S2	Yes, I've received the participant information and the like.
00:01:52	S1	And you're giving me the consent to do this interview?
00:01:57	S2	Yes. Yeah, I'm happy for you to do this interview and I'm happy for you to record this interview as well.
00:02:03	S1	Thanks, Dr Hadi. So basically, according to the semi-structure interview guide, it has been divided in two sections. The first section is perception and challenges about this role and the second will be about the future of the GP pharmacists. So I'm going to start with the first section and you can share your views based on whichever questions are there and whichever views you want to share based on your experience, and we'll just add them as a part of my study. So starting with the first question, Dr Hadi, what are your views about general practise framework and do you believe there are any gaps present in it?
00:02:49	S2	Yes, I think it is some sort of a universal truth that GP workforce is under a lot of pressure and there is significant gaps in terms of human workforce not only for your GPs but nurses, physiotherapists and pharmacists working within GP practises. With Brexit coming as well, I think this is going to seriously affect the number of nurses working within the NHS which will indirectly is going to affect the number of nurses available to work within GP practises which will additionally put burden on workload of GPs. And we know from research that the more work pressure GPs will have, the quality of care will reduce and this may significantly impact the patient outcomes evident in primary care.
00:03:56	S1	Right, yeah. Definitely, yes, I mean there has been a pressure on the GPs from the workload and with the Brexit coming up, it can have also an additional impact on the general practise framework. So just looking at the present scenario, where do you see the GP pharmacist or the pharmacist working as a general practise pharmacist in this scenario, and what are your perceptions about GP pharmacist role?
00:04:34	S2	Being an academic, I think there is a strong potential that pharmacists can take up a lot of work that GPs do and potentially reduce GP workload. For example, simple disease. For example, with like gout, which only needs medicines optimisation and the patient outcome improve dramatically by simply titrating the dose of the medicines so with pharmacist being drugs experts, they should be able to do it easily. And it is just one of many example, other examples can be minor ailments. In North America, the research had

		shown that pharmacist in like heart failure clinics, anticoagulation clinics, diabetic clinics, have had a positive impact on patient outcomes. And if they did like hypertension, diabetes and all the similar long-term conditions, that if pharmacists are able to support GPs in those condition ns it will dramatically reduce workload on GPs and they will be able to focus on more complex cases which require a specialists opinion. So this is how this can happen and I can potentially see that pharmacist can play a very important role in not only reducing the GP workload but also improving patient outcomes.
00:06:18	S1	Patient outcomes, yeah. Yeah definitely, that's basically the theme coming up that GP pharmacist has major role in the future and shape your views as well. So just getting on, based on the same perceptions coming up, what barriers of the facilitators and opportunities do you see in the pharmacists adopting this role? From the pharmacist perspective, I mean, what can be the barriers of facilitators present in the general practise?
00:06:51	S2	Again, being an academic, a lot of pharmacists who are working—and I am the programme director for independent prescribing as well and I see where the pharmacist will come—20 pharmacist who want to do independent prescribing programme because they want to take up potential roles within the GP practises thinking that there is more—the roles are more clinical, the roles are highly paid, but they are reluctant as well on the same side as well to take up such positions, because they don't feel comfortable and especially with diagnosis of patients, so I think this is the most significant barrier is about their confidence and appropriately treat/diagnosing the patient and subsequently recommending appropriate medicines for a particular diagnosis.
00:07:48	S1	Yeah, yeah. So basically, you think that it's the clinical knowledge, it's the expertise in the clinical knowledge that sets (overlapping conversation)?
00:07:57	S2	Yes. I think that they will need some up-skilling there as well. I think six months independent prescribing programme is not sufficient to prepare them to take up some role. But I think what happens is, I think there should be an expectation management as well that pharmacists need to be aware that no one year or six months programme will prepare them for taking up on such a big position within the GP practises. They have to adapt throughout their career and learn by their experience. I think which pharmacists often find very difficult because from these patients put so much hope with the

		GP that they would expect the same quality of confidence and care from pharmacists as well, and then there's this lack of confidence which is again due to perhaps I attribute it to lack of clinical knowledge, their diagnosing skill is potentially impacting their confidence, which will ultimately affect the quality of care that they provide with the patients.
00:09:15	S1	All right, yeah. And what do you think about facilitators? These are more like a barrier signs, so what do you think about the facilitators about this role?
00:09:25	S2	I think because there's a lot of funding available from the NHS which is encouraging pharmacists, plus there is a significantly growing amount of research being done looking at the roles of pharmacists within the GP practises, I think that there are some positive news coming from there which is encouraging pharmacist to take up some role in GP practises. And especially, there's the financial aspect to it as well. Pharmacist think GP practises will pay—working in GP practise will be more rewarding but (overlapping background noise) they found it's not. Yeah, so I think that is one of the (overlapping conversation), yeah.
00:10:09	S1	Yeah, that's fine. That's fine. That's good. And, you know, this role has been—or this study has been done—or different designs have been implemented in different countries, UK has got might be the one of the biggest funding about the GP pharmacist role in NHS but in other countries, there are some other ways of implementing or integrating the pharmacist in there. And based on your own research or experience, I mean, do you find or do you have any idea or knowledge about the GP pharmacist role in other countries? And, I mean, based on that knowledge or your research or your experience, do you find any difference on how the role has been implemented in England and with the other countries like Australia or New Zealand or Canada or States?
00:11:09	S2	I've not personally done any research… (audio drops)
00:11:25	S1	Hello?
00:11:27	S2	…because it's partly it can be (audio breaks).
00:11:32	S1	Sorry, Dr Hadi, I think the line did break through so if you can just start the answer for this question again?
00:11:42	S2	Yes, okay. I'll start again, okay. I've not personally done any research looking into role of GP pharmacists in other countries, but

		I've read around the topic so I can share my views based on my reading.
00:11:57	S1	Yeah, yeah, yeah.
00:11:59	S2	Okay. I think you are right, the amount of funding that's available right now for GP pharmacists is a lot. No other country has invested so much in GP pharmacists. There are good things and there are bad things associated with it. I think having a pilot programme then doing evaluation of the pilot programme and then running it nationally would have made more sense, but because of the workforce pressure is so much on the NHS that they did a very small pilot there, I think they did some small evaluation in the UK as well which showed some positives. There was some positive things that's already been done I think. Then there were some new medicine service. So there've been some services that have been evaluated which were run by the pharmacist which gave some positive outcome, which encouraged the NHS to involve them more within the primary care. There have been other instances as well with this where pharmacists have shown to improve patient outcomes. And that is another factor, I think, which encourage the NHS to give pharmacist some additional role within the primary. But we don't know yet because the pilot that they've done in England was very small and, again, depends on how well do you up-skill them and how confident the pharmacists are in taking up those roles and how well they're remunerated against those services that they provide within the primary care. I think theses all factors are key and will play important role in future in ensuring that the patient get the best care, the best possible care.
00:14:10	S1	Yeah. So yeah, as you say, it might be not the early days but still in the evaluation stage and with the time, yeah, it will get a bit more clear idea how the things are working, so. And when they will be at the stage where we can compare it with other countries, but yeah it might be something for the future where it can set an example for the other countries as well. That's what I have got a bit of impression coming up. So, that's fine. Do you want to add anything to it or should I move to the next question?
00:14:45	S2	Yes, please. Move on, please.
00:14:47	S1	All right. Yeah, so just getting on from the same thread, why you believe research in this area is important? I think it might be linking in with what your experience or… I mean as a programme

		modulator, why you think we need to do more research and what aspects of more research should be done in this role?
00:15:14	S2	I think there's no major evaluation that's been done yet on looking at the roles of pharmacists within the GP practises. I think what they can do is to develop subset of services and evaluate those subset of services using both qualitative and quantitative matters. I think qualitative research is important, but what's more important is to have a research that shows an impact on patient outcomes. For example, it can be very small research looking at number of GP visits, if there's been a reduction in that, for example, medication adherence, hospital admissions – for elderly it can be risk of falls – reduction in all the pharmacy. So these are small things that can be looked at. But national evaluation is very important and will be very important in the long-term as well. Because without having a national—because, you know, if a pharmacist is very competent, he's devoted, he's dedicated, working very well in one GP practise and you evaluate that only that GP practise, that will never tell you the full picture of pharmacist working in different GP practises. So it can vary; the service, the quality of service, the nature of service may vary depending on the competency and the confidence of the pharmacists. So that is why a careful selection of pharmacists should be made and a comprehensive evaluation should be done before more money is thrown into the service.
00:17:12	S1	I see. Yeah, that's fine. Thank you, Dr Hadi. We've completed the first section. If you just stay online, I will be back in two minutes, just to get another paper and then we will start the next section. Is it okay?
00:17:23	S2	Okay. Yeah, that's fine.
00:17:24	S1	Thanks. Thanks, Doctor. (Pause) All right. Dr Hadi, thank you. Thanks for the wait.
00:19:41	S2	Yeah.
00:19:43	S1	So we will move to the next section then about the future of the GP pharmacist role. And I think most of the views you will already have given in your previous section but it will be just might be a bit more elaboration or explanation from the previous views in the future guidelines. So starting with it, so what future do you see for the GP pharmacist role in general practise framework?
00:20:12	S2	Certainly, there is a future. The grand model of care or the model of practise can be different, it can change. If more roles can be given to

		community pharmacists as well, if they can integrate with the local GP practise and community pharmacist can deliver the same services as well, then the GP practises may not need to hire a lot of pharmacists. So it will vary that how prepared the GP pharmacists are, how well they do in this year, in the next year, what are the results of the comprehensive national evaluation, how much money's been thrown into it, and how GP see pharmacist coming as a partners within the GP practises and how do patients feel about having seen a pharmacist instead of a GP. So there is a potential but the potential will depend on the work of pharmacist themselves. So pharmacists need to do what they're supposed to do in a manner that is appropriate, that is acceptable to both GPs, their bosses, GP partners and for the patients.
00:21:48	S1	Yeah, I understand. That's more like how the pharmacists can present themselves in the future that will make the pathway for them in the future guidelines. Absolutely right, yeah. So how you evaluate NHS response to GP pharmacist role and do you think they will continue this role in next 5, 10 years?
00:22:11	S2	I think given the work pressure on the NHS and within the primary care, with our ageing population and the requirement of our population, there will be investment in one way or the other. If they can't recruit, the NHS has not be able to recruit the number of GPs, the target number of GPs that they wanted to recruit by 2020, so there is the potential that more money will come to GP practises to recruit pharmacists. But again, whether they're able to find the right pharmacists with the right skill set who are able to deliver the patient care and achieve patient outcomes; that may vary. And there is a potential role that the universities should work more together with the NHS to develop appropriate training programmes for pharmacists. So they're up-skilled to a level that they can deliver better patient care, and pharmacists themselves should be prepared to take up those additional roles, develop confidence, build clinical skills not only to diagnose and to treat patient but to handle different complex patients as well and later on during their career working in a GP practise.
00:23:34	S1	Yeah, absolutely fine. So, I mean, mostly you have given the answer, but if I just want to say specifically or something. So with the patients feedback and perceptions about GP pharmacists, I mean from the research you have done or the papers you have read, so how you see the patient's feedback about this role?

00:24:02	S2	That's a very good question. I've not read anything about patients' feedback on GP practises. But understanding what patients wants, what they want is someone who was able to understand their needs and develop a plan that fits their needs, not a genetic programme. I think most of the patients do struggle with that and with GPs only having 10 minutes for consultation time, may not always be able to listen to patient stories and develop a plan with all their needs. I think pharmacist with more consultation time may be able to do that, but again it depends how well is their working relationship with the patients, how confident are they. So I think it goes down to the clinical skill set of pharmacist and their willingness to do well in their jobs is going to determine the patient satisfaction.
00:25:15	S1	Yeah, yeah. It's how they present themselves, how they communicate themselves with the patient and, yeah, it's the approach, how easy they are to get on with the patients. All right. And I mean, again as I said, you might have or you have mentioned this thing before, but if you just want to specify any specific training or any specific aspects of the training you think pharmacists should take on before or during when they have taken this role on?
00:25:51	S2	Again, there can't be a single generic training programme that fits the needs of all pharmacists. Pharmacists will be different. The pharmacists working on community are different to the pharmacists working in hospital pharmacy. Pharmacists having 10 years of experience are different than pharmacists having 2 years of experience. So I don't think there can be a single training programme, but what needs to be done is develop small short courses for pharmacists as a build on their career within the GP practises so that they can depend and do about all those clinical rounds and they can pick and choose the more deals that they want to do. And they should be allowed that flexibility in terms of their training. And again it goes back to the GP practises as well who hire them to allow them a good mentor who can train them through for a year or a year and a half, so that they are not only competent but they're also confident in diagnosing and managing patients.
00:27:05	S1	Yeah, that's fine. Yeah, just summarising this now. So, I mean, do you want to have any comments on success and failure of GP pharmacist role?
00:27:19	S2	I would like it to be successful programmes because I'm a pharmacist myself and I would like pharmacists to be successful in whatever they do. And I think pharmacists, in my experience, they are willing

		to take up these roles and there is a need for them to take up these roles as well. This is an expectation from their profession to not only take up these roles but to deliver these roles to the best of their ability and to up-skill themselves that they're better prepared to deliver better patient care as well.
00:27:58	S1	And if I just—if you want to highlight any specific observations where you feel that, yeah, these are the observations in your mind about this role, any specific one you want to list on?
00:28:11	S2	I think I've already said that a number of times now, it's about their ability to diagnose patients I think, (overlapping conversation). They're not being trained in their undergrad and the only training they receive is during their IB training. But that is not very comprehensive as well because it's only six months training programme. I think really they'll struggle with diagnosis initially but if they have a good mentor, they shadow a GP for six months or three months or they have a better referral system and they see that simple patients first and the complex patients later on in their careers, so I think it's something can be arranged.
00:28:56	S1	Yeah, that's fine. And, I mean, has GP pharmacist roles change your overall perceptions about the pharmacists?
00:29:06	S2	I've never consulted a pharmacist in a GP practise, so I don't feel comfortable making any comment on that.
00:29:20	S1	That's fine, no worries. That's fine. We'll move to the next one. I think you have already mentioned in previous section, but again, just to highlight any specific research you want to be seen to be done on this role? (Pause) Hello? (Pause) Hello? I think there's some problem with the connection because I can't hear Dr Hadi at the moment, so I'm just waiting for him to come back on. (Pause) Hello?
00:33:12	S2	(Audio breaks).
00:33:46	S1	Hello?
00:33:52	S2	Hello?
00:33:54	S1	Hello?
00:33:56	S2	(Speaks in Foreign Language).
00:34:03	S1	All right. That's fine. No worries, Dr Hadi. I think we're just left with two questions, so. Yeah we're still… I mean we're recording, so if I

		just ask last two questions and then we can just sum it up. Is it okay? (Pause) Hello?
00:34:27	S2	Yes. Hello?
00:34:29	S1	Hiya. Can you hear me, Dr Hadi?
00:34:34	S2	Hello?
00:34:35	S1	Hi. Can you hear me, Dr Hadi?
00:34:39	S2	Oh yes, I can hear you. I can hear you.
00:34:41	S1	Yeah, I think you had a call in between so that's why I think it was…
00:34:44	S2	Yes, yeah, yeah, yeah.
00:34:47	S1	That's fine. We're still carrying on with the same call, yeah? And I think we are just left with a couple of questions, so are you okay to carry on now?
00:34:54	S2	Yes, I am.
00:34:56	S1	Yeah? So I think where we left was about your—you were mentioning the research that you think should be done about the GP pharmacist role. So yeah, if you just want to complete your views, then we'll be able to sum it up.
00:35:15	S2	Okay. As I mentioned earlier, in terms of research, national evaluation is very important. I think the outcome or the results of the national evaluation will determine the future of GP pharmacists. If the evaluation is positive… Because there's clearly a need. There is a need. The government has—they has not been able to recruit the GPs, what they should have done, there is an acute shortage of GPs and with growing population, there is a tremendous demands of primary health services. So there is a need. Whether pharmacists can fulfil the need or not, that's the question that needs to be answered. And that's why I believe that the national evaluation will be critical, will be very, very, very critical in determining the future of GP pharmacist workforce.
00:36:13	S1	Right, that's fine. Brilliant. I think that we have covered all the section, but just I mean if you—do you want to add any other comments to this interview or any other aspects you want to mention if I have missed anything or any additional views, anything you want to add up?
00:36:29	S2	No, thank you. I think I've spoken quite a lot. (Chuckles)

00:36:31	S1	Right, right. Yeah, yeah. That's fine. Dr Hadi, your views really have been helpful. So thanks, Dr Hadi, for sharing your views and giving me your time. Hopefully, we'll… I mean, this interview will be transcribed and so hopefully, we'll share the results with you. And if ever you want to add any comments, yeah, just feel free to…
00:37:00	S2	Okay.
00:37:01	S1	Yeah? Thanks, Dr Hadi.
00:37:02	S2	Thank you very much and best of luck with your study. Thank you.
00:37:05	S1	Thank you, Dr Hadi.
00:37:06	S2	Thank you. Cheers.
00:37:07	S1	Bye.
00:37:07	S2	Bye.

[00.37.11]

[End of Audio]

Duration 37 minutes and 11 seconds

Appendix 13
Interview with Nurse1/England

S1 Interviewer - Noshad Akhtar

S2 Respondent - Mary Mosteen

Timecode	Speaker	Transcript
00:00:00	S1	Hi. My name is Noshad Akhtar and I'm the clinical pharmacist working in [inaudible 00:00:05] in Manchester. I am doing the interview with Ms. Mary Mosteen, a practitioner in one of the practices in Manchester. So this is a part of my study which is about the evaluation of expectations and perception of key stakeholders of OTP pharmacist role. Welcome, Mary. And Mary you know about the bit of introduction about the study?
00:00:37	S2	Yes, yes.
00:00:39	S1	You've given me the consent to do this interview.
00:00:40	S2	Yes.
00:00:42	S1	Thanks, Mary. So let's start then. Basically the interview is guided is divided in four sections. So, we will start with the first section that's called perception and challenges. So Mary, just…I mean based on your experience in general practice working, what are your thoughts about the general practice framework at the moment and do you believe there is a [inaudible 00:01:07] in the present framework with reference of the workforce working for the general practice?
00:01:16	S2	Yes. There's clearly gaps because there's not enough…there's not enough departments for patients' needs. The need always outweigh…the demand outweighs what could be given with regards to patients wanting to see generally doctors, and obviously that's being diversified now with recent kind of assistant advancements in practitioner and obviously paramedics are now starting to be involved in general practice also which is helping with particularly with the visits of acute patients. And we've got like a cell pharmacist, we've also got a trust pharmacist. So, we got two different pharmacists doing different roles within the practice. So yes, there's

		definitely gaps but how that's gonna be filled I don't know about. If I knew that, I'd be quite rich.
00:02:13	S1	You have mentioned the right gaps. Where do you feel the GP pharmacist can fill any part of this gap do you feel they can play any role to fill this gap?
00:02:23	S2	Yes, often patients will come in for medication review and I think probably the best person, the best place is gonna be the pharmacist because they're always there. Obviously pharmacists also…I know within pharmacists can see people for minor illnesses. That can be a role that can be brought into practice or, you know, sort of, if we've got a pharmacist who could do that, and then was a chronic disease monitoring I'm sure from a point of view of a lot of that is down to the medication and optimising it and whereas the local guidelines might want to change things and everything, I'm sure, again the pharmacist is gonna run with the people best place to look at that. And if they're within the practice, patients that are quite anxious when you change the medication and things you got that continuity, sort of, advising and support them through it.
00:03:14	S1	Like a follow-up.
00:03:15	S2	Yeah, yeah.
00:03:19	S1	So you have been working in a few years now with the practice firm. When it came into the start, when did you know that there's a pharmacist coming into the practice, were there any specific expectations you had for that role when he started? Anything in your mind?
00:03:44	S2	I think…I think as always the more people you've got with all the different expertise, your expectation is there's somebody else to go to with certain queries. There's another person with a lot more knowledge on a particular subject so that's always gonna be a benefit. But to be honest, I wasn't sure that the role was gonna be…I think it was more of an evolving role at the time. So I don't think anybody really knew what the role was gonna be. So I don't think I had particular expectations but just the fact that it was because it was good in a different discipline.
00:04:17	S1	Was there any mismatch with what you expected and what you saw in the initial stages?
00:04:23	S2	I don't think so 'cause I've said my expectations weren't very specific.

