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## **Effectiveness of stress control classes: A multi-service practice research network study**

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# Acknowledgements

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# The PRN

## IAPT services:

Leeds  
Sheffield  
Cumbria  
Barnsley  
Kirklees  
York  
Doncaster  
East Riding  
Lancashire

***P***  
***R***  
***N***

## Universities:

U. of Sheffield  
U. of York  
U. of Huddersfield

# About Stress Control



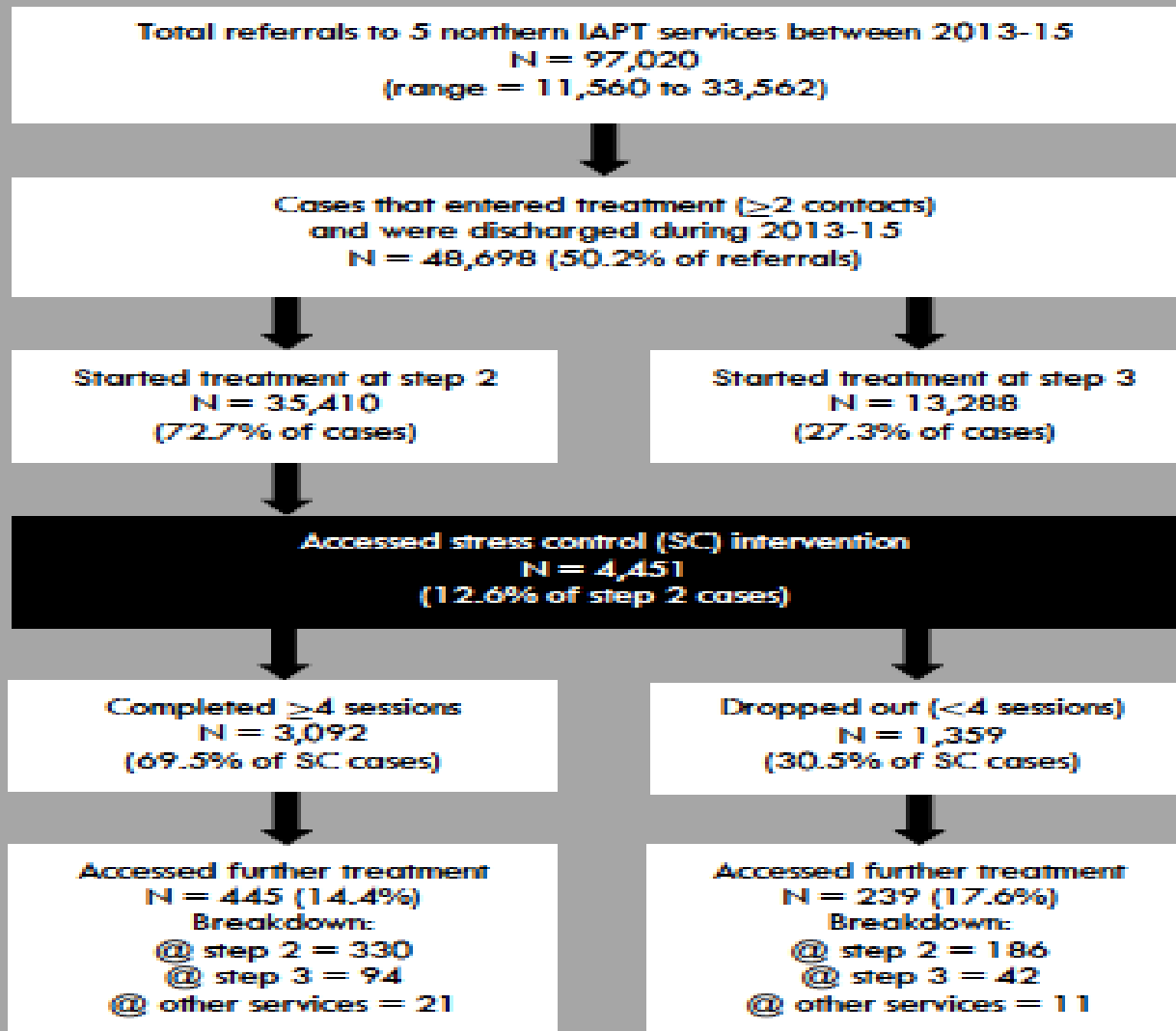
- Stress Control (SC) is a brief educational class about stress and anxiety management skills
- It usually lasts 6 sessions
- It includes lectures delivered by mental health workers and additional handouts / information
- It doesn't require participants to talk about their problems or symptoms
- Participants have a chance to approach the class facilitators to ask questions or obtain advice
- Friends/relatives can also attend in some cases
- Provided in all/most IAPT services

