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University of HUDDERSFIELD

The Role of the Clinical Skills Technician

By Tracy Clayton



University = June 2007

- Clinical Technician
- Part Time



Technicians

- 1 Full Time = Senior Clinical Technician
- 1 Part Time = Clinical Technician





Nursing Ward

Simulation Suite





Operating Theatre

Occupational Therapy







Neptune Ward (Child Nursing)





• iStan = September 2008



iStan = September 2008



- Need for Technical Support
- New Job Role Generated
- Demonstrator for iStan
- 2 Full Time = Senior Clinical Technician
- 1 Full Time = Clinical Technician

Overview of Job Role



- Maintain
- Preparation
- Correct Running
- Voice (Unless Male)
- Designing New Scenarios
- Collaboration With Staff

» Correct Curriculum



Nursing and Midwifery Council (NMC)

 Allow 300 Hours for Simulation Practices

Critical Care



Road Traffic Accident

- Airway (A)
- Breathing (B)
- Circulation (C)
- Disability (D)
- Exposure (E)



Road Traffic Accident



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Save Stop	Logs	Detach Tab	Recorder	Pa	tient Time	Disconnect Connectio	ons
HR	MAP	C.O.	Simulation Scen	nario Condition Drugs	Fluids Cardiova	ascular Respiratory	
94 SpO2 97	99 Hot 42 30	Isch. Idx.	Show: Player		•		
ABP 129/74	PAP 21/9	CVP 7	Scenario 🔻	RTC RTA Abdominal Inj	ury.hs6	•	
CS-X	ICP	CS-Y	► Initial Assessme	ent			
12.85	8	55.57	► ICU Postoperati	ve 4 Hours Later			
Left Vol. 1234	Right Vol	Spont.VT	Surgical Ward 7	2 Hours Later			
PACO2	PAO2	Spont.RF	Voice Command	d-Pain Scale-"7"			
30.6	139.7	18	► Voice Command	d-Pain Scale-"4"			
Alv. N2O	Alv. Iso.	Alv. Sevo.	► Voice Command	d-Pain Scale-"2"			
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Alv. Halo.		Alv. Enf.					
PaCO2	рH	PaO2					
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36.0	100.0	36.5					
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Stop Breathing



			iStan (1) @ localhost
Save Stop	Logs	(Contraction Detach Tab	Recorder Patient Time Disconnect Connections
HR 162 Sp02 97 ABP 19/19 CS-X 12.85 Left Vol. 1150 PACO2 38.9 Alv. N20 0.0	MAP 20 Hot 42.30 PAP 19/19 ICP 8 Right Vo 1150 PAO2 116.2 Alv. Iso. 0.0	C.O., 2.0 Isch. Idx. 3.16 CVP 19 CS-Y 55.57 L Spont.VT 0 Spont.VT 0 Spont.RR 18 Alv. Sevo. 0.0 Alv. Enf	Simulation Scenario Condition Drugs Fluids Cardiovascular Respiratory Show: Heart Image: Condition Drugs Fluids Cardiovascular Respiratory Parameters Parameters Cardiac Rhythm Override Contractility Factor: Left Ventricle Contractility Factor: Right Ventricle PEA Contractility Factor: Right Ventricle Normal Junctional Normal Junctional Fixed Heart Rate Heart Rate Factor Ischemic Index Averaging Normal Junctional (50) Paroxysmal Junctional Tachycardia Ischemic Index Sensitivity Pericardial Fluid (Acute) Resistance Factor: Aortic Valve Terus Ventorial Tachycardia (130) Left Bundle Branch Block Terus Ventorial Vento
0.0 PaCO2 33.2 PvCO2 39.4 TBody 36.0	pH 7.49 Weight 100.0	0.0 PaO2 76.4 PvO2 36.1 TBlood 36.5	Description Image: Secription

Non Shockable Rhythm





Learning Outcomes



- Observation of A, B, C, D and E
- Understanding & Administration of
 - » Oxygen
 - » Medication
 - » Fluids
- Sense of Real CPR