00:04:29	S1	Any initial resolutions you had from the role?
00:04:32	S2	No, not at all. I always think the more people you've got with difference of experience, the better.
00:04:41	S1	And any occupational challenges you face while working with the pharmacy in the initial stages? Like any communication barrier or any type of hurdle or anything which you face in the initial phases?
00:05:01	S2	Not now, I mean no, because we've got the systems on the computer to send messages or just face-to-face discussion, yeah.
00:05:11	S1	That's fine. And what do you think in your own idea, what should be the key performance indicators for the events to check how the performance is working in your own. Because I think for the nurses, are there any specific key performance indicators to check on how they're performing?
00:05:32	S2	I suppose with the annual appraisals, we'd look at that. We'd look at, for example, this May taking, there's an audit done to make sure that we've not got the…we're not getting inadequate resources, et cetera and there's also different training that we need to undertake to ensure we're maintaining our skills. So I think that's where the keys. So from the pharmacists, so I think probably from a practice point of view, it would be medication reviews up to date, are medications, sort of, the prescriptions and everything, are they up to date? As in patients that have not had things for quite some time, is it being updated on the system and are patients…patients that come in discharged from hospitals or letters from hospitals, is that medication being prescribed properly and appropriately I guess.
00:06:28	S1	Yes. There's some key performance indicators. That's fine. So we are covered with the first section, yeah. All right, the next section an important one. The pharmacist, nurse working collaboration because in the initial phases, what I have seen when I have done the other interviews, I've been talking with my other colleagues, the initial factor was that it might be the overlap or it might be the duplication of the role, what nurses are really doing. So just keeping that in mind, there are some questions we will discuss these ones. So how do you feel your present working relationship with the practice pharmacist?
00:07:03	S2	Absolutely fine. There's no issues. No issues at all.
00:07:07	S1	And do you believe it has changed since the beginning?

00:07:13	S2	I'm not sure. I don't think I can answer that properly or accurately because I was off for quite some time. Once the pharmacist started and then I was off unwell for a number of months and then I've come back. So change, I'm not sure. I think at first, high potential reviews was simple impression reviews and things, that's not happening now. I don't think…but I think that that's being undertaken anyway and probably the pharmacist's other skills are better used. So I don't think, no.
00:07:44	S1	But you think that working relationship has improved.
00:07:47	S2	Yes, absolutely as it does with any…once you get to know people and their roles better, yeah.
00:07:53	S1	That's fine, that's fine. This is a general question, yeah. So how do you differentiate practice pharmacist's role with your role as a nurse practitioner and does it make you confused or do you get an impression from any other staff members? Will they have to direct the work whether it is with the nurse or the pharmacist? Any feedback from the practice staff?
00:08:20	S2	From my own perspective, I don't think that's an issue because I think the roles are quite different. I think at first, some of the admin staff were confused as to where to send the letters, some letters when they came in from the hospital as to whether we should go because it was obviously traditionally the doctor and a lot of them now can go through the pharmacist. And I think maybe that was just an initial worry as well with the doctor that sees everything. But I think that's been…it's not something that I'm directly involved in but certainly at practice meetings it's not coming up as an issue. So, no I don't…
00:08:57	S1	So you feel there is clear instructions. In your own perspective you find a clear distinction what the pharmacist is doing and what your role as a nurse practitioner.
00:09:07	S2	Yeah.
00:09:08	S1	That's fine. Brilliant. Any concerns about the medical legal implications of the practice pharmacist with the feel that the pharmacist might have one or might go beyond the legal expertise.
00:09:26	S2	I think probably down to each individual practitioner really, isn't it, and I think cert…
00:09:30	S1	In your own experience.

00:09:31	S2	In my experience, I've never noticed that. I've never…there have never been any issues raised or there's never been any, even suggestion that that's been the case so no, I don't think so at all.
00:09:44	S1	And you find pharmacists do approach and communicate easily?
00:09:47	S2	Yeah, very approachable, yeah.
00:09:49	S1	That's fine. Brilliant. Any factors do you believe that be implemented to improve the growth and relationship?
00:09:58	S2	Honestly, no. I don't think there is because there's two-way communication, there is no barriers to that and the pharmacist is approachable. There's messaging systems within…with our practice systems. I don't…to be honest, no, I don't think so.
00:10:15	S1	Any factors in your own mind that can use this working relationship?
00:10:21	S2	I think it's okay. So, I don't think…I think, you know, if I need advice or information, it's great to have the pharmacist there available to be able to ask face to face and talk through different things so yeah.
00:10:34	S1	I think you have mentioned you got this conversation but just if you want to add something briefly explaining what impact the GP pharmacist has made on your scope of practice.
00:10:46	S2	I say it's just having that extra diversity within the practice team. I think somebody to be able to ask straight away about maybe queries on medication and just patients I think get better reviewed from a medication point of view.
00:11:02	S1	To summarise, I mean you can say no to it as well, do you think GP pharmacist has made a positive impact on this scope of practice?
00:11:11	S2	Yes, I would say so. Definitely yeah.
00:11:11	S1	All right. That's all for the second section. Now moving to the technical pharmacists. Do you know the pharmacist is working as a prescriber as well as a patient-facing role and in a patient-facing role have some presentation so just facing that with those respectively? So how do you hear from them and how it can be from you leaks not within the same game as your other places or who is working at the moment as in other surgeries based on the people as well as if you were rating them. How do you value potential performances in patience-facing roles like learning, cleanings and telephone consultations and so forth.

00:11:48	S2	How do I…
00:11:47	S1	How do you value the competency of pharmacists in patients…
00:11:51	S2	Competency. Well, what I see, the patients' feedback or the consultations and I just…it's just another face to make sure patients are having the right medication, another way for patients to understand and therefore increase…improve compliance and the consultations are always really quite comprehensive and the patients' feedback has been good as well, so yeah.
00:12:32	S1	What about the prescribing or how would you be prescribing in general or how do you think the prescribing role of the pharmacist….
00:12:32	S2	The pharmacist.
00:12:34	S1	Just generally.
00:12:36	S2	I have not really had any experience with that, I'll be honest with you, so I don't know. I mean, I would guess that if the patient…if there's letters are coming in with a descriptions, and then the pharmacists is the prescriber then that can improve efficiency. But directly, I couldn't comment, really.
00:12:54	S1	But do you feel if the pharmacist is playing this role, do you feel that it's a positive for the general in the practice?
00:13:02	S2	Well, definitely, yeah. If I could guess.
00:13:05	S1	Any specific protocols you feel that should be set up at the organisational level for the prescribing role of the pharmacist, like any step wise letter and any protocols?
00:13:23	S2	Well probably, if it's a non-medical prescribing role, isn't it. So they just follow the guidelines the local guidelines that are set out for that. And obviously, we've got the greater Manchester Medical Medicines Management which I think we all follow that that. So I would say that those are the guidelines.
00:13:41	S1	And what about the other side, like non-patient facing roles like medicine management, how do you feel that how competent the pharmacists can be or is it about the medicine management part of it.
00:13:53	S2	Well, I think that's probably one of the biggest advantages of the role which is this faster medications and that's the area of the pharmacist. So certainly I've noticed in somebody who practices pharmacist medication screens are always more up-to-date so if

		medications haven't been used for a while are no longer dispersed it will be just requested and things so I think it's far safer. More I think patients' medication is monitored more closely and when patients need new medications, if there is unusual, I think that this is far better with someone that really knows what he is talking about.
00:14:32	S1	And you did mention that there are two different sets of pharmacists. One is the in-practice and one is coming from the CCT level?
00:14:39	S2	Yes.
00:14:41	S1	How do you feel? You have worked with both you have seen the notes there might be different treatment. So how do you believe the difference between the two? Is it better to have the…not full time, but might be someone who is working within the practice or someone coming out from the CCT like do you have a specific agenda?
00:14:59	S2	I think it's always going to be better that you've got in-house for continuity for both staff and the patient. But I do think as well that the pharmacist in the CCT when they do do it, it's effective. But I think if you ask a pharmacist that did both face-to-face medication reviews and was the practice pharmacist, I think you're going to work better overall. Because it will be better for all, yeah.
00:15:28	S1	And do you feel in how you see a pharmacist as a link between the practice, community pharmacy and a hospital or different organisation? Do you feel that it can be the means central with a link for the different patient release or within three or four different organisations?
00:15:46	S2	Definitely because obviously you've got sometimes issues about certain medications being available or not. There's hospital only prescriptions that can get complicated is off for licenses and there's so many different uses. I think having a pharmacist within the practice where you can go to and discuss that is really superior.
00:16:06	S1	We covered the third section and law section and just a few small questions here. It's about the future of keeping pharmacists over the line here. What would the future do you see for the GP pharmacist in the future general practice being? Basically summarizing the duties they should be more of the patient level, commission level or practice level in what next five-ten years. How do you feel that they should be the GP pharmacist role?

00:16:35	S2	I think probably like most roles in a general practices, it's an evolving role and everybody is taking on different roles so I think with a pharmacist it would be good to see a lot more face-to-face work particularly with minor illness like what they would do in the actual pharmacy. So that could be a role that maybe could be evolved whether it be maybe a bit of a walk-in scenario or not. But obviously with improved capacity for patients to be seen by a clinician that can diagnose and prescribe. I think that they continue with the monitoring of medication and I think it's part of the pharmacy that has been an issue for years and years so I mean somebody that is specifically look at that is an obvious one, going to save an VNHS money, which is always a good thing but also maintain the patient safety and compliance hopefully as well.
00:17:27	S2	That sounds good. Have you did you…you haven't mention about the…we talked about the patient feedback so just generally summarize these things how you would view the patient feedback have you seen any or come across any patient feedback about the GP pharmacist role in the surgery?
00:17:47	S2	Yes, patients who are filled what pharmacy from or if I spoke to the pharmacist, and quite often it will be getting more questions off patients are the results of that which is always going to be a good thing if they're questioning what they having and everything. But also I think the patients do feel more aware of what they take and why are they taking it and yes, it's probably been the odd comment of, well I didn't realize that was for that, I'll make sure I take it now, that kind of sort of feeling.
00:18:17	S1	What do you think might be a bit more specific with it yeah what do think about the part time or full time role of the GP more about and we can just get this it's more about the work load of the GP surgeries or let's just get this one out.
00:18:32	S2	Okay.
00:18:35	S1	In the training wise --- how you feel what training should the GP pharmacist have before they come in this role or during this role, while looking at a GP pharmacist?
00:18:45	S2	Well, I think because obviously the required…I suppose pharmacists have been around for…they're everywhere aren't they? But I suppose probably if there's only going to be one pharmacist generally working, so there needs to be you know there needs to have their training consolidated or if they're might…might acquire

		vast knowledge of chronic diseases and just life management. So I think those are possibly the two things that are going to come up most and I think, dependent on the role as it evolves, the training, for example if the pharmacist is going to get involved with immunizations or flu season, then obviously to ensure that they're up to date with immunization and anaphylactic training just like anybody who is giving immunizations. I think it's probably quite bespoke once they get into the practice depending on what the role the pharmacist wants to have and the practice wants to have. Once that's agreed, then looking at the competencies and training that seems to be already had and then looking…making getting the training that's needed.
00:19:47	S1	That's on the more like the medical condition and the long-term medical…
00:19:48	S2	Yeah.
00:19:57	S1	And how well do you believe the more regular pharmacists have evolved as GP pharmacists in affecting the overall healthcare provision. Do you that it has been a positive factor has involved in a positive was since the beginning?
00:20:15	S2	Yeah and I think probably as a running theme for…for us here it's broadens the team, it gives us another dimension so we will…just somebody to ask about medication, because it is such a vast area and it changes you know there's so many changes all the time, so it's absolutely a positive in practice and I think definitely improves the safety of prescribing them and the patient's compliance.
00:20:45	S1	As you said it's basically the same thing coming up, the evolving one. So just summarizing up. Taking into your own practice, or general role, the possible barriers and facilitators with the current GP pharmacist role, any steps you think that should be taken to facilitate this role within your own competency, your own working collaboration or within the general practice, any specific steps you think should be taken?
00:21:14	S2	To improve the pharmacist's role?
00:21:17	S1	Yes, yes.
00:21:18	S2	It's hard to say, really because obviously I'm not directly involved in the employ and everything else and the decisions around what the role should be.

00:21:33	S1	It might be good for you to personalise what elections the how do you improve the working collaboration or what working communication or these things.
00:21:42	S2	Well I'll say I think communication is generally good and I suppose the only thing is partly on the practice meeting maybe the pharmacist attending the practice meetings.
00:21:49	S2	Yes and that's a good kind of thing.
00:21:52	S2	I think as far as a CCT is concerned we have the practice nurse for RNs or something sometimes maybe they would be good places for the pharmacist to turn to sometimes, because a lot of it is about chronic disease management we get a lot of speakers about chronic disease. So the pharmacist, I mean, it's making you aware of and trained to know about it anyway…but updates if the guidelines changes and everything, but also then there'd be that communication there, I suppose, because with different queries. But I think on the whole the communication issue is good and you know so …
00:22:34	S1	That's fine, yeah, I think that's a good point. You sending out the few meetings or the CCT or the CCG role especially when looking prescribing pharmacist. That's a good point, yeah. So just a few questions. Quite a few research has been done. Any specific other areas do you see that more research should be done on this overall GP pharmacist role? Any specific thing you can put like the training or consultation skills or medicine management or any new specified area that you feel more
00:23:09	S2	Sure, I suppose…again it's not something I'm aware of but maybe…I know as a practice nurse coming from working from…I know working in hospital coming into practices is very, very different so I would imagine for a pharmacist coming out of from a hospital environment or a community environment, into a GP practice there's going to be things that are a lot different and it's taken many, many years to like for practice nurses to get the training and everything that's probably appropriate and so there is now different courses that are specific to general practice. So whether for pharmacists there's something like a bit more structured as to when they go work in general practice certain areas to cover and to work on being trained at before the entry into six-twelve months to maintain that but, again, without knowing the pharmacist's role in depth it's a difficult one because I

		don't have an idea of what pharmacists do out in the community and in the hospital and, I as I say now, in a GP practice.
00:24:11	S1	Okay.
00:24:12	S2	But I think in hospital the pharmacist is a big part of the war team and is so there's no reason why the pharmacy shouldn't be part of the team in general practice.
00:24:24	S1	I think it's more of defining the old description because at the moment there is a confusion on how to deal or talk about it varies surgery to surgery, it varies organisation to organisation and so once that's a bit more defined, structure will come into the picture and it will give a bit more clear picture of all the things are we working on then.
00:24:50	S2	But I think that's true in general practice really now if everybody's role in general practice, every practice like you could be the advanced nurse practitioner's their role can vary hugely from practice to practice and it is definitely evolving because so much is going into practice now, that there is just not the capacity to deal with it so everybody that's involved in general practice within their role is evolving hugely.
00:25:17	S1	I think I've come to the end, but any additional comments you want to ask. Anything you want to ask to sum it up.
00:25:26	S2	Well, no not really. I just I think it is a positive thing having a pharmacist within the practice and I do see the role will probably evolve quite a lot over the next few years. And yes, I better shut it.
00:25:41	S1	No you're fine. Thanks Mary.
00:25:43	S2	Okay.
00:25:44	S1	What we will do is we will transcribe it and then I will forward you a copy of it if you just have a look at it and if you want to add anything even in the future or something, just let me know.
00:25:52	S2	Okay. Yes.
00:25:54	S1	…and thanks very much for your time. Thank you.
00:25:56	S2	You're welcome as well, yes.

(00.25.58)

(End of Audio)

Duration 26 minutes

Appendix 14
Interview with Nurse2/England

S1 Interviewer

S2 Respondent

00:00:00	S1	Hi, my name is Nosha Abenda , I'm a research master student at Huddersfield University. And my topic is about the evaluation of…perception and expectation of GP pharmacist role in England and Australia. Today I'm doing the interview with a practice nurse. Her name is Aisha and she's working as a practice nurse at the moment in Moss Side Healthcare Centre. So…and it will be just like…this interview of 20, 25 minutes which will cover the basic questions about the structure interview guide. So I will ask Aisha to introduce herself and then we will carry on with the interview.
00:00:41	S2	HI, my name is Aisha, I'm a practice nurse at Manchester Medical, Moss Side Health Centre.
00:00:48	S1	Aisha, just before starting the interview, thanks for giving your time and this interview is basically to evaluate a GP pharmacists' role. You are giving me the consent to carry on with this interview?
00:01:00	S2	Yes, I do, yeah.
00:01:02	S1	So this interview will be recorded and then transcribed later. This interview is divided in four sections about the perception and challenges, working in collaboration with GP pharmacists, pharmacists' skillset in your experience and the future of GP pharmacists and what do you think of. So starting with the first one, the perception and challenges, based on your own experience in the GP practice or primary care GP practice, do you think there are any gaps present in the general practice framework at the moment?
00:01:39	S2	I think there's always a gap in any healthcare on the street to be honest, but with the clinical pharmacist, I think every GP practice

		needs to have them because they do cover a broad range of topics in the practice itself. And they're more of a support for every clinician. So I work a lot with them because as nurses we don't deal a lot with medication, but as we grow in our career and become prescribers and things, I feel that we need clinical pharmacists more than we even doctors to be honest. And GP practices, they don't have that. I feel they're kind of losing out.
00:02:21	S1	Yeah, yeah, that's fine. So you think there were gaps and that gaps can be covered with GP pharmacist role, yeah. So I mean just carry on with the same thing, what were your initial perception about GP pharmacist role when it started to come and work with him.
00:02:36	S2	I was little bit worried at the beginning because I wasn't sure how they would deal with patient to patient like consultations.
00:02:47	S1	All right.
00:02:47	S2	Especially when the GP said oh, they'll be doing consultations by themselves. I was a little bit apprehensive about that because I thought oh well, I'm not so sure pharmacists are good at that kind of thing, but actually as we got along they ruined that because they worked a lot with me and then I grew more in confidence with medication because I worked closely with them. So now we work as a team and it's really good.
00:03:11	S1	And just carrying with the same thing again, do you believe there was mismatch in any professional expectation you had from GP pharmacist role in the early stages?
00:03:23	S2	Not too much, just a little bit with the patient consolations, but I could always see the positive side of it because there's a lot of gaps with nurses and doctors and a lot of mistakes in prescribing to honest. And when they came they kind of picked up on a lot of that and helped us. I think we're a little bit more confident now in prescribing, but also a lot more cautious in how we prescribe so we're making less mistakes.
00:03:48	S1	Okay.
00:03:49	S2	Whereas before there was small, small mistakes that were done all the time and it helped to get rid of that, but I think also we did very high expectations of them at the beginning and we thought, as soon as they start, this is what they'll do.
00:04:03	S1	Yeah.