# Aims

- To scope stress control provision across the services
- To evaluate outcomes across stress control classes
- To compare outcomes between the five services using routinely collected IAPT measures
- To investigate relationship between client variables and outcome (baseline severity; socio-economic status).

- 4,451 people accessed 163 SC classes across the 5 services over 2 years
- 12.6% of cases receiving an intervention at step 2 received SC.
- SC groups had between 4 and 111 participants; mean = 48.77, SD = 27.42, median = 45.
- Based on defining completers as attending at least 4 sessions, treatment completion rate for SC was 70%.
- Approximately 15% accessed further treatment on completion of SC, either at steps 2 and 3, or were signposted to other services.

# Stepped care pathway for stress control participants





# Participant characteristics

- 63% of SC participants were female, with a mean age of 43 (range: 16 – 89).
- 92.6% were white British ethnic background.
- 71.4% were self-referred; 21% referred by GPs; 7.5% by other professionals.
- The most common primary diagnoses were mixed anxiety & depression (60.8%), GAD (19.7%) and depressive episode (11.1%).

# Mean baseline severity scores

GAD-7 = 11.87 (SD = 5.33)

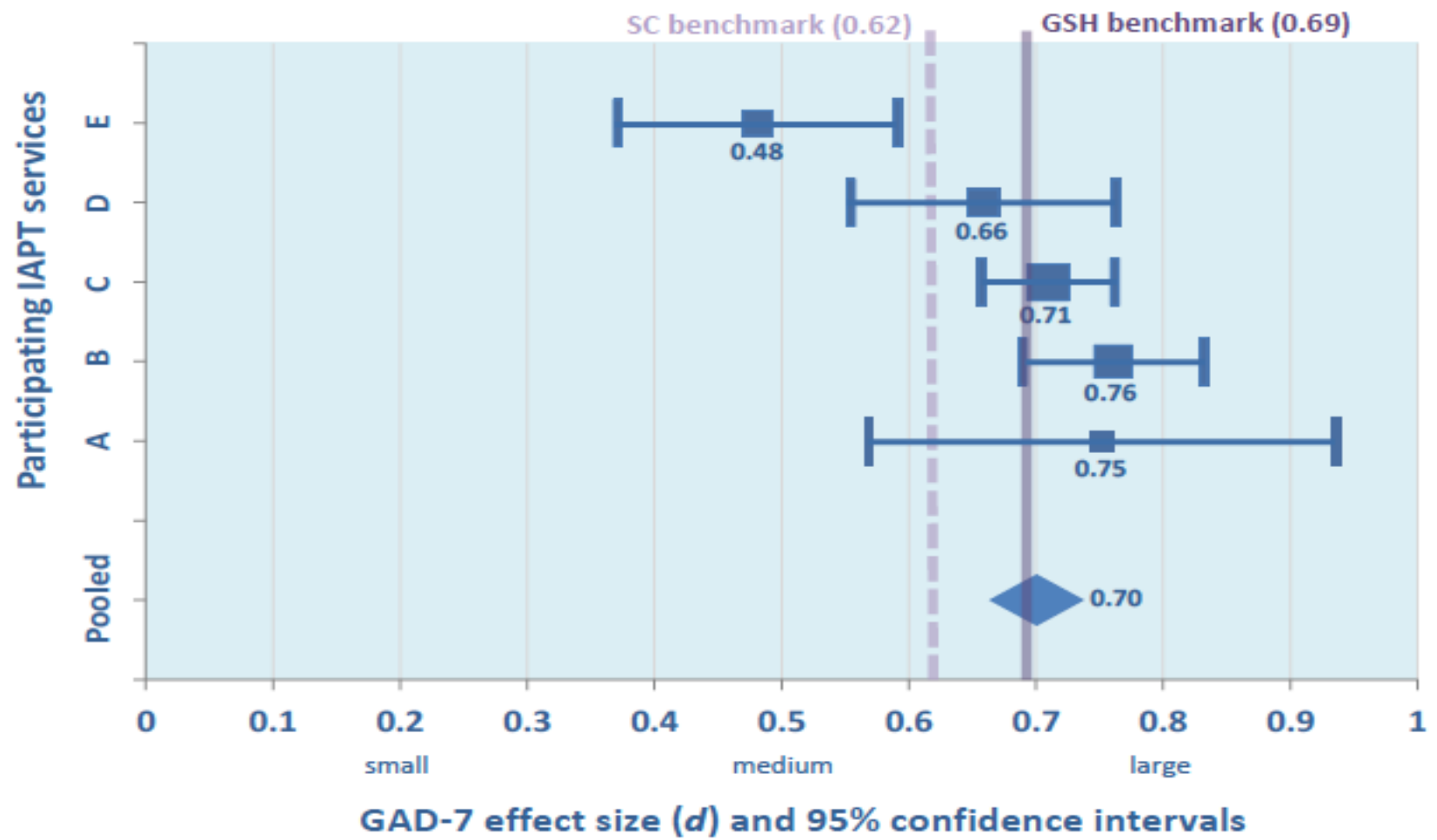
PHQ-9 = 12.13 (SD = 6.02)