- Develop the role of the simulation technician
- Open it up to students
- OCSE'S
- More Disciplines
- Practice Gap



Skills Learnt Through Simulation

HUDDERSEI

- Communication
- Confidence
- Involvement
- Problem Solving
- Creative Scenarios
- Curriculum
- Understanding



- Programmed 9 scenarios
- 7 Adult Nursing, various illnesses
- 2 Mental Health, schizophrenia patient presenting diabetes's
- 1 Self Harming Scenario (in progress)



Simulating Self Harming Techniques



Practicing on iStan





Flat Lining iStan



- Can you flat line iStan?
- How do you flat line iStan?
- Physiological effects
 - » Eyes close
 - » Stops breathing
 - » No palatable pulses

Flat Lining iStan



00			iStan (2) @ localhost 🛛
Save Stop	Logs	Cetach Tab	O0:13:14 Disconnect Recorder Patient Time
HR 95 SpO2 97	MAP 100 Hct 42 30	C.O. 6.7 Isch. Idx. 5 60	Simulation Scenario Condition Drugs Fluids Cardiovascular Respiratory Show: Heart
ABP 130/76	PAP 23/13	CVP 3	Parameters Cardiac Rhythm Override Baroreceptor Gain (Cardiac) Facto None (Model-Driven)
CS-X 12.93 Left Vol. 1484 PACO2 29.7 Alv. N2O 0.0	ICP 7 Right Vol 1484 PAO2 136.3 Alv. Iso. 0.0	CS-Y 57.14 Spont.VT 707 Spont.RR 17 Alv. Sevo. 0.0	Contractility Factor: Left Ventricle Contractility Factor: Right Ventricle Fixed Heart Rate Heart Rate Factor Ischemic Index Averaging Ischemic Index Sensitivity Pericardial Fluid (Acute) Resistance Factor: Aortic Valve Resistance Factor: Mitral Valve
Alv. Halo. 0.0 PaCO2	DH	Alv. Enf. 0.0 PaO2	Description
32.0 PvCO2 39.1 TBody 36.0	7.50 Weight	77.2 PvO2 36.6 TBlood 36.5	With over nucle With over nucle Value: Default None (Model-Driven) (iStan) Default None (Model-Driven) (iTruck Driver) Default None (Model-Driven) (iStannette) Default Right Bundle Branch Block (iGranny) Default None (Model-Driven) (iSoldier)













100 Years of Evolution



Mrs Chase 1911

1/ Adult Sized Soft Doll, designed on Mrs Chase body size and looks

2/ Sewn Elbow's & Knees

3/ No Breathing, Blinking, Pulse's etc

4/ No Software.

iStan 2011



http://www.nsna.org/Portals/0/Skins/NSNA/pdf/Imprint_FebMar08_ Feat_MrsChase.pdf

Thank You For Listening



Any Questions?



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References



- Bradley, P. (2006). *The history of simulation in medical education and possible future directions*. Medical Education History, vol 40, pp. 254 262.
- Clayton, T. (2010). The Role of the Clinical Skills Technician. [online] Available at http://eprints.hud.ac.uk/8097/ [Accessed 28th October 2010].
- Cooper, J, B. Taqueti, V, R. (2004). A brief history of the development of mannequin simulators for clinical education and training. Qual Saf Health Care, vol 13, pp. 11 18
- Harder, B, N. (2009). *Evolution of Simulation Use in Health Care Education*. Clinical Simulation in Nursing, vol 5, pp. 169 172.
- Herrmann, E. (2008). *Mrs. Chase: A noble and enduring figure*. American Journal of Nursing, Vol 81, pp. 52 55.
- Herrmann, E. (2008). Remembering Mrs. Chase. [online] Available at http://www.nsna.org/portals/0/Skins/NSNA/pdf/Imprint_FebMar08_Feat_MrsChase.pdf [Accessed 28th November 2009].
- Hilton P, Pollard C. (2004) Supporting clinical skills developments. Nursing Standard. vol 18, pp. 31-36.
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