00:04:03	S2	But it was a night that they did a lot of stuff that we didn't expect, but they also went as we thought it would be. So we thought, oh, as soon as they start that they were to just get on with it, do this, do that, but obviously coming from community pharmacy it's very different. So now when we have other like pharmacists coming in, we know exactly how to deal with it and it does help a lot.
00:04:26	S1	So there was initial mismatch, but they have improved now.
00:04:30	S2	Yeah.
00:04:30	S1	Yeah, that's fine. Any initial reservations specific one giving the example like clinical knowledge, communication skill, management skill or course factor that [inaudible 00:04:39] discuss within this factors if you remember?
00:04:42	S2	No, I don't think that was ever an issue.
00:04:45	S1	Okay. Okay. How well you believe pharmacists for professional prepared to perform as GP pharmacist when he started?
00:04:53	S2	How do you mean?
00:04:52	S1	Professional prepared like when he came up and joined the team, your initial…the first experience you got that how well…I mean clinical knowledge by his communication, by his…how well he was prepared to take on this role?
00:05:12	S2	Well, when he first started I think they were more apprehensive. So they were dealing with like teaching. So he was more prepared than we thought he would be to be honest.
00:05:25	S1	All right.
00:05:26	S2	But I think it was just appropriate to be honest, everything because he just started and he was like, if you need any help, anything you're unsure of. But it wasn't…there was no gaps that he needed to improve in or anything like that. He just grew in…they all just grew in themselves to be honest.
00:05:48	S1	Okay. What are your personal challenges or hurdles you face by working with a GP pharmacist? Any operational challenges if you remember?
00:05:57	S2	No, actually. I think there was more benefits than any challenges on my part anyway because they helped with a lot of the work I was

		doing. So any challenges I had before they came were helped out by them, so.
00:06:14	S1	But I mean did you feel any organisational like…like availability of the rooms or something like on the organisational level did you feel any…any hurdles while working with them?
00:06:26	S2	Not when they started because we had enough. So a lot of the times before they came, if I went on annual leave, the clinics were all cancelled. When they started, when I went on annual leave, they covered for me. So it was more beneficial than…
00:06:43	S1	That's fine. And I mean in your views what should be the key performance indicators for them to evaluate their impact on the general practice?
00:06:52	S2	I think like everybody else really, professional development, personal development because that's what keeps you going for everything to be honest. Everybody…I don't see them any differently than any other clinical team. So anything that we have to deal with, they do because really we kind of do similar jobs.
00:07:14	S1	Okay.
00:07:14	S2	They're clinicians as we are, they…they're professional as we are. So for me they're not any different to like what a doctor would have to do. They're accountable and responsible for their actions and everything. So I even think there's anything specific just for them because they're pharmacists, they're clinicians, it's the same.
00:07:36	S1	All right. That's fine. I think that's…that was the first section of it, yeah. And now we're gonna move to the second which is…I think most important one from this question that's the pharmacist, nurse working collaboration, all right.
00:07:47	S2	Yeah.
00:07:46	S1	So how do you value your present working collaboration with the pharmacist and has it changed since the beginning?
00:07:56	S2	Yeah, it has changed, but for better really. The work used to be divided nurse and pharmacist before, but now it's just the clinical team. We all do the same work together, so.
00:08:09	S1	Okay. It has improved.
00:08:11	S2	Yeah.

00:08:09	S1	Yeah, yeah. And how do you differentiate practice pharmacists' role with the role as a nurse practitioner? Because [inaudible 00:08:16] might be mostly dis-confuted and overlapping job in the general practice. So how do you differentiate your role from the pharmacists' role?
00:08:26	S2	I think sometimes there are times when my role comes in as nurse more effectively. So when it comes to like certain consultations they do tend to call me in and say, can you come in and explain this to the patient or can you see this patient for that, but then there are other times when I get very confused with medication or I'm unsure what to give to a patient and I'll call one of them say and can I just get your advice. That's when they really…we could see a big difference in them. Otherwise most of the time it's similar. We sit and discuss everything together. We do the work together. If I'm unsure of something…so when we get a task it doesn't get sent to the pharmacist or the nurse, we are one team, it comes to one work box and it all goes to us. So we all deal with it the same way. The only times, you know, the difference is small times when we are little bit unsure. With like children. I deal with children a lot more so I see them more and when they're unsure about immunisations or something they'll ask me. Or if I'm unsure about medication, what's licenced and what's not, I go to them. But that's the only time really. Otherwise…
00:09:35	S1	That's fine, brilliant. So you think they…with the time there is coming a bit more collaborating between your role and the pharmacist role? Yeah, yeah. And it's more coming towards like a clinical thing, yeah.
00:09:44	S2	Yeah
00:09:47	S1	Yeah. So how…have you got any concerns related to medical, legal implications in the scope of pharmacists where you think sometime it might be a pharmacist has gone beyond his expertise?
00:09:58	S2	No, because especially now we have some pharmacists who are doing acute clinics where the good thing is every acute clinic they do, the speak to do a doctor and say, is this what you would recommend? So I think they tend to be more cautious than doctors even. And I guess that's because of the legal implications, they tend to understand where they can't overstep a little bit more than I guess, maybe other clinicians. I think even we tend to take more risks than they do because we think oh, like for nurses the indemnity is mainly with the doctors, but with pharmacists they tend to be a bit

		more cautious because they feel like they're responsible for their own indemnity, so.
00:10:44	S1	That's fine, that's fine. Okay. How do you find pharmacists to approach and communicate?
00:10:48	S2	I think they've improved a lot. Now when I go to a pharmacy I know the difference straight away. I can see clinical pharmacist and a pharmacy that I see over the counter.
00:11:02	S1	Yeah, yeah. So you find it easy to communicate with the pharmacist in general practice now?
00:11:07	S2	Definitely.
00:11:07	S1	That's fine. And what factor you believe influence this working collaboration in the practice?
00:11:15	S2	I think it's because of the increase of…because they deal with a lot more patients so they're confidence has improved a lot more that way. And they tend to know the work effectively actually more than…because in the community they deal with just medication and it's just a quick five minutes one-to-one whereas here they can sometimes be with a patient for like 15 minutes, 20 minutes dealing with everything. And that's improved them in their communication. Even with nurses I think at the beginning it was a little bit different.
00:11:46	S1	Okay. Okay. Any steps you think that can improve this working collaboration between you and the pharmacist?
00:11:54	S2	I think it's a work in progress, but I don't think…but I guess you can say like it's an individual thing as well. So different nurses and different pharmacists, you know. Because I know some nurses who will say, oh no, pharmacists, I couldn't work with them like that, but I guess that's where they're losing out because they're quite an asset to the practice.
00:12:15	S1	All right, yeah. That's fine. Okay. And I mean just…sort of if you want to add something like has…or what impact a GP pharmacist put on…on your scope of practice where I mean, where you were working before and now. Has it changed your scope of practice as well?
00:12:32	S2	Yeah, quite a lot actually. Even with the prescribing when I first started, I was very cautious and didn't want to aggressively treat anybody. But having them there, knowing I can quickly ask them oh, do you think this is the right thing, this patient has something of this

		or thing, knowing that there's staff support, it's easier for me to make those decisions quickly than to say to the patient, actually, let me discuss it with a doctor and I'll call you in a weeks' time. It's a lot easier to just message one of the pharmacists and say, do you think this is the right thing? And they can easily say yes, that's what to give next.
00:13:10	S1	That's fine, brilliant. Talking about the second section, I will just quickly go to the…mostly you have given the answer of some of these questions, but I will repeat the question if you want to add something. Yeah. It's about the pharmacist skillset. So how you are working with the pharmacist and what skills you feel pharmacists has gone. So how you value competency of pharmacy in patient facing roles like running clinics, doing medication reviews and home visits? It's more like a clinical, like patient facing roles, yeah.
00:13:37	S2	The thing is its different though because like they're very good at medication use. With patient consultations they need to do a lot of them to get used to it because I think at uni they don't tend to do a lot of that. Whereas with us, at uni, that's most…90 percent of our teaching, that's how it is. We do face to face. So I think medication reviews and all the other reviews, home visits where it's a few minutes, they're really good at that right at the beginning. But face to face it needed time to build up. So I think what they will benefit from like other pharmacists is maybe to sit in with the nurse a little bit because at the beginning when they started I wasn't here as much and…and then when I came back I saw the difference. So they sat in with me quite a lot and saw how I dealt with the consultations and it really improved how they dealt with their consultations.
00:14:27	S1	Brilliant.
00:14:27	S2	Because they can be a bit apprehensive and it's a bit like no, just…just do what you think is right, you know. And that helped after a while.
00:14:36	S1	Brilliant. Yeah, yeah. That's my own experience as well. Sorry, just getting up here. About the prescribing role, so what are your thoughts about prescribing role of pharmacists? Highlighting any reservations, you might have about pharmacists working as a prescriber?
00:15:05	S2	No.
00:15:05	S1	No.

00:15:06	S2	Because they're the ones who pick up all the mistakes the doctors make, so I think they're probably better off than any one of us.
00:15:11	S1	All right, all right. I understand. So you're confident about them playing as a prescriber role, yeah?
00:15:18	S2	Because I've dealt with different pharmacists. So I've dealt with pharmacists at the hospital. They're the ones who pick up all the mistakes we make. We've dealt with pharmacists in the community. They're the ones who return all the prescriptions and say that's not the right dose you've prescribed or you know, can you check it again. And in clinical it's the same. They'll see a prescription and they'll say actually, I don't think this is the right thing, you know, it should be prescribed like this. Or this is not licenced anymore or you know, they know the up to date information. So no, I have absolutely no reservations.
00:15:50	S1	That's good. In your views, what protocol should be set up at an organisational level or practice level for prescribing pharmacists? Do you think there should be any protocols?
00:16:01	S2	I think at the beginning its exactly the same as when nurses prescribe. The only difference is because we…the diagnosing time, we're not as great as doctors obviously because of their training. So there it's all to do with training. Doctors are really good at seeing something and saying, okay, let me look at it as a whole and do everything else and then give the right thing. We're good at, okay, this is what you've diagnosed, Okay, this is the medication for it, but when it comes to like acute things, oh, I've got to rush, let me have a look, this is where we're a little bit cautious in saying, oh, I think this is this. That's where we kinda lack and I think with the pharmacist it's the same as well. We can be quite apprehensive even though a lot of the times they write what they're saying, but I think it's more to do with legal as well because they can be a bit more cautious and say actually, let me get a second opinion before I prescribe you something.
00:16:57	S1	It's more like a link with the GPs here.
00:17:02	S2	Yeah, maybe if they had more training for like acute stuff for the…for the pharmacist.
00:17:03	S1	For minor types yeah, yeah. Okay. What is your thoughts about pharmacists working for the medicine management skills of…how…do you think they're fine?

00:17:15	S2	Yeah, they are quite…and especially when they've done clinical knowledge as well. It works out really well.
00:17:21	S1	All right. That's fine, that's fine. How do you value your GP pharmacists to link surgery with community pharmacy in hospital or other healthcare organisations like a CCG?
00:17:29	S2	I've had not much experience with that to be honest. So I don't really know.
00:17:35	S1	All right. But do you think that it can be link person between these different organisations?
00:17:41	S2	Yeah, because sometimes when for example…I'll give you an example, with the vitamin D protocol, we're always unsure. But then the clinical pharmacists are always the ones who are saying actually, we've received something from medicine management this is what it says. And it's like oh, okay then. We need it somewhere written down, you know. So yeah, actually a link, but…
00:18:01	S1	So it's the link of the…between the different organisations has been a part of the role here. All right. And this last question, so what are your thoughts on comparing in-house practice pharmacists? Employed directly by Sergy and the one which comes from different organisations like CCG pharmacists?
00:18:21	S2	I've mainly dealt with in-house pharmacists.
00:18:23	S1	All right then.
00:18:24	S2	So I don't…I don't know to be honest and I've not…I don't really work anywhere else, but the pharmacists that I've met outside like you say they've done different work and sometimes it's nicer when they are in-house because they know the running's. Just like if you were working as nurse somewhere else and you don't know the ins and outs, you know, as efficient as you are in your own practice. But I think it helps when you do go other places. It helps to see what works somewhere else and what doesn't and you can put it in your own practice, yeah.
00:19:01	S1	That's fine. All right. That covers our third section. Now, the last one is more about the future of GP pharmacist role, yeah. So what future do you see about a GP pharmacist role in future general practice framework? Any specific level that you think should be involved at patient level, clinician level or practice level? How you see the future of the GP pharmacists' role?

00:19:23	S2	I think there should be a lot more funding to do stuff to be honest because they do…we do benefit. So like the nurses get a lot of funding to do a lot of things. But the pharmacists don't get as much. However, I can see that they've got a bit benefit to the kind of training that we have and you know, more. So sometimes what stops them against…can be the funding to do stuff and the GP practices as well because they're thinking oh, will the funding be coming out of our pocket. That makes them a little bit apprehensive as well. I think on that level if that could've been improved, it'd be better.
00:20:02	S1	Yeah, yeah, that's fine. But do you feel that GP pharmacists is in the plan of the…or should be in the plan of [inaudible 00:20:10]?
00:20:13	S2	Yeah, I think there'll probably be…now, when you think of a GP practice, I don't think it will be a GP nurse healthcare assistant. I think now it will probably be like GP clinical pharmacists, nurse, all the other stuff. It will be like in the future. That's how people see it.
00:20:29	S1	How do you value patients' feedback about GP pharmacists? Have you got any experience?
00:20:33	S2	Yeah, do have a lot of patient feedback now. We actually have patients who will say, can I please see this person? Can I please see this person? Because they know they've been able to manage their symptoms a lot better.
00:20:44	S1	All right. Yeah. So it's all positive feedback coming up? All right. That's fine. And based on your own experience and need of workload, do you see the GP pharmacist as a part time or fulltime in this organization?
00:20:57	S2	Fulltime.
00:20:58	S1	Fulltime.
00:20:58	S2	Yeah.
00:21:01	S1	Okay. Again, based on your overall experience, what training do you see that should be given to the pharmacist to improve the competency as GP pharmacist? Any specific respect of training specifically?
00:21:11	S2	I think at the beginning it's patient facing consultations. That kind of training is helpful for them. Not because I don't think they're not

		good at it, just because they don't have the confidence I think. It's just the confidence building really.
00:21:29	S1	And how well you believe practice pharmacists has evolved or perform as a GP pharmacist impacting all over healthcare of provision? Any patient care highlighting any practice level benefits. So have they evolved from the initial phase up till now. Do you think they have evolved?
00:21:48	S2	Yeah, quite a lot and we've seen quite a lot of benefits actually because the doctors used to spend a lot of their times doing medication reviews. And telephone consultation regarding medicine. That medication reviews and telephone consultation regarding medicine. That medicine. This needs to be changed, that needs to be changed, what can we give now? And it used to take a lot of time because they'd have to call an outside pharmacist to ask oh, if this is no longer available, what is? And it used to take a lot of time whereas now the pharmacists just deal with that. And sometimes I deal with that as well, but it helps because they've got more time to do other things.
00:22:19	S1	All right. That's fine, brilliant, yeah. And how has GP pharmacists changed your role or perception about pharmacists in general, pharmacists as a professional, has it changed your perception?
00:22:32	S2	Yeah, quite a lot because I didn't used to think of them as clincians whereas now they are just…yeah.
00:22:39	S1	All right. Considering the possible barriers and facilitators for current GP pharmacist role, what steps should be taken to improve GP pharmacist role at an organizational level. Any steps you think that can improve this role?
00:22:53	S2	I don't think because it's a work in progress I think and we've taken action for every little thing that can…you know, as we got along, but it's just like nurses, if they get the training then everything's fine. I think they definitely need training before they come to do anything like…it shouldn't been good for them to just be sent in the deep end. That…I think that would be disaster, but other than that when they have training, then they're absolutely fine. They're even better than some of the nurses I can think of.
00:23:28	S1	All right, that's good. And briefly describe any [inaudible 00:23:32] research you would like to work on in loads of researches on the GP's

		or nurses and different provision of the…so do you think any specific research should be done on the GP pharmacist role?
00:23:41	S2	Yeah, I think to be honest, they don't get a lot of recognition for the work they do. So clinical…like GP pharmacist, they can be really good at consultations and dealing with…just with the patients overall, but it's not recognized. People think oh, nurses as advocates, as advocates, they're really good, but working with the GP pharmacist, I can see that actually they're really good as advocates as well. They can say this is not…this isn't beneficial for this patient, I'm sorry, can we try that, can we try this and they're really good at that, but when…I never thought actually, that is their role, that is what they do. This…you know, they'll tell the doctor this patient, 75 don't give him this or reduce the dose. We never thought of them as advocates, but that is what they are. I think research into that and actually giving them at recognition would be really good for them.
00:24:40	S1	Yeah, that's fine. And I mean it goes over most of the section. So just the last question, do you have any other comments to add?
00:24:45	S2	Not really.
00:24:46	S1	Not really yeah?
00:24:48	S2	I think I spoke a lot.
00:24:50	S1	No, it's been really beneficial because it values the experience with the data we have. So thanks Aisha it's been really helpful and I hope I to speak to you again sometime with other things I'm working.
00:25:07	S2	Definitely.

(00:25:07)

(End of Audio)

Duration 25 minutes

Appendix 15
Interview with GPP1/Australia

S1 Noshad Akhtar

S2 **Amy Page**

Timecode	Speaker	Transcript
00:00:03	S1	Hi. My name's Noshad Akhtar and I'm a GP pharmacist [inaudible 00:00:07]. And also, I'm doing a research study on the topic of evaluation of expectation and perceptions of GP pharmacist role in England and Australia. And today, I'm doing an interview with Ms Amy **Page** who is a GP pharmacist in Australia and this is a qualitative interview. Hi, Amy.
00:00:30	S2	Hi.
00:00:31	S1	Hi. Can you just briefly introduce yourself, please?
00:00:35	S2	I'm Amy **Page**. I have been a GP practise pharmacist for four years in Melbourne, Australia. It's a fairly new role in Australia, so I'm one of the earlier pharmacists to be working in GP practises. I had a background in clinical pharmacy and education and was undertaking my PhD already when I started working as a GP practise pharmacist.
00:01:08	S1	Thanks, Amy. Amy, you have given me the consent to carry on with this interview?
00:01:15	S2	Yes.

00:01:15	S1	Yeah. And you have the information, the initial information about the study, yeah?
00:01:20	S2	Yes.
00:01:21		So you want me to start, yeah?
00:01:23	S2	Yes.
00:01:23	S1	Yeah. Excellent. Amy, as you know, this is about the comparative study of the GP pharmacist role in England and Australia. The [inaudible 00:01:31] interview guide and has got four sections which have been divided into perception and challenges, GP pharmacists working collaboration, pharmacist skillset, and the future of GP pharmacists. So, I will start with the first topic. If any question you don't want to answer or skip, let me know and I'm recording this interview and at the end of the interview, it will be transcribed and if you want, I can give you a copy of the transcription. If you want to add or delete anything, let me know **in** the transcription. So, I will start with the first topic, the first section of it, that's perception and challenges. So, based on your own experience on the role about the pharmacists in Australia or general practise framework in Australia, do you believe there are any gaps present in general practise framework in Australia at the moment?
00:02:31	S2	For pharmacists working in that environment, you mean?
00:02:34	S1	Just generally you know, how things are working in about the general practise if there are any gaps about the lack of GPs, or lack of nurses, or any gaps present where there is an excessive workload on GPs or nurses or other healthcare professionals?
00:02:55	S2	Yes, I'm working in an area on the edge of the city so it's often challenging to recruit health professionals there. We've been down a GP for a while now. There's also challenges in the structure financially rewarding doctors to do the work rather than other health professionals unlike in England, I believe. Which means that the delegation of jobs is limited or willingness to delegate jobs can be really limited. But we have a strong ethos at the practise where I am of having the most appropriate person for the job doing that role and we try to be **into [00:03:50]** professional.
00:03:51	S1	All right, fine. That's fine. And you know the gaps which you have specified within you practise or where you're working. Is it something that has been discussed within the Australian system that that gap can be filled by the GP pharmacist?