Work & Social Adjustment Scale = 14.82 (SD = 8.84)

# Outcomes

- Approximately 42% showed reliable and clinically significant improvement after SC (RCSI)
- People who attended more sessions were more likely to recover
- The pooled GAD-7 effect size for all sites was  $d = 0.70$ , which was consistent with efficacy benchmarks for guided self-help interventions ( $d = 0.69$ ). One site had significantly lower effects ( $d = 0.48$ ), which was explained by differences in treatment length and case-mix.
- PHQ-9 ES = 0.59
- WSASES = 0.47

# Benchmarking analysis of SC interventions across 5 IAPT services

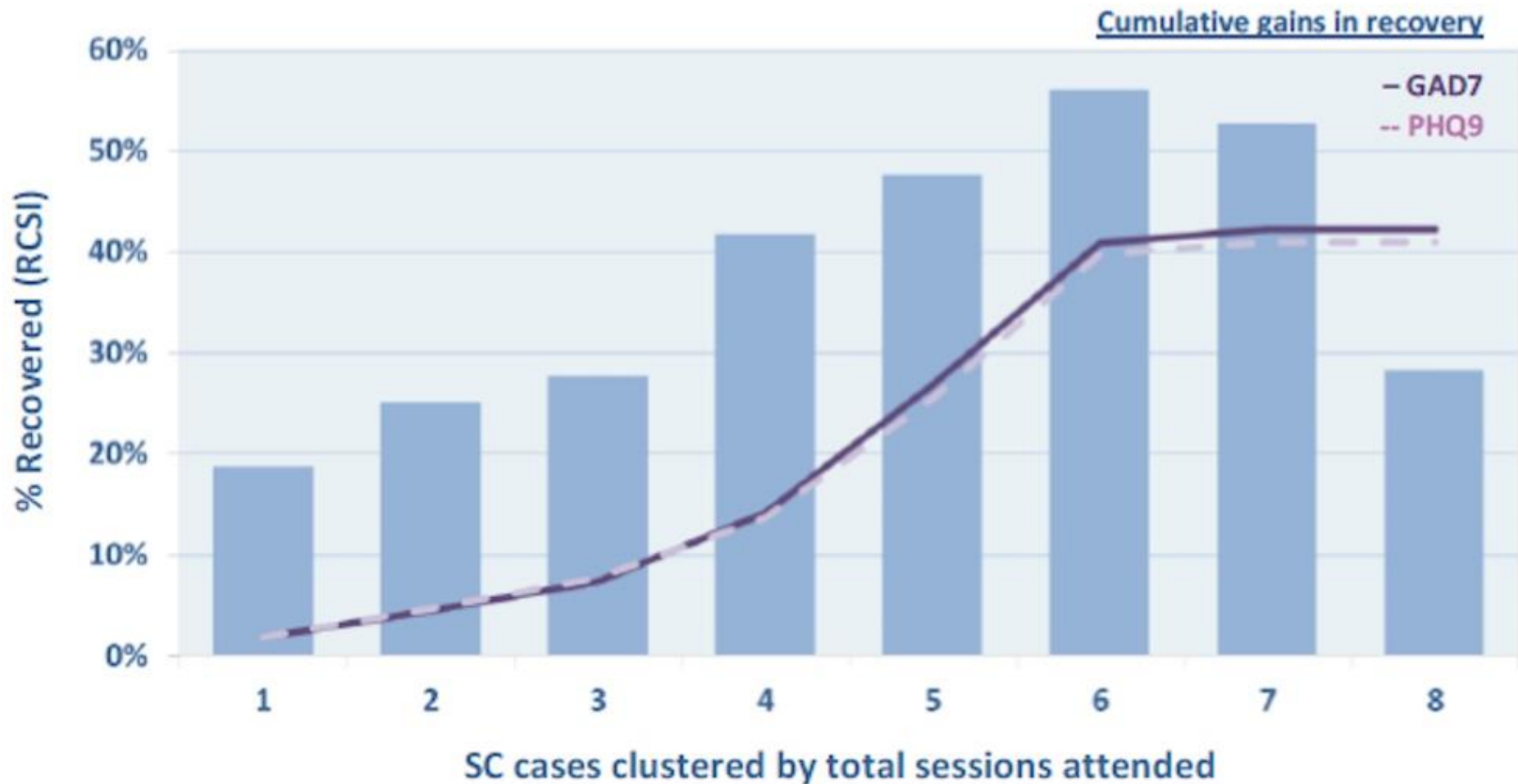


# Analysis of case-mix and group effects

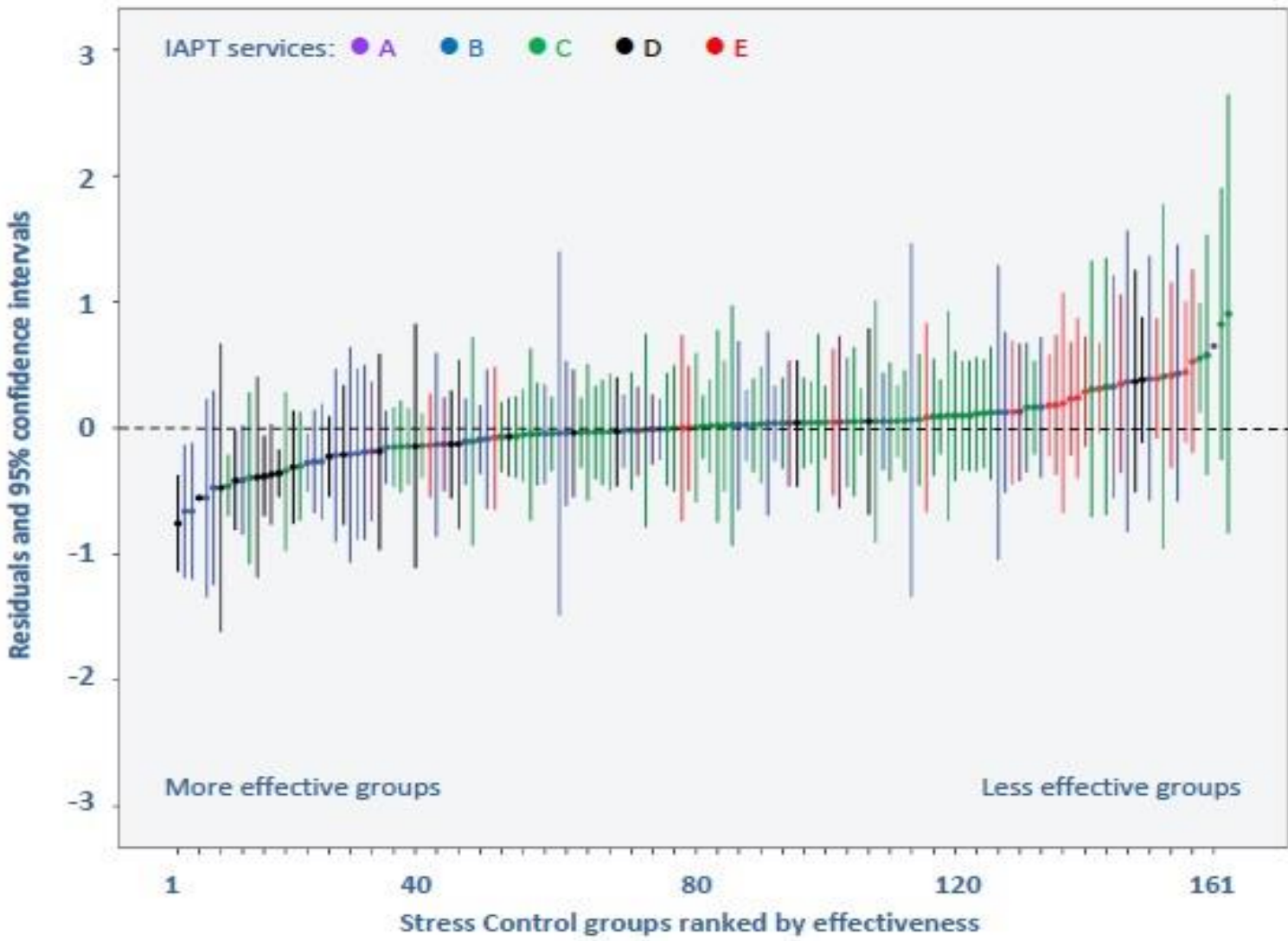
- Multilevel regression model (MLM) which takes account of hierarchical nature of the data
- Cases were nested within SC groups, and groups were nested within sites
- MLM to investigate if outcomes influenced by patient characteristics (case-mix), after controlling for differences between sites and variability in outcomes attributable to groups (*group effects*).
- Post-treatment GAD-7 score was primary outcome measure
- Analysis was restricted to a subsample where each SC group had at least 5 participants (Total = 4,220 cases within 161 groups).