00:04:10	S2	Not particularly.
00:04:12	S1	Not particularly. All right, fine. So, I mean, what was your initial perception about GP pharmacist role integrated to fill this gap? Is there something that has been taken on specifically in your practise as an option to fill that gap in?
00:04:29	S2	No, not at all. The reason for me being at the practise was that we'd identified—the practise had identified that they had a significant proportion of their older patient, of their patients generally, who were taking eight or more medicines. And we wanted to be able to reduce that proportion of people who were taking eight or more medicines because they wanted to improve the quality of care that they would be able to deliver to their patients.
00:04:59	S1	Okay, okay. Is it more like dealing with polypharmacy, just specifically dealing with polypharmacy?
00:05:06	S2	Yeah.
00:05:07	S1	All right. Okay. That's fine. Okay. So, what were your thoughts about initial expectations or again, initial expectations, other healthcare professionals had from GP pharmacist role when you started? Have you been working there for three full years, you're saying, yeah?
00:05:29	S2	Four years now, yeah, four and a half years.
00:05:32	S1	Okay, right, yeah. So, I mean, what were your thoughts about their initial expectations from yourself? Was there any mismatch between the expectations or what you can do initially as a GP pharmacist?
00:05:45	S2	No, the expectations were fairly well matched. They wanted someone who could champion the prescribing and that was the area of my PhD. So, it was fairly well matched and the principal GP and I had fairly similar interests and skills, so we were able to work at programmes together which were then discussed with the broader team.
00:06:12	S1	All right. That's fine, that's fine. And were there any initial reservations about your role? Factors like clinical knowledge, communication skills, management skills or [inaudible 00:06:22] factor?
00:06:25	S2	No, it was more that we started off with doing what's called **home** medication reviews and attending the clinical meetings, drug

		information, and then it's evolved over time and changed over time, so I think it was fairly well accepted roles for a pharmacist and they were grateful to have a pharmacist available.
00:06:45	S1	And I mean, were there any initial reservations during like you were yourself, you thought that you were ready to take on this role from your own clinical knowledge perspective or you **had** the communication skills, everything, those type of things where you told yourself that you're okay to do this role initially?
00:07:06	S2	Yeah, I was actually because the role evolved over time. So, the role started off with what I was comfortable with doing and providing and then it grew and changed over time. And as I said, I came into it, I'd already had a master at clinical pharmacy. I was undertaking my PhD at the time, I had already had a graduate certificate in health professional education. So as far as skill base, I was well prepared for starting that role.
00:07:39	S1	All right, that's good, that's good. All right. Were there any initial operational challenges or hurdles you faced while working as a GP pharmacist?
00:07:49	S2	The main one is financial reimbursement to be able to do some of the roles or some of the ideas that we've got that's just not the financial structure.
00:08:04	S1	Okay, okay. That was the initial or has it improved now?
00:08:08	S2	No, ongoing. Initial and ongoing.
00:08:11	S1	All right, that's fine. That's good. And most probably you have answered this, but I just want to quote this one. What are your views on emotional challenges especially in the initial phase such as perceived professional inadequacy or developing clinical aptitude for patient-facing clinical skills? Although you already had the master's so most probably you will be comfortable in [inaudible 00:08:38].
00:08:39	S2	Yeah, no, that's fine.
00:08:39	S1	Was there any other emotional **change**? Was there any barrier while working with the GP?
00:08:50	S2	No, not really because I'd already been working in an interprofessional setting for several years before I started working in a GP practise, so I was fairly used to working with other health

		professionals. I think perhaps if I'd never worked in an interprofessional environment before, it might have been.
00:09:10	S1	Might have been, yeah. Like someone who haven't got that background, do you think like if a fresh graduate or if someone hasn't got that clinical background, it will be difficult for them to go and do the role what you have done, isn't it?
00:09:26	S2	Yes. Yes, I think it would be.
00:09:30	S1	And what support did you receive at the organisational level to overcome any challenges you had?
00:09:41	S2	No, I wouldn't say so much challenges, as you know, as in a barrier challenge. It was more that we were looking to be innovative and develop new programmes that hadn't been done before. And when there was no funding available for them, so it was more the challenges of working out new roles.
00:10:02	S1	All right. So was there any support there financial-wise from the organisation to help you out, or was it like any specific funding coming from the government for this role?
00:10:17	S2	A little bit the funding from the government for a specific programme which was the home medication reviews and then the principal GP and I put in a lot of our own time to developing it.
00:10:29	S1	Okay. Okay. I think you have answered this, how will you believe you are professionally prepared to perform as a GP pharmacist with your **clinical background**? I mean, in your own views now you have got the experience of three, four years. What do you think that there should be any specific key performance indicators in any government or any organisation to evaluate the role of the GP pharmacist?
00:10:59	S2	No, I don't think so. Mainly because I think that the different roles of the GP practise pharmacists are quite different. So, if you're only undertaking patient-facing roles, that's going to be very different to if you're doing governance roles. So, if you were if you were to put in generic KPIs, you would limit the role to one particular function and each GP practise probably, and the population in each area is going to have different needs.
00:11:39	S1	Yeah, so it's difficult you think to pinpoint any specific key performance indicators for this role?

00:11:45	S2	Yes, because the needs of the patient population and the needs of the GPs change so much.
00:11:55	S1	Yeah, it's very surgery to surgery which what role they want you to play, isn't it?
00:12:00	S2	Yeah.
00:12:02	S1	The same over here, because in some of the practises, they want you to do a more clinical role, and some of them, they want you to do the meds management role, so...
00:12:12	S2	Yeah, and do they want you to be teaching the GPs and the nurses about education or do they want you to be putting in protocols and policies and that sort of thing, or do they want you to be facing a patient, you know, patient-facing roles, they're so different.
00:12:30	S1	It's different, exactly. That's fine. Amy, that covers our first section, so thank you for that. And the next one is about the working in collaboration with the other healthcare professionals. So, I mean, how will you evaluate your present working collaboration? I know you have got an experience of three, four years and you were working as a healthcare professional before as well. But just specifically as a GP pharmacist, how will you evaluate your working collaboration now with the healthcare profession especially GPs and nurses? I don't know how the nurses' system work in Australia, but has it changed since the beginning? Has it's got stronger since the beginning?
00:13:13	S2	Ah, it's definitely stronger as they're used to having me there, but I don't think—I think that's just the way…. I think that's because they trust me. I don't think that's necessarily because it's a pharmacist role that they're used to, I don't know if another pharmacist could walk into this. In fact, I've suggested another pharmacist comes and works at the same clinic and they're like, "No."
00:13:41	S1	Okay, okay. Is it because, I mean, just adding the question, is it because they feel that there is no need for the pharmacist or is it because they feel that the other pharmacist won't be able to do the quality of the work what you're doing?
00:13:59	S2	Exactly. They think that—they know that they like and trust my work and that I work to a high level and they don't trust that another pharmacist would do the same. I've offered to mentor and support and train another pharmacist and they are not interested.

00:14:18	S1	All right, all right. But do they feel that there is a need for the pharmacist?
00:14:25	S2	Yes. Yes, they want more time than I'm able to give, but they don't want somebody else.
00:14:33	S1	I see that. So, it's more like a personal relationship you have with the team out there.
00:14:38	S2	Yes.
00:14:39	S1	All right. That's fine. And do you think that—I mean, it has got something to do with your clinical knowledge or is it something to do just overall from your academia background?
00:14:56	S2	I think it's both. I think it's my academic background and my clinical background and how I interact with the team.
00:15:04	S1	Okay. Okay. That's fine, that's fine. All right. Brilliant. Okay. Over here, it might not be the, I mean, the relevant question in Australia, because I think Australia nurses are working in a different way. But over here, nurses are very much a part of general practise over here. But I mean, I don't know how it works out there, but how do you differentiate your role from the practise nurse because it's often, sometimes it is confused to be overlapping with each other? Is it same over in Australia as well, or…?
00:15:41	S2	It's the same, but I've been very, very specific that I only look at the medications, I don't do any of the activities that the nurses do.
00:15:52	S1	Okay, okay. Can you just (overlapping conversation)?
00:15:55	S2	Because any patient-facing roles are purely using the home medication review model which is a role that only a pharmacist can do, and any roles, any other roles I do are all purely medication-focused. I am very specific that I don't want to do any roles that are already being filled by the practise nurse. So, we've got that differentiation, that's not been an issue because I'm very aware of it.
00:16:25	S1	Okay, so there is no overlapping going on in your practise.
00:16:27	S2	No.
00:16:28	S1	That's fine. All right.
00:16:29	S2	No, but that's something that I've been very personally cognisant of because I don't want to replicate or duplicate work that can be done by somebody else.

00:16:40	S1	Okay. But in your own experience, it might be from your other colleagues, it there something that is going on in any other practises, it might be another GP pharmacist working, do you think so, any [inaudible 00:16:52]?
00:16:55	S2	I think there's some people who are really keen to work in GP practises who will say that they are capable of doing X, Y, Z activity that is currently done by a nurse. But I don't know if any of that's happening at the moment because there's funding for a nurse to do those roles and there's not funding for a pharmacist to do those roles.
00:17:16	S1	All right. Yeah, I understand. That's fine. So, have you got any concerns related to medicolegal implications or scope of your role as a GP pharmacist, situations where concerns raised about pharmacists has gone beyond their area of expertise?
00:17:36	S2	I haven't come across that yet, but it's still very small numbers of highly skilled pharmacists who are working in GP practises in Australia still.
00:17:51	S1	All right. So, there is…yeah, I mean, because you have got [inaudible 00:17:58] strong background so you won't have come across these types of things? That's fine, yeah, I understand. Okay. And how is it you find GP or nurses or other healthcare professionals to approach and communicate within your GP practise?
00:18:16	S2	The owner, did you say?
00:18:18	S1	I mean, all the GPs, how easy for you to communicate with them or approach them for any task or any delegation, anything? Is it easy to approach them?
00:18:30	S2	It's really easy. I don't have a problem. I mean in particular, the principal GP, so that's what we call the GP owner, he and I are very close, so we'll regularly email or phone each other. So, yeah, we work very closely. And that sort of, I guess, facilitated the relationship with everybody else. It's just been—it's a really pleasant workplace where I am.
00:19:10	S1	All right. That's good. It's all about the experience, isn't it, with the time it gets stronger and stronger.
00:19:20	S2	Yeah. Yeah, everybody's used to me there so when a new—like when a registrar comes on, a new registrar because we get a new registrar every 6 to 12 months, they're just like, "Well, this is

		fantastic. We've got a practise pharmacist. I've never had that before." And everybody else accepts me, so they say "Yeah, that's just good." Know there's no, you know, I'm just another member of the team.
00:19:48	S1	All right. [inaudible 00:19:48] . That's fine, that's good. In general, I mean, if you have to give advice to any other organisation or even in yours, your own practise, is there any factors or do you think any steps can be taken to improve this working collaboration?
00:20:11	S2	Better funding models would help. That would enable us to do more if we were better funded. I mean, that's probably the main thing.
00:20:26	S1	Can you just highlight, because I'm not aware about the funding, I've got different feedback about the funding in Australia. So how is funding working at the moment [inaudible 00:20:36] GP pharmacist?
00:20:39	S2	At the moment, there's no direct funding, so there's what we call the home medication review model which can cross subsidise the role. Or you can use MBS item numbers to do shared consultation. So basically, the doctor is the one doing the consultation, but you get a proportion of the fee if they poke their head in the door.
00:21:03	S1	Okay. Okay. I have heard about this home medication review that GPs refer you the patients to do the home medication reviews, isn't it?
00:21:12	S2	Yes, that's correct.
00:21:14	S1	And you've described. And do you need to be a GP pharmacist for this or take on (overlapping conversation)? No, they can (overlapping conversation)?
00:21:21	S2	No, you need to be a — any pharmacist can go through the accreditation process to be able to do it. And once you've done the accreditation process, you can do it. You can do it so community pharmacies directly through a GP practise are embedded in a GP practise.
00:21:40	S1	All right. But the community pharmacists who is doing this role, they won't be considered as a GP pharmacist, isn't it?
00:21:46	S2	That's correct.
00:21:47	S1	Yeah, because GP pharmacists is a different role, it's more like when you're working within the GP practise, isn't it?

00:21:53	S2	Yeah, that's correct. So, it's basically just using it as a funding mechanism to make it happen.
00:22:00	S1	All right. But is there no funding available, like to have a specific GP pharmacist role in Australia at the moment?
00:22:08	S2	No, not at the moment. There'll be a payment that'll be eligible starting mid next year, but not now.
00:22:17	S1	Okay. That funding is specifically for the GP pharmacist?
00:22:21	S2	No, currently there's a funding for a practise nurse, and next year, mid next year, that will be extended that they can choose to pay for a practise nurse or a practise pharmacist or any other allied health professional.
00:22:38	S1	All right. So (overlapping conversation).
00:22:39	S2	So, most practises will probably just continue to employ their nurse the way they always have.
00:22:46	S1	Okay. And that decision has to be taken by the lead GP or the main GP?
00:22:51	S2	Yeah.
00:22:53	S1	Okay, okay. That's fine. That's fine. All right. That covers our second section. Thank you for that. And the third one is about the pharmacist skillset that depends, I mean, more about how the pharmacist is equipped with the knowledge. So, I mean, how you valued competency of pharmacists in patient-facing role like running clinics, doing home medication reviews, or home visits? So, you think is it competency-wise you're enough competent to do this role?
00:23:33	S2	I think so, but it's a steep learning curve doing appropriate documentation and someone like, I don't think pharmacists are usually doing sufficient documentation. And a lot of it's about—I mean, it depends what sort of background you come from, so I think a lot of community pharmacists are very used to developing rapport with people very quickly. It's about how quickly you can develop that rapport and talk to people.
00:24:07	S1	Yeah, because there's the challenge to have a patient-facing role, you need to be equipped with your mainly clinical knowledge, communication skills, yeah, so it varies.

00:24:20	S2	Yeah, it's not just the clinical knowledge, though, it's also that ability to build that rapport and get that information and how do you synthesise that information.
00:24:32	S1	But, you know, in…sorry, go ahead.
00:24:34	S2	Yeah, you go.
00:24:36	S1	In your work, I mean, once you finish your degree as a pharmacist, do you get any specific time for the training like to work before you actually start working as an independent pharmacist? Like over here, they have a pre-reg year, so is there something that's in Australia as well?
00:24:55	S2	Exactly the same. So, we've got a four-year degree and then a one-year preregistration year.
00:25:02	S1	All right. And that pre-reg year, is there anything with any specific time or any specific link to work as a GP pharmacist?
00:25:15	S2	No, none.
00:25:16	S1	No. All right. So, it's more like community and hospital, isn't it?
00:25:20	S2	Yes.
00:25:21	S1	All right, yeah, that's fine. All right. I don't know whether this question is relevant or not, but what about the prescribing role for the pharmacist, how [inaudible 00:25:31] how is the situation about the prescribing role for the pharmacist at the moment?
00:25:36	S2	No, there's none. Pharmacists don't have prescribing rights in Australia.
00:25:41	S1	Okay, okay. Is it something that's being considered?
00:25:44	S2	It's being considered, but it's not current.
00:25:48	S1	It's not going to do, okay. That's fine. Have you ever discussed it with your GP, lead GP or any GP, any reservations they would have said that "These are my reservations" or might be their reservations about prescribing role for the pharmacists?
00:26:07	S2	They would not be supportive at all.
00:26:10	S1	They won't support it. All right.
00:26:11	S2	No.

00:26:13	S1	Okay. Is it more because they don't trust the…?
00:26:19	S2	No, they just think it's a GP role, they wouldn't support it.
00:26:22	S1	They won't support it, all right. That's fine. Okay. What are your thoughts about the medicine management skills of the pharmacist?
00:26:34	S2	I think that's essential and I don't think it's just the clinical knowledge, I think it's also being able to see what patients are doing and support patients to manage their medications.
00:26:44	S1	Yeah. So, is it more like the stronger side of the pharmacist to have the medicine management role in the GP [inaudible 00:26:53]?
00:26:53	S2	Yeah.
00:26:54	S1	That's fine, all right. And how will you evaluate your role as a GP pharmacist to link with the other organisations like Community Pharmacy, with the hospital or any other healthcare related organisations?
00:27:09	S2	Not with the hospital, but very important with the Community Pharmacy. I liaise with them a fair bit.
00:27:17	S1	Okay, okay. That's fine. And I don't think the next one will be related to you because over here there is in-house practise pharmacists and then there are some pharmacists who are coming from the Clinical Commissioning Group in England. I don't think this is working in Australia as well, let's skip this question. That's fine. The last section is the future of the GP pharmacist. So, based on your own experience or your present situation or present position in the academia or healthcare organisation, where do you see the GP pharmacist role in Australia in the next couple of years?
00:28:00	S2	I don't think it's going to change substantially in the next couple of years, but where I'd like to see it is if there was a funding stream pharmacists could access the same sort of funding that doctors do, which is called our MBS, our Medicare Benefits Scheme, so that we could actually bill for the services that we provide.
00:28:21	S1	Okay, Okay. Okay. So, you think that there should be some type of funding model that comes up specifically for the GP pharmacist?
00:28:32	S2	Yeah, without being able to fund it more, it's limited.
00:28:38	S1	It's limited, all right.
00:28:40	S2	It'll stay a niche role for the moment.

00:28:43	S1	All right, yeah. Is there any discussion or any support for this role as being provided by the pharmacist main organisation, regulatory organisation in Australia?
00:28:54	S2	A little bit, but it's more lip service.
00:28:57	S1	Okay. That's fine. Okay. And based on your own overall experience, what training you would like to see to improve this competency as a GP pharmacist, anyone who is coming in this role? Do you think there should be any specific training that should be given to them before they join this role?
00:29:21	S2	Not specific training, because it depends on what sort of role that and practise role functions that they're going to have and what sort of practise specific needs there are and patient specific needs at that particular practise. But I do think it needs to be a highly skilled pharmacists going into the role. I don't think it's an entry-level position.
00:29:45	S1	Yeah. So, you don't think that any community pharmacists can take on this role straight from community to general practise?
00:29:54	S2	Oh, I don't see any reason why it couldn't be done by a community pharmacist, but it would have to be, it couldn't be somebody without further well-developed clinical skills, well developed patient skills, well developed interprofessional skills. It couldn't be somebody a year or two out of having **readjusted**.
00:30:21	S1	Yeah, so there should be training that should be given to them with the experience of one to two years and then they can take this role (overlapping conversation)?
00:30:30	S2	No, more than, more than that.
00:30:32	S1	More than that. All right.
00:30:34	S2	They need to be experienced.
00:30:36	S1	They need to be experienced, yeah. That's fine, yeah. How you valued any patient feedback, have you received any patient feedback when you're working with the GP in the GP **area** and how you're getting the feedback from the patients [inaudible 00:30:53]?
00:30:55	S2	Most of the feedback from the patients is via the GPs or via patients contacting me again.
00:31:03	S1	Okay.

00:31:04	S2	And it's been overwhelmingly positive.
00:31:07	S1	All right. So, they do take you as an important member of the clinical team in the practise?
00:31:14	S2	Yeah.
00:31:14	S1	Yeah, all right. That's good. I don't know whether this question is relevant or not, but based on your experience **in need** of workload, do you see GP pharmacists as a part-time or full-time role?
00:31:33	S2	It could easily be full-time if there was funding available for it to be full-time.
00:31:39	S1	All right. So, you think they can—there is work available or there is the need where a full-time pharmacist can be employed if funding is (overlapping conversation)?
00:31:49	S2	Yeah.
00:31:50	S1	All right. Okay. And how do you believe as a practise pharmacist you have evolved since you have beginning, how it has changed your scope of practise since you have beginning working as a GP pharmacist?
00:32:06	S2	It's changed a lot. It's continuing to evolve as we look for new programmes to initiate and develop over time.
00:32:15	S1	All right, fine, yeah. Is it something within just your practise or is it something overall going on in Australia?
00:32:23	S2	No, just within our practise.
00:32:25	S1	Just your practise, all right. That's fine. And considering the possible barriers and facilitators for current GP pharmacist role, what steps should be taken at organisational level to improve GP pharmacist roles? It might be you have answered this one before, but….
00:32:39	S2	Yeah, I think I've already answered that one.
00:32:41	S1	And there's more like a funding one, yeah. That's fine, yeah. You have answered the next one as well, so... Okay, just last few questions. You have got the academia background as well and you're doing research as well, so in Australia or overall internationally, would any specific research you want to be done on the GP pharmacist role?
00:33:05	S2	I think it would be really valuable to have a lot more research on the GP practise role. I mean, there's hardly any to date and it would be

		useful to see how it changes the appropriateness of medication therapy. The only reason we haven't done that is because we're limited to one practise and choosing outcomes is challenging. But I really think we need a lot of that research and particularly if we're able to aggregate that over multiple practises or large areas to show health outcomes ideally.
00:33:37	S1	Yeah, yeah. So, in your own knowledge, is there any research been going on at the moment about this role in Australia?
00:33:48	S2	Only small-scale evaluations.
00:33:50	S1	Only evaluations type of thing. All right. So, you think the international type of like my topic, is it something that's going to be a valuable thing to add on in the research area for Australia?
00:34:06	S2	Yeah.
00:34:09	S1	Because in England, it's quite a strong system of the GP pharmacist role with the funding that has been going on and even now, the funding here has **come to end** but many practises, they have employed GP pharmacists now.
00:34:23	S2	Yeah, you're lucky.
00:34:26	S1	Yeah, yeah, it has changed quite a lot in the past four or five years and [inaudible 00:34:33]. And I'm myself working with [inaudible 00:34:35] a big organisation, so they have really taken it on. So, yeah, it has got really well on this end. That's fine, Amy. That's good. Any other comments you want to add about this topic, about this research, anything to add on?
00:34:54	S2	No, I think that's been really comprehensive and I think that your research will be really valuable. I'm really looking forward to seeing the results.
00:35:02	S1	The results, yeah. Thanks, Amy. It was really nice speaking to you. And what I will do, I will—once transcribed, I will pass the copy to you, and if you want to add….
00:35:14	S2	Oh, I don't need to see the transcription, but I would like to see the finished paper, it'd be a pleasure.
00:35:21	S1	Yeah, definitely. Definitely, I will pass it on to you. So, I will finish this recording now. Thank you.
00:35:28	S2	Thank you. Lovely to meet you too.

00:35:30	S1	Thank you. Thanks, Amy.
00:35:32	S2	Thank you.

[00.35.32]

[End of Audio]

Duration 35 minutes and 32 seconds

Appendix 16
Written Statement by GPP2/Australia

Evaluate expectations and perceptions of GP pharmacist role in England and Australia by key stakeholders – Karen Starling GP Pharmacist

Because it is a new role in Australia, I feel the particulars of the role of pharmacists in GP practice is still to be determined. At the moment the role is based on specific clinic needs. It is also greatly affected by lack of funding available for pharmacist professional services and understanding of the role. I was employed in the role through funding provided by the Eastern Melbourne Primary Health Network (EMPHN). The job description was to fulfil clinic-specific requirements so it was difficult to know exactly what the job would entail. A lot of the services I thought may involve a pharmacist were already well covered. The clinic I work at is well organised with nurse-led cardiovascular, diabetes and respiratory clinics already in place.
Because this is a completely new role, I think many GPs are still trying to figure out how they can use the services of a GP Pharmacist. Many of the GPs expressed a willingness to work with a pharmacist but were unsure how this would work with the current model of practice.
Initially I was concerned about being able to respond to queries in a timely fashion and also access to drug-specific references. I have not found the time factor to be an issue and have been able to recommend some references to the clinic that have been accepted.
Some of the challenges faced:
-Identifying needs of clinic and working out how to address them specifically.
-Takes time to establish rapport and relationships with the staff at the clinic and understand how the systems work in order to utilise resources effectively.
-Lack of specific training and resources for GP pharmacists
-Lack of understanding from GPs, nurses, staff and patients about the role of a GP pharmacist.

Current pharmacist training in Australia does not fully prepare you for this role though there are programs being implemented now through the Pharmaceutical Society of Australia (PSA)

to address this. Being an experienced pharmacist working in both hospital, retail, manufacturing and Home Medicines Reviews gave me a good foundation for the role of GP pharmacist. If this role is to continue and grow, more specific training would be an advantage. The PSA has recently started a foundation course for GP pharmacists and there are guidelines for general practice pharmacists and practice support tools.

I have had the support of the 'GP-champion', the project manager and many of the other staff including nurses and administration to overcome some of these challenges. Many of the challenges are ongoing and I am finding the support is growing as there is more understanding of my role and increased rapport built with both staff and patients

I am employed at the clinic as part of a primary health network funded project. The objective of the project is: To improve the quality of prescribing by the 20 GPs, to reduce drug related problems (particularly for older patients) and to establish a culture where medication reviews are performed in every appropriate circumstance. To improve the capacity of the general practice to implement a Health Care Home model in the future, by demonstrating the benefits of inter-professional collaborative care.
The target outcomes include:
-Improved medication management for elderly patients, particularly for those with multiple chronic conditions, polypharmacy, or taking medications with narrow therapeutic windows or dangerous side effects.
-Improved medication management includes reduction in adverse drug reactions, improved medical adherence, reduction in non-indicated prescribing, reduction in over dosage of medication, reduction of sub-therapeutic dosages, reduction in untreated patient indications, and increase in appropriate medication selection.
Measuring the success includes many factors including:
-number of patients engaged by the project
-number of referrals to pharmacist from GPs and others
-number of consultations with pharmacist
-number of HMRs/RMMRs
-measure GPs self-assessed acceptance of Pharmacist's recommendations, competence with poly-pharmacy, knowledge of drug interactions/side effects, feelings of support when managing polypharmacy
-GP acceptance of pharmacist recommendations
-measuring patient outcomes using ICHOM measures

Factors affecting collaboration:
The majority of the GPs and Nurses at the clinic I am currently working in are supportive of the role. GP acceptance, trust and understanding of the capabilities of pharmacist in GP role plays a big part in how this collaboration works. People with experience working in team environments are better able to adapt to the collaborative approach.
Steps to improve collaboration:
Continued support of GPs, particularly in patients with chronic conditions and multiple co-morbidities. Improved understanding of the role a pharmacist can play in improving patient outcomes.

Evaluating pharmacist competency:

We have a GP feedback form for each home medication review which is used to evaluate pharmacist's input and gives GPs the opportunity to provide feedback. I have spoken to GPs about the 'usefulness' of HMRs and encourage feedback and information to guide the reviews. For example, the GPs often include specific reasons for referral which really helps me provide patient specific support. Working at the clinic gives me the opportunity to liaise directly with GPs with the results of HMRs or any specific concerns. A future focus of the HMR process would be for the pharmacist to be involved in a case conference situation with the GP, patient and/or carer and pharmacist discussing the results of the HMR.
Pharmacist prescribing:
Although this has been talked about in Australia, it is not yet a reality. My reservations would include patients wanting to bypass the GP and 'just get a script'. There would need to be strict protocols in place.

Appendix 17
Interview with Organizational Lead/Australia

S1 Speaker One

S2 Speaker Two

Timecode	Speaker	Transcript
00:00:01	S1	
00:01:02	S2	Okay. My name is Christine, I am a pharmacist for the crown I am- I work for a primary health network which is a government funded agency that I use to work in the primary care space to create a more integrated system, and I specifically work as a quality use of medicines lead in that organisation which is why I have been involved in a couple of pilot projects to explore the workforce role of the pharmacist in general practice, and so I guess I have come from an agency that has commissioned and provided funding for that happening to two other practices in our catchment.
00:02:03	S1	
00:02:18	S2	

00:02:22	S1	
00:02:28	S2	
00:02:29	S1	
00:02:46	S2	
00:02:47	S1	
00:03:27	S2	
00:03:27	S1	So Christine, what are your views about the grand general practice framework and how the general practices working in Australia at the moment and do you feel there are any gaps present in the way a GP pharmacist can come and play a role in?
00:03:47	S2	Well yeah, I do, I do have a pharmacist perspective I guess as well, but I think general practice I guess from Australia, what we find is that the most frequent interview in a general practice is the writing of a prescription, that's an activity that's done more than anything else, and that the pharmacist has a particular expertise around medicines which we frame in a framework called quality use of medicines which cover some several different domains, but there is I guess, within that episodic care that the GPs provide probations, there's a gap in a more overarching expertise into decisions about medications and monitoring that would be- could fulfill by having a resource of a clinical pharma system in the practice.
00:04:59	S1	All right, all right. That's fine, brilliant, thank you. And what was your initial perception about GP pharmacist when you take- when you took over this pilot scheme, what were your initial perception about this role to fill in the gap which was present or is present within general practice and hasn't been changed since then?
00:05:25	S2	Well so I guess- so it's not me that's working in the practice just so that you understand, the way that we went about this was really to have the general practice lead the role, so they needed to sort of be a bit invested in what they wanted to get out of having a clinical pharmacist as part of the team, and the organisation I work for was just funding that role so that it would be explored, so I think it's quite difficult for a pharmacist to sort of be dropped into a general practice where all the day to day processes are happening whether they're there or not, and to find their niche, their place, where they can feel that they are making a difference, and there was also- there's a bit of a limitation to the hours so the role is like, 20 hours a

		week, so the pharmacist can't be there all the time, so for them to find what are the things they can do in that time that make a difference to the patience and to the practice.
00:06:56	S1	All right, yeah. So it's a bit of time issue as welcoming people, it's not like a full time role at the moment.
00:07:03	S2	Not at the moment, no.
00:07:04	S1	Not at the moment, all right, yeah, yeah, that's fine. And you will have also contacted with the other clinical team members like GPs or nurses who have been in touch with the GP pharmacist in practice as well, so do you believe there was or anyone of them has shown any mismatch of expectations of what has happened since the- and since this pilot scheme has started?
00:07:35	S2	Well certainly some GPs are more adjourned to what they- they can work with the pharmacist than others, but it is a role that needs time for that sort of relationship and trust to be built, I think- so some GPs are much faster or more trusting, other GPs are slower to sort of see how they can relate to the pharmacist, what sort of tasks that they expect or expertise they can expect, so it's certainly not even across the board, and the we- in our general practices, we have practice nurses, they're called practice nurses rather than a trained nurses, who have patient facing roles, some of which would overlap with what the pharmacist could also be offering, so- and I think when a new position comes into place, people might be a little bit concerned about role encouragement and that might have been more of that with the nurses than other staff and other- than the GPs themselves, but nothing serious, so I think it's something that the pharmacist have been mindful for, for example, nurses working with patients who have respiratory conditions or type two diabetes, there's a lot of overlap in showing people how to use devices and how to manage the medicines in that setting which the nurses probably have been doing all along and may not want to really increase some of their sort of activity.
00:09:42	S1	All right. So yeah, it's a bit of what you can say- over here, it was the same thing as well even when I started, it was always like well, I think the role rather than bleaching the cat, it was more like there was a bit of concern that we have come to take over what nurses was already doing in the practice, so yeah, there was a bit of a mismatch of the expectations, all the role specifications, same scenario with it as well, so there's…

00:10:17	S2	Yes.
00:10:19	S1	
00:10:45	S2	
00:10:50	S1	All right, sorry, sorry, Christine. What I mean was I mean looking at the present scenario now or whichever role specifications have come now for the GP pharmacist here, do you believe or do you think that how well the pharmacist was professionally prepared or trained to take on this role?
00:11:14	S2	I don't, but I think that because it's a new role and despite that there's been quite- there is quite a lot of activity on that front, people have independently started working with general practice, so not many but a few, and so they're sort of the ground breaking people that are feeding back to our industry ways to go about this, professional society as a pharmaceutical society of Australia is currently using that sort of information to create a training package to prepare pharmacist for working in that role, so they've come behind the trend setters, the people who have broken the ice, but I think it's very hard to actually sit very specifications for the roles, because each focus is very different.
00:12:18	S1	Has its own demands, yeah, yeah.
00:12:20	S2	And I think the way our pilot was triggered was really a identified area of concern for older people on polypharmacy, so polypharmacy is a sort of the first word of the year and people somehow think that you can you know, accept with a click of a fingers, and so one of the solutions that we come up with was to have a pharmacist as part of the GP team so that they could perhaps focus on older patients in the practice who were on a lot of medications and review their medication management and work with the GP on a you know, carefully and considered and monitor the prescribing way that was deemed appropriate…
00:13:21	S1	So you think- so if I'm getting it right, so basically the training modules or the training sector is being renewed or I mean they are designing the training based on whatever experience or whatever- I mean the things have happened in recent years, based on them, there are new training modules or structure is being done by different organisations in Australia if it…
00:13:50	S2	Really being done by the pharmacy legal society of Australia, and they would be researching the role that is in the UK that works, but

		our system is quite different, so our general practices work on a free for service model and I think in UK it's more a cavitation model, so that- the system starts in our model where doctors are rewarded for [inaudible 00:14:29] it is really quite hard to put in- implement activities on there about quality improvement necessarily, but the report has to be preserved so that means that spacing the general practice is a priority for a prescriber rather than somebody who is actually not generating income.
00:15:03	S1	what the initial operational challenges or hurdles you face while working with the GP pharmacist as an organisational lead considering expectations and reservations you had, expect like, job description, management skills, communication skills, initial training, cost factor, any specific barrier you face?
00:15:44	S2	I think I was concerned about the challenges of the pharmacist being fairly isolated within the practice, so we attempted to put in conditions I guess to help mitigate that in that there needed to be a champion GP and a demonstration by the practice that- of how they wouldn't utilise that role, and so to make sure that the pharmacist had you know, a visible presence and a name on the door, an email address, a space to work, was part of the clinical team, invited to clinical meetings, et cetera, so I think because we insisted that spend a couple of months of trying and getting all those things in place before the pharmacist commenced, I think we were able to mitigate that risk, and compared to now as a trial sort of being underway where the pharmacist spend six months trying to demonstrate that they were useful process.
00:17:00	S1	
00:17:03	S2	
00:17:04	S1	Yeah, yeah, definitely. I think it was an almost similar over here as well, availability of the rooms, integration into the team, initial concerns, how the- what task they have been given out, cost factor, all these were here as well, a bit of different structure but yeah, I think the initial reservations they was saying they're the same, so this one.
00:17:29	S2	Yes, and one other concern that was- has been raised, not specifically me, but something that is in the background that is of concern is the relationship with the community pharmacist that they don't feel that the role or they've been bypassed, because they also have a strong and supportive relationship with many of the patients,

		so that the role of the GP- pharmacist in general practice was more to coordinate and connect and refer patients back to their community pharmacy for services that they can provide like you know, I guess words to text, but other forms of medication checks that the pharmacies can provide and that they area also remunerated for.
00:18:34	S1	Right. Just getting to another question from the same discussion, how did you choose the GP pharmacist for the pilot scheme? Because I mean sometimes it's the community pharmacist who have got a bit of training and they can upgrade themselves for the role or was there any specific other criteria to apply for this role?
00:18:57	S2	What we have in Australia is an intervention called a medication management review that is done in the home, to undertake that work pharmacist had to undergo an accreditation process with some up skilling that gives them a bit more expertise in working with- making reports for doctors, making sense of pathology reports as it relates to medications and targets and goals and things like that, so we have a workforce that is highly skilled and they often are not working fulltime in community pharmacies, they may be doing all of that sort of medication review work or part time in a pharmacy and part time doing reviews, so- and because the home medicine review is an intervention that's done jointly between a GP and a pharmacist, an accredited pharmacist, the GP is also remunerated for that intervention for their party net, and the pharmacist is remunerated, so the- and most general practices want to have more of that activity from the pharmacist that works there, either- so coordinating that sort of work or identifying patients that would benefit from that, et cetera, so the practices actually had to employ the pharmacist, so our agency didn't employ the pharmacist, we provided the practice with funding and they advertised and interviewed and employed the pharmacist themselves.
00:20:51	S1	
00:20:53	S2	And mostly they were looking for an accredited pharmacist so- and someone who had a bit more maturity and experience.
00:21:01	S1	Okay, all right. That's fine, brilliant, and all right, that's fine. Just moving on then Christine, I think you have answered this one but I will just repeat the question if you want to add something, what support as an organisational lead did provide by yourself or by your

		organisation to GP pharmacist to work in this challenges and hurdles?
00:21:27	S2	Is that a question that's on my sheet?
00:21:30	S1	Yeah. I think it's question number seven, but most probably you have already answered it, yeah.
00:21:39	S2	Yeah. So I guess with that- that's we're insisted that they prepare for the pharmacist role and so they had a three month lead up time before they needed to employ a pharmacist, they could employ them sooner than that, but it was expected that they would help develop the plan of the work and what they would be doing and basically prepare their practitioners in their space and their team on the role.
00:22:10	S1	
00:22:13	S2	But yeah, for the actual talking with the pharmacist, yes, we had close contact with the pharmacist once they were selected and employed, we connect them with a GP pharmacist who was working in another state who had been joined there for 10 years who had a lot of insights, so we had a Skype call resume meeting or something, where they connected with that person, also there is like a chat room for pharmacist working in general practice that- who can you know, they- it's like a projected check room where they can just share experience, so we made sure that they had access to those peer to peer type supports.
00:23:09	S1	I understand and I think there's the basic support, I mean from my own experience, I think that's the basic or the best support you can give just to give a bit of feedback and a bit of support from the back that yeah, you are here for your specific role and we have training support or all this support yeah, definitely helps out, so that's fine.
00:23:34	S2	Yes.
00:23:35	S1	Okay. Let's moving on to number eight, just what are your views on GP pharmacist scope of practice, has there ever been any medical legal issues where concerns were raised by yourself or any other helping professional about GP pharmacist area of expertise (Background Noises)
00:23:56	S2	I don't believe it has, and I think that's what the pharmaceutical society in their developing the training package, I mean in Australia we're having a bit of a tussle about limited supervised prescribing by

		pharmacists, so we have- we always have in Australia, we possible do there as well a bit of a turf was between doctors and pharmacist, doctors always feeling pharmacist are trying to take over the world, so I think that there is definitely a need to be quite clear about the scope of practice and the pharmacist is obliged to conform with the pharmacist sort of guidelines and ethical obligations and not to be doing things outside their expertise, so that means that they're not doing some of the- a lot of the things that the nurses can do in terms of more patient focused health checks and things like that, although it's not out of a pharmacist scope to take blood pressure for instance, but it might be out of their scope to start you know, looking in ears and down throats and things when there's no nurses here to do that.
00:25:31	S1	But I mean by now or by today, there has been no medical legal issue that has been in your knowledge about pharmacist crossing their boundary or something where the issue has been raised up by any clinical person that pharmacy should have not done this.
00:25:52	S2	Not that I'm aware of.
00:25:53	S1	Not aware, brilliant. That's fine, brilliant, okay. This last question for this one, what should be the key performance indicator you think for- to assess or to gauge up the pharmacist role in GP practice, any specific key, KPIs you think should be there for the pharmacist?
00:26:13	S2	Well that's been a really difficult area to decide how do you evaluate an outcome, so we have the convenience of being able to I guess, see an increase in home medicine reviews conducted in the practice, so it's a bit underutilised intervention, because it's quite complicated, the doctor- the GP has to identify the patient, discuss whether they would be happy to have a pharmacist come to their home, then make a referral on the pharmacist to send to, then the pharmacist has to bring the patient and make an appointment at a convenient time to go their home, and go through all their medicines and their issues, and the pharmacist has to write a report and provide that back to the GP who made the referral who then has to recall the patient to the practice for a consultation to devise an on-going medication management plan and if all that work with the patient, so it's quite a…
00:27:25	S1	It's a difficult one to, yeah, yeah…
00:27:28	S2	