- Group size (number of participants in each SC class) did not predict post-treatment anxiety scores
- Higher post-treatment anxiety scores were found for cases in the most socioeconomically deprived areas and those with higher baseline GAD-7, PHQ-9 and WSAS scores
- Age, gender, ethnicity and employment status were not found to predict outcomes
- The site variable was no longer statistically significant in model that took account of differences in group and case mix variables, suggesting they fully explain differences between services
- Compared to most other sites, patients in site E attended a lower mean number of SC sessions ( $F(4, 4804) = 28.483, p < .001$ ), they lived in more socioeconomically deprived areas (IMD;  $F(4, 4743) = 12.786, p < .001$ ), they had higher baseline anxiety (GAD-7;  $F(4, 3291) = 9.842, p < .001$ ), depression (PHQ-9;  $F(4, 3256) = 10.836, p < .001$ ) and functional impairment scores (WSAS;  $F(4, 3171) = 62.459, p < .001$ ).

# Dose-response in stress control interventions



# Caterpillar plot: variability in GAD-7 outcomes





# Service users' views

- Very helpful, even for some with long standing MH problems.
- Questioned whether benefits lasted – longer term follow up required
- Some parts more relevant than others – sign posting to more information on topics of most relevance.
- How to keep people engaged when most relevant topics come later – stress connectedness and flag up future topics, preparatory information, video
- Case examples not so relevant to backgrounds of those attending
- Importance of a friend/family member attending
- What happens after the classes? Like “falling off a cliff”; “fall through cracks”
- Importance of feeling supported, hope, structure of sessions.
- Some presenters more effective than others – if they used own words, not just follow ‘script’.

# Our conclusions

- About 42% showed reliable and clinically significant improvement and effect sizes equivalent to other low intensity interventions – but how much can we attribute to SC?
- Attending more sessions associated with better results – may be that those who don't find it helpful drop out
- Why do about a third drop out (attend less than 4 sessions) and what happens to them? Why are so few stepped up?
- Longer term follow up required
- Importance of engaging significant others in self management
- People with severe depression/ anxiety symptoms, and those in more socio-economically disadvantaged areas seem to gain less from attending SC – these factors should be taken account of when comparing services.

- Thank you