		Notes abt positive impact of Home mediscine reiew service. Yeah, it's a clumsy thing, so many GPs, if they weren't happy with the first attempts that pharmacist writing reports on that, they often didn't pursue that or forget about it like, don't remember it exists, et cetera, so it's easy to increase that by having a pharmacist there to identify patients and do a lot of that preliminary work and to coordinate that whole medication review stuff, so we had differ in measuring that because it is a medicine supportive intervention that the government has been prepared to pay for and you know, there's been researches, it's an evidence based intervention that helps things like HbA1c and cholesterol levels a ND number of medicines, et cetera, so we're counting that, and then any other- we're counting direct patient encounters that the pharmacist has with patients in there, so they might have direct face to face consultations with patients about medicines here, and we also count the number of contact with GPs around questions or clinical meetings like, sometimes a pharmacist are presenting on a clinical topic, so how many clinical meetings, et cetera, and also, we're also measuring patient's sort of satisfaction and a measure of GP satisfaction…
00:29:16	S1	That's really nice Christine, because I think when I ask this question over here, I mean we have got a bit more experience, but to be honest to you, your answer is much more in detail and it has given some good ideas to be honest, so yeah, thank you, that's good.
00:29:34	S2	Okay.
00:29:34	S1	
00:29:41	S2	I think we can move onto the next one.
00:29:43	S1	Next one, all right, brilliant. All right, thank you. All right. The second one is about the working collaboration, most probably you have answered quite a few things already in your previous answers but I will just repeat the question if you want to add something to it, it's about the GP pharmacists, nurse, organisational lead and other staff members in the practice working collaboration, all right. So I mean how you evaluate the working relationship of GP pharmacist with other team members of your organisation, and do you think it has been improved since beginning?
00:30:22	S2	I guess because we have had maybe monthly- two monthly meetings with the practices and that they- the lead in the practice which is

		generally the practice manager and the pharmacist, and I think- the working relationships appear to be very really good, although we've got two practices, one where the pharmacist is much more micromanaged by the practice manager, and the other one where the pharmacist has sort of more created their own- have got what they do, they're not sort of like having to- these are micromanaged, and that's just a personality of the practice managers in each instance. ***(importance of practice manager in defining role)***
00:31:19	S1	So I mean what do you think which one is…?
00:31:20	S2	But overall- sorry?
00:31:23	S1	So I mean just comparing both practices, what do you think in your own personal opinion, which one is working better?
00:31:37	S2	It depends what you're looking at from, it appears if you're just going on numbers, and I mean they're very- they're totally different practices, but it seems like the one that's got the free scope seems to be able to be really increasing the amount of reviews, but then it's a much bigger practice that they've got two other several practices, so he has actually got a lot more people to work with, the other one that is micromanaged is I think that pharmacist who's a very, very experienced pharmacist, and also she must be a whole lot more cautious I think about territorial boundaries and things, she's doing very well, but I think it's a little bit hard going for her. (***for discussion)***
00:32:37	S1	
00:32:40	S2	But they're both happy, they're both happy, it's you know, and I have ***had contact with pharmacists doing this in other settings and other PHNs, other primary health clinic networks, who had said that that was awful and they didn't work because the GPs didn't have any idea what they were there for, they had been assigned a document by some business corporation lead who didn't even tell the GPs, I have no idea what the pharmacist was there, and they couldn't really get much leeway, so they actually folded.***
00:33:19	S1	
	S2	
00:33:26	S1	A lot better than that, all right, that's good, that's good. Okay, brilliant. Okay. okay, the next one, how do you differentiate practice pharmacist role with another practice nurse, I mean as occasionally it is confused to be overlapping with each other, I think

		we have discussed before, but I mean just specifically where you think is the top of still there with the nurse as well?
00:34:00	S2	I think the pharmacist are very aware of that, that that's going to be a problem solving, they're just very careful and offer- they offered to help separately but don't try to takeover, but it does- I think the pharmacist feel that they would do actually a better job of some of those things, but that's not- that's just based on their biased, so it is a difficult area that has to be sorted, because in the end you really want each person working to their full scope, so not feeling aggrieved by that but finding where is the place that the pharmacist can make the most difference to the patients, and maybe in time, the practice can say, "Well, we can actually relieve the nurse of a whole section of what she's doing with diabetes patient, and she can then see more patients and the pharmacist just is signing off on the medication part of that." I think that takes time and I think that will happen eventually.
00:35:18	S1	It will happen, yeah. I think it just need a bit of time, acceptance of the role and just to be a part of the team, to be honest just sharing my opinion- my reviews and my experience, it was same in this hand, you can see a bit of tension in the air, but now, I mean I have been working like two, three years now, and it has been so much easy now what I need to be passed on or what task I need to do, where are my boundaries or what I need to be doing, so yeah, that is- it's just a bit of time, acceptance of the role and it does work out, it does work out. All right, brilliant. So just moving onto the next one, I will just combine them altogether, how easy you find GP pharmacist to approach and communicate? I mean this was- it was a question which I just made out for the organisation lead in England when I was working because she was not a pharmacist, she was- I mean we had an organisation here so if you want to answer this one or whichever way, shall we move on because you are in contact with them, I think you have answered this question, okay, if you want to add something there?
00:36:50	S2	Sorry, I lost you just towards the end of that. Did you want me to comment on that?
00:36:55	S1	I mean yeah, I mean if you want to add, because you already have answered this one, but if you want to add something to it, number 12.
00:37:02	S2	Yes, so yes, so I guess it's my peculiar- because I am a pharmacist and I already knew one of the ones that got employed and I have a lot to

		do with them, so I just think there is an understanding you know, you live and breathe the same issues, so I love communicating with other pharmacists and…
00:37:31	S1	And they are…
00:37:32	S2	And yeah on how that's going.
00:37:34	S1	And they are easy to get the messages from you or from the other side of the team and they are communicating well with you and they have got it, yeah, yeah, just giving the right feedback about the pilot scheme, everything has been working well, yeah.
00:37:51	S2	
00:37:54	S1	
00:37:56		
00:37:57	S1	
00:38:02	S2	
00:38:03	S1	What factor you believe influence this working collaboration and what steps you think should be taken or can be taken to improve this working collaboration?
00:38:17	S2	So do you mean just the general working collaboration within the practice for those people or for me as a lead involved?
00:38:24	S1	Just generally, anyone I mean you think so, for yourself or with the team as well, even if- you know the clerical staff as well who is dealing with the prescriptions or dealing with the queries over the counter, over the reception, all those type of people.
00:38:43	S2	I think with- as organisation funding, we have sort of looked for early signs of maybe acceptance of the role and getting to know them from the receptionist you know, right through to you know, the senior principal GP, and I think that that all worked very well but that has been because of the engagement and investment of the practice manager, because they're sort of the- I guess they're looking for the next cheque from us, the next payment, and they want it to work, so if it all falls apart, the money stops.
00:39:35	S1	All right, all right, yeah.
00:39:36	S2	So I think it's been- it's worked very smoothly, I think we're really happy, and my colleague who is actually the contract manager for them for these projects, actually devised a very easy data capture

		that he has now got represented like a dashboard with sort of growths and refs and things and it looks very- and it's very encouraging for them I think to see that things are actually moving, and you know, they've got it all there in front of them, so I think that's been encouraging.
00:40:19	S1	You think, all right, that's fine. And how you feel, I mean you did mention a few- something about the working collaboration of pharmacist and practice with the community pharmacist, where do you think that stands now at the moment?
00:40:37	S2	Okay. One of the two pilot areas we had to do a little bit of (Background Noises) on that area, because it was- the pharmacist and general practice made the mistake of thinking that they should be doing all the home medicine reviews himself, and so previously the work had been done via the community pharmacy who- they own accredited pharmacist society with their business who provided the home medicine reviews, then- so some- and they weren't impressed, so that feedback was received and the pharmacist, once he understood that we were- because the number of home medicine reviews that can be remunerated for any particular pharmacist is kept, they can't do more than 20 in a month, and so we said you know, we didn't want you to do them, you can do some outside the 20 hours because remunerated by the government, but we wanted you to identify the patients that would benefit the most and coordinate them, help the doctors to you know, get the referral down and get out there, and to work with our community providers to build up a network, so that was remedied, but yeah, that was something that we didn't expect to happen.
00:42:13	S1	
00:42:17	S2	
00:42:19	S1	
00:42:23	S2	Yeah. No, I just think it's important to be to make sure that the community pharmacies role is not undervalued or bypassed and that they are still made aware of the paramount of what is supporting patients, because they're the first one- they see them every month to get their prescriptions and walk- they can just walk in without an appointment, and the community pharmacist do a great supporting role, so I definitely want to manage that relationship.
00:42:59	S1	

00:43:03	S2	Yeah, that particular problem is now solved.
00:43:06	S1	
00:43:13	S2	Yes, sure.
00:43:13	S1	It's about the pharmacist skillset again, So it's more I mean about the ***patient facing role*** about- for the GP pharmacist, I don't know whether they are doing at the moment in the practices out there or not, but how you feel are they really do have a bit more like a patient facing role now in the GP practices like, running clinics or any vaccinations or- I mean doing the long term reviews, something like this?
00:43:53	S2	I think that won't take long to evolve, there's certainly pharmacist that have sufficient expertise and perhaps are doing these things in other settings, I think it is an evolving thing in general practice because I guess most of like the clinics would be a nurses- nurse led, and that would be- so I guess it really come to understand the expertise and the scope of practice of the practice pharmacist to get the most out of what can be offered I think.
00:44:43	S1	But in your- these two pharmacist, are they doing any patient facing role other than the reviews at the moment?
00:44:53	S2	Yes, they do patient facing roles and- so sometimes a doctor will send a patient in directly to the pharmacist to- as for a consultation around their medications, maybe it's around demonstrating device technique or ask for medications or reinforcing complex instructions, just making sure that they've got all that because then the doctor doesn't have to spend that time I guess, if the pharmacist is there, they could be seeing another patient and know that the pharmacist will look at what those medications are and ensure that the patient has sufficient information, resources, printouts, et cetera, to make sure that they can make those medications, so that exists now, yes.
00:45:44	S1	Yeah, definitely. All right, that's fine. And what are your thoughts about the ***prescribing role of the pharmacist***, any reservations you have with yourself or you have any reservations from the GPs or nurses or any other organisation?
00:46:03	S2	It hasn't been actually part of the role as we see it now, I think there is a current- a lot of talk currently about pharmacist about prescribing, and that the society- the pharmaceutical society supports a- like a supervised non-autonomous prescribing, so I guess like, for patient stable on their stat that the patient- that pharmacist

		could write the next repeat prescription sort of level, but not a part of prescribing, so our workforces are ready to take that on by yeah, if there was any more autonomous prescribing it would be specialised and section would probably be only in specialised settings, so ***I guess- I think it would fit quite well but it's- we're not mature enough in that area yet to actually have sensible discussions with practices about that yet, that's not possible yet.***
00:47:21	S1	
00:47:24	S2	It's not possible yet. We do look with envy over UK because we know that you have pharmacist prescribing and it's- but we have a very bristly at times relationship at higher levels between the GP- the paid body and our own pharmacy paid body that plays out in the media on the ground and get along quite reasonably, and there's no pharmacist pretending that they're writing prescriptions, yeah, so that's the conversation that plays out in the media really, but it is an aspiration to have more scope in selected prescribing roles.
00:48:16	S1	I think we have answered the- something about this model about the ***protocols*** you said about organisational level so it is more like set of the standards or specific field where the pharmacist can prescribe, but I think it's in a very initial phase, even the discussion is in a very initial phase at the moment in Australia, am I right?
00:48:41	S2	Yes, yes, and it would require policies and training and credential and regulatory changes, et cetera, so at a lower level, there doesn't need to be perhaps regulatory changes, but there needs to be credentialing because yeah, everyone might want to do this and so it will be quite- it will evolve in little bits I think, so they might- but I think mean they've sort of changed scheduling to allow pharmacist to supply and that's almost like prescribing so like for morning after pill and things like that, and limited to things for treating migraine, but there's sort of limits around what you can supply that for and recording it, so it's semi there in small areas, and whether it just grows a little from there.
00:49:52	S1	Definitely. Because in UK…
00:49:54	S2	Which would mean that would it necessarily help to change the schedule from prescription only if pharmacist could prescribe certain prescription only.
00:50:05	S1	All right, yeah. And in UK it started with the ***supplementary prescribing*** where there was an agreed document type of thing like you mentioned migraines or- there was an agreed documentation

		between pharmacist, patient, and the GP, the GP has done the diagnosis, they have put the patient on some prescription most probably, and then whenever the patient needs the next load of the pill, rather than going to the surgery that yes, she use to go to the pharmacist and they were allowed to issue the prescription based on nothing has changed, so yeah, that was more like a supplementary prescription, yeah, yeah.
00:50:46	S2	That will be exactly how it happened, so limitations, yeah, the doctor has to be involved in the beginning and it has to be like you say, no changes, no red flags, it's really just a repeat and things going well, and I think that we're all moving to that, but it would probably take 50 years but… (Laughter)
00:51:11	S1	You're right in that one. Okay, that's good. All right. Because in UK, it has progressed very quickly to be honest and I think it was a good push from our society and which was supported by the GP federation as well, I think they do realise now that how much workload even just the prescription, the workload that has been taken by the pharmacist in UK now, and they do appreciate it now, they do appreciate it now, yeah. So that's good.
00:51:46	S2	Yeah. That's a nice point to get to.
00:51:49	S1	Yeah, yeah. It was, but I mean the other concern that they understand was in the med insurance because they were a bit concern about the insurance, but now all of the surgeries, they do take the pharmacist, even with the prescribing role in their own insurance because they have got a bit more trust on the system now and which is a really good point- which is a really good positive thing for the pharmacist, but otherwise in terms of insurance for the pharmacist, for the prescribing role was very high for the pharmacist on its own which was a big barrier, but now it has changed so which is a good thing to have.
00:52:31	S2	Okay.
00:52:33	S1	All right. The number 18th one, what are your thoughts about the ***medicine manage skills of the pharmacist***, I think that's the main role which is being done at the moment in Australia, so…
00:52:46	S2	Yeah, yeah. These and they're already credentialed and I guess when the doctors- they're interviewed for the role by the practice, they judge a person on maturity and experience and patient you know, how they approach patients, how they write reports for doctors so there's a load of school, but there's also a lot of people

		that do that sort of well and doctors you know, get offended by the report instead of feeling supportive.
00:53:25	S1	All right, yeah, yeah, yeah.
00:53:29	S2	I think there's room for improvement around that stream like that because it's- when we did research or surveys to try to discover how the GPs prefer to receive the report as in how much it contain, what types of things and how it sit out, blah, blah, there was so many different answers you know, that goes just all over the shop, so it didn't really get changed.
00:53:58	S1	Okay, all right, all right. That's fine.
00:54:02	S2	Sorry, yeah. What one GP likes, the other GP doesn't.
00:54:06	S1	Yes, a big different, all right. That's fine. Okay. Number 19th one, how well your GP pharmacist ***role to link surgery with community pharmacy hospital in any other health related organisations*** and do you think the pharmacist can be in the centre of this communication?
00:54:29	S2	I think that would be really good- it would rely on the pharmacist being full time which our pilots are not, I think that coordinating role where decision are being made about medicines is just- it's underestimated how much improvement could be made if that role is done and done well, so I mean probably the same in the UK but discharge from hospital is such a big gap for things going wrong, the discharge information often doesn't get to the GP before the patient comes back, they often don't even know their patients in hospital, the pharmacies packed three- we use the packs ahead of time and doesn't know that everything's changed and so it would be an ideal area for a pharmacist to communicate, coordinate all the players that the GP has the information, the community pharmacy has the information, the family and the patient have some opportunity to be probably informed and understand any new medicines and changes and they will have to take things and how to manage the discharge clutter of OP wards and things like that.
00:56:06	S1	
00:56:08	S2	Do you have that in UK, everyone comes out of hospital with a packet of oxycodone here.
00:56:13	S1	Is it? All right. Okay. We have got I think in the last few months we are breaking down on opioids, so yeah, even if the hospital is

		initiating any opioid like oxycodone or morphine, it's just for a couple of weeks and then we have to review it and most probably yeah, unless it is something essential, otherwise we're not going to continue it, so- unless there's more like a pharmacist role to start with in reviewing the pain management and getting something, it needs to be continued and we just keep it like an acute item, and then we don't put them all with it so that every time when they order something, we have to review how the things happen in past month, so…
00:57:09	S2	Yes, yeah. I think that's important, they're starting to move on what we're calling opioid stewardship in hospitals, but also so that it's alright for us making decisions about this and that but the patient often doesn't have the clue, because they you know, so involving the patient in understanding the pain, recovery trajectory, what they can expect and what they- how long the tablets are meant for and how they take care and keep and touch and all that sort of stuff, I think that's sort of something that pharmacist could really take on, yeah.
00:57:47	S1	Yeah. I think there's something with pharmacist can differentiate or stand up separately about the nurses, because the nurses, yeah, they have got clinical knowledge that it might be because of their experience, but pharmacist, they have got much more better knowledge medication-wise, so yeah, that's where they can stand up into- in taking this role, yeah.
00:58:13	S2	I think sometimes- so we have new senior roles here, you probably have that too, sometimes the nurses are called in to that to provide what they describe as medication management which is really medication administration, and then just make sure it's put in their head or whatever, but they're not across hey hang on you know, what do you do with these, why are they so bruised for their you know, it's just- they just want to sign chart and give it whereas the pharmacist are like, "Oh, we think of all these other things." and that's different, so when I think managing the administration of a child medicines compared to medication and management.
00:59:05	S1	
00:59:59	S2	
01:00:00	S1	
01:00:02	S2	But it's only funded- the only funding that the pharmacist and general practice can get is by doing or coordinating, generating money from home medicine reviews, that may change, so- but the

		government doesn't pay pharmacist to be there yet, so that's a struggle because there's no way to get them remunerated, so organisations like us getting often paid, give the practice the money to pay the pharmacist, but when we step away, if they can't see that there's enough value to continue that themselves with perhaps what they can generate from home medicine reviews, it's likely to diminish, it's likely to be an eight hour awake role.
01:00:51	S1	Okay. But the funding of the money you are paying is separate to that home medications reviews, isn't it?
01:00:59	S2	It is, it is. So we're paying like, so that they can pay the pharmacist to salary, the pharmacist has another 20 hours of their work where they can draw home medicine reviews if they choose, but one of the pharmacist work in a community pharmacy so she hasn't got time to do them, the other pharmacy doesn't and he does a lot of additional home medicine reviews in his own time.
01:01:25	S1	
01:01:38	S2	
01:01:39	S1	Yeah, all right, this one. So these questions are based from the previous discussion that we have and see how the things are moving out for the future, so- I mean would you think now is the future of the GP pharmacist role in the next one, two years, where you see the things are moving up now?
01:02:00	S2	I think they're moving very rapidly, there's more PH and so there's 31 PHN across Australia, and several of them, probably- there's probably about 20 that now involve in piloting- this is a workforce model to get learnings from it, to find out how does it work, what are the barriers, what are the enablers, et cetera, the society is creating a package they're talking about you know, from the beginning as a career path, so I think over the next- I'd say over the next five years, I think a critical thing would be how is it going to be remunerated if the government can see that this would save them money, they may provide some sort of incentive funding to practices to have practice sessions there has been a sort of a cost benefit analysis done for to try and influence government on this, so we worked out that every dollar invested in the role of the GP pharmacist would transfer to a saving of a $1.56 costs to the health system.
01:03:30	S1	To the health system, all right. I think I will just move to number 25th question I have, based on this discussion, one aspect is the woman giving you the funding for this role, but have you had any discussion

		with the GPs or any GP lead or practice where they can take pharmacist on their own practice budget and see if they want to employ without any funding support?
01:03:58	S2	I think that would be- it has happened, it has happened, and I mean I know of one and there's probably more, and we get GP to say I wanted to start up a practice and they said these are the people I needed on my team, a receptionist, a nurse, a pharmacist and someone to do the accounts, et cetera, so some do things like that, but I think that getting incentive payments is what our practice has just learned to expect and that's probably would be the thing that makes a bigger difference.
01:04:39	S1	All right, brilliant, that's fine. Brilliant, okay. All right. I think we have answered the number 22 because you have said that in the next five to 10 years, the things will change over a period, but if you want to add something to that or should we move onto the number 23rd?
01:04:58	S2	Mm-hmm.
01:04:59	S1	Okay. And any feedback from the patient about the GP pharmacist role where you see how the patient has been giving the feedback about the pharmacist working in the GP practice?
01:05:11	S2	Yeah. They use like just a very simple patient satisfaction survey like a little- like at a scale of one to five to measure level of satisfaction or relevance or something, and so it's quite basic but they give them the form and they just put it in a box in the reception on their way out, and that- so their score is really high, it's like, 4.9 out of five on average or something like that at the last- on the last survey, so they said there has been- I mean possibly people who feel lows you know, people who are satisfied and the ones who are not- don't bother, so it's not terribly rigorous, that's an indicator, and I guess there's other ways that they could give feedback to the practice if they were unhappy and that hasn't happened.
01:06:10	S1	It hasn't happened, all right, that's good, that's good. All right. Okay. (Pause) Number 25th we have done, so we will just move onto the- I think number 26th again is something related to the employing of the GP pharmacist so we have these question again, I mean if I'm skipping any questions which you want to answer, just let me know, yeah, because I think we have those two questions, yeah, yeah.
01:06:40	S2	That's all right, that's fine.

01:06:42	S1	Yeah, all right. How well do you believe GP pharmacies has evolved impacting on overall healthcare provisions, I mean do you believe the initial mentor or training, all the mental strength of the pharmacist when they started this role and with this thing now, have they strengthen themselves up?
01:07:09	S2	So they've been going only a little bit over 12 months, so it's a bit hard to judge on overall health care provisions, I think it's a bit- it's hard to measure with a small- two pharmacist in two separate practices.
01:07:38	S1	But do you feel that pharmacist on the round, they are feeling more comfortable now working and going there in the practices?
01:07:46	S2	Of course, yes.
01:07:47	S1	Yeah, yeah, yeah. Definitely more comfortable, yeah, that's good, all right. And what do you think, I mean do you think that on the round, how the feedback is coming or the workload, do you feel that it should be still carry on with the full time or should be still as a part time or full time role?
01:08:06	S2	Okay. Well it's being funded as a part time, so I mean point 5 EFTS we call it or 20 hours instead of 40, and I think that once the role evolves and moves into things like coordination and other systems help that, so some of the things- systems things need to be changed to enable full benefit of the role, and then I think it would need to be a full time role where every day you know that there was a time that a patient could see a pharmacist or that a doctor could ask a pharmacist to stay for advice about a clinical medication decisions or follow up discharge or create you know, a presentation to deal with clinical conundrum or whatever, I think it needs to be a full important full time role.
01:09:16	S1	Full time role, yeah, yeah. No, that's brilliant, that's fine. Okay. And I mean based on your own overall experience of any specific aspects of training, would you like to see for the pharmacist to improve their competency as GP pharmacist?
01:09:34	S2	Yeah. I think- this is a hard one, I think I've looked at my couple of training practices that have been devised by the pharmaceutical society, and I think you can do that sort of training but nothing will substitute actually working in a GP practice, because you just really needed experience, so I think it is something that the training is part of it but I think it really needs opportunity for clinical placement of the role so that you don't just go in cold, so you might have done a

		whole lot of training about general practice, and then in reality they're all different, they all go about things slightly differently, and they are private businesses here and there so they've got a bottom line, they've had expectations, I think the opportunity to experience working in a general practice alongside the theory training will be a very important- being and that's probably had put in place into, you've got more experienced pharmacist or any in places to be mentors.
01:10:59	S1	Okay, all right, all right. That's fine, that's fine. All right. Where we are now? Okay, I will just move onto the- I think we are just finalising, we are just summarising it at now, so last few questions, so how are you going to comment on the GP pharmacist role from the success or the failure of this role just summarising any barrier and facilitators in your own opinion, just summarising the whole discussion?
01:11:37	S2	Sorry, I don't quite understand what you're saying, I'm not sure…
01:11:40	S1	Sorry, sorry. I mean just summarising the whole discussion Christine, if you just want to highlight a few bullet point I put in just to say- I mean what should I say, comment on the success and the failure or any bullet points how the role can be successful and I mean any specific barriers or facilitators for this role, any bullet points, either like a cost factor.
01:12:17	S2	The cost factor is critical I think, that's a barrier, that's the biggest barrier in Australia for a pharmacist working in general practice because there is no pathway for remuneration on the role per se, it's only the home medicine home review that can attract some remuneration from the government for that, but you don't want to just make that just about that, there's so many other things that's just…
01:12:48	S1	So if I just say that this is the biggest barrier at the moment, yeah?
01:12:53	S2	Yeah. It is, there's no formal remuneration pathway.
01:12:57	S1	And what would you think is the biggest facilitator at the moment like supporting…?
01:13:02	S2	The biggest facilitator at the moment is I think the experience of the medication expertise that the pharmacist brings to the team.
01:13:18	S1	

01:13:21	S2	And I think on the barrier side is that it's generally quite a lack of knowledge by other health professionals of what a pharmacist does, especially conceptualising and non-dispensing role for pharmacist, so a lot of nurses, they're all- even doctors just can't quite get their head around it, this isn't a dispensing role and then- so they just think, "Oh, what do you do then?"
01:13:54	S1	
01:13:55	S2	So I think that's a barrier that the role is not well understood what a pharmacist, so we just know what we do and what we can do, so we're a bit stunned when people also don't know, that's silly of us.
01:14:14	S1	Yeah, yeah, yeah. I think with the time runs, we have got a bit more clarification on the role specifications based on what surgery needs and yeah, you can highlight this thing a bit more openly that this is my role and this is how I can integrate into the scheme, but yeah, it will take some time to…
01:14:34	S2	Yes, and I think that will be important going forward and then how- when individuals bring within that specified role is you know, more or less of a benefit for each practice in individuals but to understand the role and why you want it is paramount.
01:14:56	S1	Yeah, brilliant, all right. That's fine. Christine, just a last thing, based on the research, I mean quite a few research articles have been published in UK and I think there are quite a few coming up in Australia as well about this role, any specific aspect you feel that in any further research that should be done on this- on GP pharmacist role, any specific aspect of the research?
01:15:29	S2	Well I guess trying to demonstrate the benefit to patients really, it would be good if we could do that and it's quite difficult because a lot of the funding, all that doesn't long enough to see how it makes a difference over time once relationships are established, and even when you're looking at reducing polypharmacy, you need quite a length of time for any general practice setting, I think it's easier in an aged care facility, but in general practice is all comers, the pharmacist who need to deal with what presents and so it's you know, it's a lot of work, so in our funding, there's just not sufficient money to get a whole heap of that and analyse it, it's hasn't been funded by that, so you're trying to use these sort of surrogate like as a measure of things that don't fit the government need for how much money did we save.

01:16:40	S1	All right, yeah, yeah, yeah. I think one of the other thing which I have found based on Australia is the- getting the views from the GPs about this role, and I'm having a bit of difficulty because I am away, so it's a bit difficult to get engaged with the GPs out there, but even in the articles where we need a bit more input from the GPs how the things have been working in Australia about this role, this is my personal opinion, yeah, but yeah, I think the more feedback we get from the GPs about this role, the better research can be done and that can (Overlapping Conversation) the pharmacist, yeah, yeah.
01:17:26	S2	So did you get any response from our GPs?
01:17:29	S1	To be honest not yet directly, I think one of your pharmacist say she has a Saturday, the practice will give me the written response so I think they are having an inspection soon, some type of inspection, so…
01:17:43	S2	Okay, yeah. Looks like having their practice accreditation, everything stops doing practices to get their accreditation (Overlapping Conversation) they can't get anything in. Okay. So that would be Karen, and does Karen have an interview with you?
01:18:01	S1	I think I said that either we can do the interview, but if the whole practice has given me the written response, I said to Karen that if you can give me the written response as well then I can just keep it on the same- the way the methodology will remain the same, yeah, yeah, so I can integrate them (Overlapping Conversation) yeah, yeah, but…
01:18:22	S2	That's good. All right Noshad, I do wish you well with putting all this together, I don't envy you dealing with all these interview data.
01:18:32	S1	Yeah, yeah. That's fine, thanks Christine and it has been really helpful, if you want to add anything else later, just let me know and I can have another sessions, but I think we have done quite a good covering and I'm really grateful for your time, it's a big help.
01:18:48	S2	Okay. When you're in Australia drop me an email just in case there is an opportunity just to catch up for a coffee or something.
01:18:57	S1	Yeah, yeah, definitely. I'm not sure where I'm going, but it's somewhere in Melbourne, but yeah, I will give you an email and if if able we can have a sit down definitely, it will be really useful, yeah, yeah.
01:19:10	S2	Wonderful, okay, thank you.

01:19:11	S1	Thanks Christine, thanks for your time.
01:19:13	S2	Okay, thank you.
01:19:14	S1	Thanks a lot, take care.
01:19:15	S2	Bye-bye.
01:19:16	S1	Bye-bye, bye.

[01.19.21]

[End of Audio]

Duration 79 minutes and 21 seconds

Appendix 18
Interview with Academia1/Australia

S1 Speaker One

S2 Speaker Two

Timecode	Speaker	Transcript
00:00:01	S1	I'm ready.
00:00:07	S2	
00:00:38	S1	
00:00:41	S2	
00:00:59	S1	
00:01:03	S2	
00:01:05	S1	
00:01:07	S2	

00:01:13	S1	So I'm Lautitia Hetting. I'm a pharmacist in Australia. I've worked in quite a number of settings in Australia as well as originally in South Africa before coming to Australia but I've been here now for about 21 years. So I've worked in various clinical settings as well as more policy settings as well. And before I joined Galtas Health, I worked as an academic. So I've got a bit of academic background as well. And when I was in academic, we also did some research with one of our students to the role of GP pharmacist in Australia and I think that's how you kind of about our paper. Currently, I'm working as a clinical researcher for Queens and Health at Goldcoasts.
00:02:12	S2	The first one we started is about the perception and challenges about the GP pharmacist role from your research or from your experience, how you can see it. So what are your views about general practice framework in Australia? And do you believe there is any specific gaps that can be seen in Australia?
00:03:57	S1	I mean working in a hospital setting here, certainly we identify that many patients come to hospital when they could actually go to their GP. And for some GP practices, it's quite challenging to get an appointment in Australia and they're just quit busy and patients often when they need to see a doctor urgently, they'd rather just come to the emergency department with actually an issue that could have been dealt with by one of the primary healthcare so specifically in Australia, the model is quite challenging in that. I mean obviously it's funded by the government because most, or some of the GP's practices they are pretty full. Some of the GP practices, they do private funding so on top of the government funding that they charge an additional feel even though these practices are sometimes pretty difficult to get into. So certainly I think in terms of gaps, one of the main gaps or one of the main challenges is the fact that it can be quite difficult to get into a good GP. And yeah, that then flows on to the public hospitals being flooded and we have issues sometimes with availability of this because people come to emergency department when they could really be looked after by someone else.
00:05:39	S2	And then can you see realistic GP appointment it's the same over here in England as well. And that's where the role of the GP comes. Do you feel the same thing? Or do you feel that gap the GP pharmacist can be integrated into the system?
00:06:06	S1	Definitely, I think if I mean there's already nurses integrated into marginal practices. And they do have some other and like health workers as well. Certainly a pharmacist at the GP practice who do a

		number of things and I suppose some of the lighter bits specifically if I look at what pharmacists do in our emergency department setting when patients come in, they can do that original medication reviews, when they come and reconciliation and so you know just as a start that's already some work that they can take from the GP's. And it certainly can get involved with helping patients with chronic conditions as well in terms of their medication and management so certainly I think it can take a load of GP's to make them available to focus on other aspects and then also provide better and more accurate information about patients medication and also work on preventing medication related problem because that's what we do as pharmacists. We are the experts in medication and so it's our role to look at medication related issues.
00:07:32	S2	It's fine. The initial time we give to the patient to report to the hospital the GP pharmacist can do the medication or the initial check up just to avoid patient going to the hospital. Yes, that's fine. So what barriers to facilitate, what opportunities do you think pharmacist, what do pharmacists adapting to slowly? What will be the barriers anticipated for the role?
00:08:06	S1	Yes so our project sort of focused on that quite a lot. So as their man, let's focus on facilitators first. I think facilitators, one of the aspects is that our professional organisation, the pharmaceutical society supports the role of GP pharmacist and has developed a framework around that as well. So that's definitely a facilitator. And one of the other facilitator is that we in Australia have home medicine reviews. And so the government aids the pharmacists to do medication reviews at the patient's home. And so most of the GP pharmacists also do a medicine review so that gives them that funding opportunity to get funding from the government to go to patient's homes to do this. But then in the same sense, the main barrier of it here is that there is a specific funding for pharmacists to be GP pharmacists and that's why most of them use the HMR model for their funding and very few GP practices actually pay the pharmacists. They give funding from other sources to sponsor the GP pharmacists except for there are a few trials where they got specific money to pay the pharmacist to be in the GP practices so that certainly a barrier the fact that there's no government funding for that. And at the moment, there's also, and our ability for pharmacists to claim from the government so in Australia the doctors can claim through Medicare for their items. Pharmacies can't do that. The only items that pharmacists can basically claim for

		doing work that's not related to a community pharmacy is if they do a medication review and like I said a lot of GP pharmacists use that model to find and to work in GP practices. So certainly the barrier is the fact that there is no government funding for that sort of role, directive government funding and whereas the other barrier is the fact that our main pharmacy ownership organisation which is the pharmacy guild, they do not really support GP pharmacists so they would rather let the community pharmacists sort of work closely with GP practices. And in their opinion, if you are going to have a pharmacist working in a GP practice, that should be the community pharmacist so because they're basically just looking after their own but that means that you're not giving other pharmacists the opportunity to take on this speciality role.
00:11:10	S2	Just a little key points from this. So basically at the moment, the GP's are working for patients for home medication reviews to the GP pharmacists or community pharmacist?
00:11:24	S1	Neither. It's unaccredited pharmacist so you need to have an additional qualification to do medication reviews. And so you can be a community pharmacist or you can be, you don't have to be a community pharmacist to do those medication reviews but you must have the additional credentialing to do this. So what I tend to do is get pharmacist who do have this additional credentialing to work as the GP pharmacist because that means that they can use the home medicine review funding mechanism to pay them.
00:12:05	S2	And this funding is for the practice?
00:12:12	S1	No, the funding, yeah, some of the funding goes to the practice and some goes to the pharmacist so some of the funding so if the GP refer someone, they give money. And then when the pharmacist do get money for to go and do the report and all of that so the government post both of them separately so that's why they use this model to fund GP pharmacists.
00:12:41	S2	GP pharmacists but....
00:12:41	S1	That is actually a model intended for something else.
00:12:46	S2	But to play this role and you performed this and especially you don't need to be a GP pharmacist if I am right.
00:12:55	S1	Say it again.

00:12:56	S2	If I'm right, to perform this role or to do the medication review, you don't need to be specifically a GP pharmacist.
00:13:05	S1	Yes. No, you don't. You can be an independent accredited pharmacist. You can be, as long as you got this credential, you can go out and you've got to refer or you don't have to be a GP pharmacist.
00:13:17	S2	That's fine. And there's the open addition Pharmacy Guild so basically they are backing more like community pharmacists to go and perform this role.
00:13:30	S1	Yes, yes. So they're not supporting GP pharmacists because in their opinion the community pharmacist is already fulfilling that role. And in their opinion they say if there is scope to have a pharmacist in a GP practice then that pharmacist should be the same as the community pharmacist. So maybe the community farmer just works in the community pharmacy three days a week and go and work in the GP practice two days a week. So they don't acknowledge the fact that maybe you need the independent pharmacist that can working in that practice, that can work with a lot of community pharmacist not only one you know. So I think that's the main barrier for implementation in Australia is the fact that the guild is, because the reason they're not supporting that model is because they don't want the government to pay money for other pharmacist. And they want all the money to go through to community pharmacies.
00:14:27	S2	Community pharmacies, okay. But in addition with the medication reviews with GP pharmacist can play the role as well like when...
00:14:38	S1	Exactly.
00:14:38	S2	…when running.
00:14:48	S1	Yeah so a pharmacist working in a GP practice like you said they should have a lot of roles not only bring medication reviews which they actually need to go to the patients home to get the money from the government. They can do lots of other things like developing protocols, doing some audits, a lot of other things but there is a government, the government pays for them to do it.
00:15:15	S2	Is there any organisation or any settings who is supporting this role in Australia?
00:15:21	S1	Yeah so like I said before we've got a number of professional organisations. Our main organisation and that looks after

		pharmacist, the Pharmaceutical Society of Australia. They support the role. The Pharmacy Guild which basically looks just after the community pharmacy owners. They're not really support the role but PSA's and I think our hospital pharmacy association is also in support of the role.
00:15:52	S2	Alright. That's fine. Based on your research and work on this role, is there any competitive, have you got any comparison, how you compare this healthcare system with the other countries like Canada, New Zealand or England as well where this role is a bit more established than Australia?
00:16:15	S1	We looked into some of the literature. We didn't directly compare but I mean certainly we are aware of the fact that there's a much better model already in existence in England. So Australia is sort of like I think piggy bagging on that model to try and get our model established. So we certainly looked into what's happening internationally and we're aware that Australia is lagging behind.
00:16:45	S2	That's fine. And do you believe there is need of more research in this, and why do you think this is more important to have more regarding this role in Australia?
00:16:58	S1	I think definitely. I think there's more research needed in terms of looking at not only the barriers and facilitators and all of that but then also specifically looking at what GP pharmacists are doing so our research looked at that a little bit so what tasks are they actually doing in the practice. So there's more research needed because that can help inform whether there are special training required for pharmacist working in GP practices and also they could have been informed potential future funding models so certainly I think there's a lot of research needed, yeah.
00:17:41	S2	Alright. That's fine. That's the first section, I mean based on your experience of how thing are working in Australia, how there will be few questions about the future of GP pharmacists in Australia. So how you see the future, how you see the present system and will you see the future of the GP pharmacist role in the next 5 to 10 years while the things are developing out there.
00:18:08	S1	I think it;s really an important role in Australia and I think all of the things that I've talked about before the professional organisations need to keep pushing for that. And specifically also to provide another career option for pharmacist especially some of the younger pharmacist especially some of the younger pharmacists who come

		out of university are quite frustrated with working in community pharmacies. Not everybody likes that sort of business model and so certainly that would give them another option. And so I think it's a nice, it could be a nice career path and definitely yeah, probably need to be a bigger push to get it up and running and Australia.
00:18:59	S2	And do you see government organisations they are backing this role any positive feedback from the government organisation about this?
00:19:10	S1	Government I'm not so sure. But some of the general practitioner organisations are very positive about it.
00:19:20	S2	Have you contacted any GP or any division in the who has been working with the GP pharmacists and any feedback from them about this role?
00:19:30	S1	I certainly in our previous research we talked to a lot of them and I know a few pharmacists who work in GP practices and they are very, I mean on for them it's a learning curve as well and they have different experiences depending on which practice they're working on but generally it's very professionally rewarding for them because I mean obviously they do have access to a lot more information about patients then they would otherwise not have access. And the feedback that I got from them is a lot of them said that once I started to work at the practice not only the GP's but also some of the other health professionals at the practice like the nurses really appreciate the value of pharmacists whereas previously they didn't really quite realise what clinical pharmacists do have and you know how we can help with a range of aspects in a practice not clinical as well as protocol development and other areas as well.
00:20:38	S2	And what about the GP's feedback about, have you received any GP's feedback?
00:20:45	S1	Well I've been to conferences where they talked and very positive about it. I mean obviously the GP's are the ones that actually are quite proactive and they're the champions because the other ones don't really have a pharmacist working in the practice so they love it.
00:21:03	S2	Positive coming feedback from this side. That's good. And I mean in your research or in your experience, how the patient sees, how they take this role I mean dealing with the GP pharmacist and the general practice. Any experience about the patient feedback?
00:21:24	S1	No, we didn't talk to patients at all. Some of the other pharmacists say who do work in this area have said once they get past that initial

		hurdle of explaining to the patients their role, the patients really do evaluate especially the ones that are looking after chronic patients and they say once they've sort of established, their practice tend to come to them first before they, because they realise seeing the pharmacist first will then help the GP to make better informed decisions. So yeah, once I think they got past that initial questioning about what's the pharmacist going to do and patients who understand the value.
00:22:20	S2	Yah, the initial hurdle. I understand. That's my own personal experience as well because I have been working now for about four years now so yeah the initial [inaudible 00:22:30] then they were expecting GP's or nurses to come across but now they really see many any issues and then follow up with the GP so yeah. That's going to be a work flow.
00:22:49	S1	Yes that workflow also for the other practice staff to understand how the workflow needs to be.
00:22:58	S2	Yeah, definitely. And just summarising all the questions now so it might be you have already answered this question but just to summarise it up. So do you want to comment now how would you comment on the success and failure of the GP pharmacist role in Australia?
00:23:20	S1	I mean it's hard because like I say they're currently doing some trials and certainly there are some research coming out to show it's quite positive so it's all sort of like pointing in the right direction. The main hurdle is really to sort of try and get some sort of funding mechanism because we really need to make sure these dedicated funding for pharmacists to provide that service. Some of the GP practices at the moment funded from the practice but my understanding is most of them actually use some medicine review money to support that role so they really need to look at how to sponsor pharmacist being in practices and sort of work on a model where depending on the size of the practice that would determine the allocation of the money.
00:24:20	S2	One point was out here but you know the prescribing role of the pharmacist working as a presciber. What's your views on the prescribing role of the pharmacist?
00:24:32	S1	I think in collaboration with other health professionals like with the GP I think there can be some protocols around that. But personally I'm a bit hesitant to give community pharmacists prescribing rights because I think that's better, it's a dangerous area because we

		always say you need to separate dispensing from prescribing. And moving that into that area we'll start to cross the boundaries. So I think certainly certain settings like for example in the emergency department where there are some models with pharmacists prescribing specific medication within protocols and within a medical team. Yeah so to me that's, those sorts of models what they really should be looking at. I'm not very, I'm a little bit hesitant to support pharmacists and community pharmacists starting to prescribe antibiotics and other medication because we're not trained to be, to do diagnosis.
00:26:01	S2	In England, because loads of pharmacists are working to prescribe [inaudible 00:26:08] but still you need the different doctors once the protocol Is set up then it can be followed by the GP pharmacists.
00:26:22	S1	Yes and I think you know that that's a model that can work because I'm working with the healthcare team. And even with continuing patients' medication to chronic medication they're still as a GP pharmacists you're still working within that team. But compared to a community pharmacists that would work in isolation.
00:26:43	S2	Isolation, yeah. As the GP pharmacists it needs more sense to have the medication. That's fine. So just coming to the training, based on your role and experience, what training would you like to see for the pharmacists and through competency as a GP pharmacist...?
00:27:08	S1	I think, yeah I mean obviously I'm not, I'm probably not informed enough to make some decisions around that. But in Australia I think the model that we already have to train pharmacists to become, to do medication reviews so that whole credentialing process is quite robust and that would be adapted or training of GP pharmacists. I don't think any new graduate might have, they might have the clinical skills but they may not have the communication and the system skills to moving to that role. So I do think it needs additional credentialing.
00:27:55	S2	It's more like that the overall training but there should be training that should be present out there in addition to the home medication review.
00:28:07	S1	Yeah so it could be fairly similar to that but I certainly think it needs to be additional training after the internship.

00:28:21	S2	Alright just last question, you have probably answered this one but any specific thing in Australia or international, any specific research expect on the GP pharmacist role?
00:28:43	S1	I think I sort of already covered so I think there's quite a number of aspects that could be looked at in terms of setting up to various facilitators and all of that but then also looking at the potential value of the pharmacy services.
00:29:04	S2	That's fine. Any other comments, any other addition you might have in this questionnaire but from your own experience if you want to add any other comments about this study or about this role or comparison between England and Australia?
00:29:19	S1	No, I don't have any other comments. I think we've covered everything.
00:29:24	S2	That's fine. Thanks. It has been really helpful. I'm sure comparing it would be debatable from England it would be really helpful so thank you for your time. I will transcribe this interview and if you want a copy, I can send you a copy of this interview if you want to add something to it or if you want to recommend, you can always let me know. And I can change it and adjust it.
00:30:02	S1	I don't think I need to look at the transcript but what I would appreciate if once you sort of write it all up and you submit for publication if you can just keep me informed once you've got a paper.
00:30:19	S2	Yeah, definitely.
00:30:19	S1	I would like to get that.
00:30:23	S2	I will definitely let you know once I have the completed this before submitting or before finalising, I will let you know and you can have a look into it with your views and if anything, needs changing.
00:30:40	S1	Okay.
00:30:41	S2	Okay. Thanks Dr, Laetitita. I'm really grateful for your time and lets hope for the best.
00:30:48	S1	Okay. All the best with your research.
00:30:53	S2	Thank you. Yeah.
00:30:55	S1	Thank you.

00:30:55	S2	I'm in the, almost on the later stage and just finishing the final data and that will be used from Australia and just writing the analysis now.
00:31:09	S1	Sounds good.
00:31:11	S2	Thank you. Thank you, Dr. Letititia.
00:31:12	S1	Thank you.

[00.31.17]

[End of Audio]

Duration 31 minutes and 17 seconds

Appendix 19
Interview with Academia2/Australia

Speaker key

S1 Speaker One

S2 Speaker Two

Timecode	Speaker	Transcript
00:00:04	S1	
00:00:42	S2	

00:00:47	S1	
00:00:51	S2	
00:01:31	S1	
00:01:40	S2	
00:01:43	S1	
00:01:50		
00:01:51	S1	
00:02:00	S2	
00:02:04	S1	If you feel, there are two portions or two sections on the questionnaire. One is about protection and challenges and the road of GP pharmacist. We would start with the first section that's protection and challenges. And it's more about how the perceptions or you know still about the GP pharmacist role and challenging case about this newly developed role, coming up in the family care health program so just starting with the first question. So what is your view about the general practice structure in Australia? Are there any gaps presented in that structure and the composed…?
00:02:47	S2	Oops. Just be careful. I think we're losing the connection?
00:02:50	S1	Is it? Can you hear me properly now?
00:02:57	S2	Okay. If there's a problem, I'll put my hand up and you're back now. So let's talk before we lose the connection. So I was fortunate to be working in Queensland when the first person, the first pharmacist was doing his PhD and investigating pharmacists in GP practice and that was Doctor Chris Freeman. So that was around about 2012, 2013. And it was very exciting to hear from Chris about what he did and how he managed to really revolutionise practice in Australia. He was I think the first GP pharmacist. So from their point of view, that was very positive. He seem to have, he seemed to play an extremely relevant role and help the doctors in many ways and also help the patients about a month or six weeks ago, I was invited to be an examiner on a panel for a nurse practitioner who was about to qualify, well a candidate who was about to qualify as a nurse practitioner specifically in a pain clinic that was focusing on people who had, I think it was an orthopaedic clinic. So she was working under a specialist who did a lot of operations, back operations and knee replacements and all those things and she was then also

		coming into a role in general practice. And interestingly, they didn't have a pharmacist in that particular practice and that was one of the discussion points that came up as how valuable a pharmacist, even a part time pharmacist would be to give the nurse practitioner some guidance on some of the medicines so that's just a short, my perception of, to answer that question. No clear answer about gaps but general statement that it will be useful
00:05:00	S1	Alright, that's fine. That's good. So it was around about 2012 when the first GP pharmacist came. It was this year so it was only about 2012 when the first GP pharmacist came about.
00:05:17	S2	Roughly about that. I don't know exactly but that when I was working at Queensland and I know he was busy doing his PhD around about that time.
00:05:27	S1	Alright. Fine, that's good. So I think you answered the second question as well. It was about the perception of GP pharmacist role and how the GP pharmacist role can be bridging the gap in the healthcare system. I mean based on your own experience from education, education wide, do you feel the importance of, this role can be important in the demographic…? Importance / expectations of GP pharmacist role / role specifications
00:05:53	S2	I think there's a very valuable role. It sort of has two sides to it. One of it is assisting the GP's with their continuing professional development and they continue education. The other role is directly associated with the patients so I suppose you could say that even a third role is by taking on some of the things that doctors and nurses currently do, pharmacists can free up those other health professionals to specialise more in the things they do specifically and pharmacists can start working more and more with medications and optimising the use of medications.
00:06:40	S1	That's fine. I mean what barriers facilitated or opportunities that GP pharmacists adapt in this role.
00:06:50	S2	Well there are quite a lot of barriers and unfortunately there is sometimes a perception, can I call it a turf? Would that make sense where the professions all seem to wanting to protect their own turf if I can use that word so I would see that as a barrier and we need to

		kind of break down those barriers to actually show the benefits of pharmacists being able to expand their roles. And one of the phrases that they use in Australia at the moment is, it's not so much about expanding the role of the pharmacists because working with medicine is something we always have done but it's about pharmacists practicing to their full scope of practice. That's the phrase that they're using.
00:07:48	S1	So when they say to set up, is it more with the GP or any other healthcare property?
00:07:57	S2	I think putting pharmacists into GP practice has a lot of benefits because then patients experience a holistic care especially if you got pharmacists, nurse and GP. The turf war often happens when pharmacists are not incorporated into GP practice because then they start doing other services like vaccination, weight management, et cetera, et cetera. They do that within community pharmacy and sometimes that is then seen as direct competition to services that GP's also provide.
00:08:40	S1	How do you feel the financial side as a barrier in Australia?
00:08:47	S2	I'm not, actually I can't comment on how pharmacists get paid so yeah, probably wouldn't help if I were to comment on it because I don't actually understand how the GP's, how the pharmacists and GP's get paid. I do want to mention though just in case you're not aware of it, there is another system in place in Australia called home medication reviews.
00:09:18	S1	Yeah, I've heard of them.
00:09:19	S2	Okay so sometimes they had done inpatient's homes and sometimes these medication reviews are done in what we call residential age care facilities. And both of them have to be authorised by a doctor but both of them are actually paid for by the government. So that's another way where if a pharmacist is in a GP practice that's another role that they can be playing and a service that they can be providing through the GP practice. However the pharmacy profession also wants to enhance the roles of pharmacists so although there's a lot of support for GP's, for pharmacists in GP practice, community pharmacists are also conscious that they need to be viable and sustainable. They also need to provide these services directly from community pharmacies.
00:10:30	S1	That's fine. That's good. Thanks. Based on your own experience from education wise or research wise how do you compare the

		healthcare system of other countries? How do you compare it with Australia from England or Canada or New Zealand? And did it feel there is difference in the role of how the GP pharmacists are working in these countries? If you have an experience on that.
00:11:06	S2	Well the only experience I have as a I say is at conferences in Australia where we, and reading published papers and knowing some of the to work, pharmacist in GP practice so although I lived pharmacist in New Zealand, when I was living there, there was no pharmacist in a GP practice and I'm afraid I don't know whether they have them yet or not. It does seem to be picking up quite a lot in certain areas in Australia and in certain types of practices. Often it's on a part-time basis. And I also see that quite a few of the practices will be having nurse practitioners doing, well in some ways, they do similar sort of roles but they focus more on patient care as a nurse would. Whereas the GP's will be looking specifically at drug interactions, optimising medications. (FUTURE)
00:12:22	S1	That's fine. That's good. And why do you believe that certain area is important at the moment?
00:12:30	S2	Well anything that is new needs to be monitored so there's definitely evaluation has to happen. And when something is found to be good, it also provides opportunities to research how it can be modified and actually expanded into other areas. (Research)
00:12:52	S1	Yeah, I mean beginning, we see in England it is a very promising role at the moment because of the NHS policy, the thing about political and loads of [inaudible 00:13:07].
00:13:14	S2	I would imagine that in a system like England where you have the NHS because that's very different to Australia where a lot of it is private. I could see it working very well. And it's not that it doesn't work well here. It's just the different financial model. It's a different economic model.
00:13:36	S1	Thanks. So that's the first section. And second section is more about the future of the GP pharmacist. I mean based on your experience on papers or when you have shared the view or somebody had shared the views what the GP pharmacists, what do you see GP pharmacist's role in Australia and if you want to just elaborate again about something for the people.
00:14:06	S2	Sure. I think that this is one of those things that might be specific for certain individuals. It's definitely an area of specialisation. I don't think we should start training all of our undergraduates to become

		GP pharmacists because I think it's something that certain people are very well suited to and can actually really build their own strength and develop very good knowledge in specific areas such as pathology, results and patient counselling so yeah. I would see the sort of individualised potential.
00:14:52	S1	Alright, yeah. Can you hear me now?
00:15:00	S2	Just, yeah you came back.
00:15:04	S1	Are you finding developments for the role in this structure at the moment in Australia? (Government role)
00:15:12	S2	In Australia, I haven't heard so much about the government's role because that all depends on, it depends very much on the spokespeople so basically the organisations, the group as in pharmacists and the organisation that represents medical doctors. And they will argue for whoever should be remunerated for the roles that they're doing so that's how the government seems to get involved because there's only a certain amount of money and the government has to use that as best, for the best of the country. And as I understand at the moment, the pharmacists in GP practice seems to be more of a private arrangement.
00:16:11	S1	That is more from on the structure of the general practice rather than in the support from the government at the moment.
00:16:22	S2	That's my understanding, yes, yup.
00:16:26	S1	Alright, that's good. And I mean from the patient perspective, how do you see the role of GP pharmacist in the practice from a patient perspective?
00:16:39	S2	From a patient's perspective, am I looking at question eight?
00:16:46	S1	Yes.
00:16:48	S2	So that's the patient's feedback. So if you look into collect feedback, I suppose it would just be in the usual way when you do surveys or questionnaires or interviews and at times just talking to people without formal evaluation is a good way to go. And then there's the adult thing when something is working well, patients will come back and they will give positive feedback. (No data)
00:17:18	S1	That's good. Alright. This might be a bit repeating the questions but yeah, how would you recommend on this structure of GP pharmacist role?

00:17:32	S2	Well, I'm only going to draw on one example or two examples here that I've mentioned before so I know that because Dr. Chris Freeman is getting very busy with other things that he's involved in. He's actually being able to expand his role, or maybe I shouldn't say expand his role but he's actually employed all the practices employed another pharmacist who can help him as he is very busy as he's currently the president of the Pharmaceutical Society. So that's a very good sign that other pharmacists are able to step into that role and similarly, I saw how well the nurse practitioner was prepared and had specialised in the area that she worked in, in the practice was the orthopaedic surgeon. She had a very good knowledge of the patient's, their problem, their nursing and their medications.
00:18:39	S1	And based on your role or experience, what training what you like to see for the pharmacist or competency as GP pharmacist?
00:18:48	S2	Well I think our undergraduate training gives them a fairly good basic training including looking at pathology and counselling and what we call quality use of medicine or optimising medicines. Much of that experience actually occurs in practice so we can only provide to a certain level but it's only once they get out in practice and actually get challenged in the workplace to see what they can do. And also to see whether their knowledge is up to standard when compared to the knowledge of the other people practicing in a GP practice including the doctors and the nurses who are there.
00:19:48	S1	In the in my knowledge from England let's take a couple of training modules of the new structure made for the GP pharmacist role by opinion. Have you seen some type of expert training module, the structure of the GP pharmacist in Australia?
00:20:13	S2	Well, whether they're specifically for GP pharmacists I'm not sure but I know that the Pharmaceutical Society of Australia as well as two other organisations that specifically focus on professional development so including The Pharmacy Guild and one other organisation, there is a lot of very high standard training sort of self-learning if I can use that word and modules that pharmacist can complete. Also to become what we call an accredited pharmacist so that's a person who does home medication reviews and also there's medication reviews in aged care facilities, you have to go through quite a rigorous extra training program where you submit a lot of case studies for peer review so that would combine to, it will prove competency.

00:21:27	S1	Just a couple of questions more. So based on your own experience how GP pharmacist role change the overall perception about pharmacist in Australia at the moment it's a new one for me?
00:21:40	S2	I think definitely. I think whenever there are new innovations in the profession, its members get very excited about new possibilities and other places where they could practice and people seem very keen to develop interprofessional and multidisciplinary approaches to working with patients so yes, I think it's very positive.
00:22:08	S1	And another repetitive question but can you briefly describe any potential you would like to see in GP pharmacists and how it will impact to improve the quality of the structure of the GP pharmacist role? Any specific area where you want the research to be carried on for the GP pharmacist role?
00:22:29	S2	I would like to see how positive results or the sharing of positive results and experiences can actually impact and encourage people to explore more interprofessional work because there is much good that could be done for the benefit of patients when GP's and pharmacists work together.
00:22:58	S1	Because I see from my own experience at the moment for GP nurses and pharmacist because what's going on England at the moment, there was a bit of scary thing that came at the start from the role of the nurses. But now there is much differentiation that has been done from the nurse. Everything seems to be working in available scheme at the moment in England so yeah technically….
00:23:35	S2	So maybe just to add to that would be what you've just mentioned, the differentiations so that one is quite clear what are the roles so that that expertise is built up and yeah becomes a speciality of that particular profession.
00:23:55	S1	That's good. And just summarising now, any other comments you want to add, anything which might have been missed out from the questionnaire? Is there anything you want to add on?
00:24:06	S2	I think you've been very, I think you've covered a lot of things. It would just be to reiterate that there would be certain limitations to what I'm able to provide but I've been happy to share my perceptions and there was definitely quite a lot of excitement when GP practice, pharmacists in GP practice first came about. And it has also, I think there's a lot more focus now on all sorts of other roles that pharmacists can do as well. So it's not only in GP practice. It's

		actually encouraged people to start thinking what they can do in pharmacy practice so yeah.
00:24:55	S1	It's great I started only as a community pharmacist but even with the community pharmacist those roles can be found.
00:25:05	S2	Lots of roles. Alright.
00:25:09	S1	Thanks for participating. It was really knowledgeable. It was really helpful to have you and hopefully once I will show you my data definitely I will share my study with you and at any moment if you want to change anything then let me know.
00:25:29	S2	I will do that. Thank you, Noshad. It was a pleasure and best of luck with the work.
00:25:36	S1	Thanks. Thanks so much.
00:25:36	S2	Alright then. Bye, bye.

[00.25.40]

[End of Audio]

Duration 25 minutes and 40 seconds

Appendix 20
Written Statement by Nurse/Australia

Evaluate expectations and perceptions of GP pharmacist role in England and Australia by key stakeholders – Maree Pulcinski Registered nurse Div. 1

My initial views when a GP pharmacist was introduced to Blackburn Clinic was that it will be a great service as an educational resource and risk management for patients and Doctors.

I did not have any initial reservations about the introduction of a pharmacist as I am very used to working within a team environment.

I did not have any expectations about the professional skills or role of the pharmacist as it is not a role I have come across before. Some challenges for nurses working in private GP clinic integrating a GP pharmacist into the team include: time constraints, workload and remembering to refer patients/pharmacist-related queries as I am used to dealing with these in my role as a clinic nurse. It also takes time for relationships to develop and for understanding of each others skills and abilities to become apparent. Delegation of roles in clinic is another challenge.

Development of this relationship is aided by willingness of both sides to communicate, collaborate, exchange ideas and direct workload to the person with most appropriate skill set.

The key performance indicators to analyse GP pharmacist role should include: patient outcomes, clarity of medications, GP-pharmacist care plans, healthy at home- keeping patients at home and minimising risks for patients

Some challenges include the lack of support for autonomy for health professionals other than doctors by the Australian health system. For collaboration to work a lot more support needs to be built in to the system and there are differences between Private vs public infrastructure and resources.

Factors influencing the success of integration of a pharmacist into GP practice include proximity, openness of the pharmacist to work with others and adapt to the way the clinic runs. I have found the pharmacist approachable and easy to communicate with. Because we have never had a pharmacist as part of the team it will take time to adapt and understand their scope of practice.

The future role of GP pharmacists may include education, risk reduction, medication safety, training, quality activities and liaison with other health professionals.

I feel we are still in the early stages of seeing how the role can evolve and an important part of this is improving the understanding about what services the pharmacist can provide.

My perceptions about pharmacists have changed since seeing a pharmacist in a different and expanded role and having a better understanding of their skill set. This improved understanding will lead to improvements in patient care as pharmacists contribute to the team management of patients.

I think having a pharmacist as part of the team at a medical clinic is important as improved collaboration between health professionals (GP, nurses, pharmacists) =better patient outcomes

Appendix 21
Written Statement by GP/Australia

Re: The Uk research project comparing GP pharmacist role in UK and Australia

My experience as one of practice principals and directly involved in the GP Pharmacist role has been overwhelmingly positive.
The GP pharmacist has filled a relevant and important role within our practice. We have been able to take advantage of the pharmacists' experience and expertise to improve our own prescribing, enhance medication safety, educate our patients and staff and prevent negative outcomes through safer medication taking and reducing polypharmacy.
These goals have been achieved through direct direct advice from pharmacist to GP, patient interviews with the pharmacist, home medication reviews and having the GP pharmacist presenting at our monthly clinical meetings.
My only reservation of this role and its future ishow it will be funded beyond its current pilot program. The only current funding benefit that I can see is through promotion of home medication reviews. The lack of medicare funded consultation with the GP pharmacist makes the provision of a consulting room difficult to justify compared with the ability to lease the room to a GP.

My conclusion however is that having a pharmacist working within a General practice is professionally stimulating and rewarding for both professions and of immense benefits to our patient.