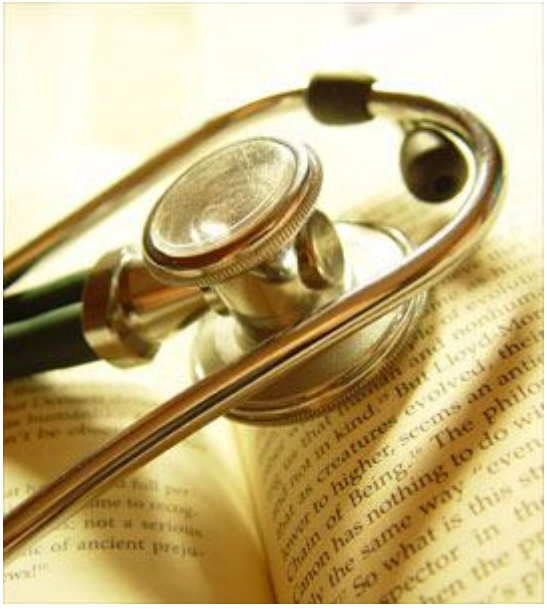
Simpson Clinical Skills

and

Simulation centre



Annual Report

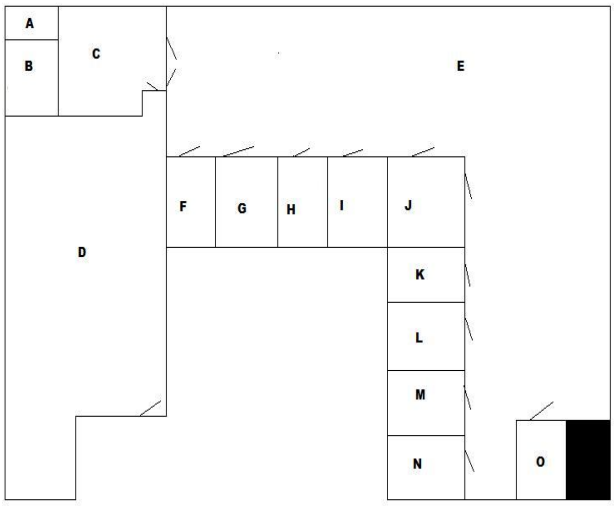
2009

Compiled By: Julie Turner, Clinical Skills Lead

Background

The Simpson Clinical Skills and Simulation Centre is part of the Chichester Medical Education Centre. It was built in 2008 and was fully established in January 2009, after the Clinical Skills Lead was appointed. The current facilities occupy a third of the 1st floor of the education centre. The primary target groups are Medical students and Western Sussex Trust Doctors of all grades. Training sessions are also held which are open to all Doctors from around the country.

Floor Plan



A- Store Room
B- Clinical Skills Lead
C- Simulation Suite
D- Clinical Skills Room
E- Teaching Area
F- Clinical Skills Training room - Laparoscopic
G- Clinical Skills Training room - Cannulation & Venepuncture
H- Clinical Skills Training room – Minor Surgery
I- Clinical Skills Training room – Clinic
J - Clinical Skills Training room - Bowel
K- Clinical Skills Training room – Eye and Ear training
L- Clinical Skills Training room – Airway management
M- Clinical Skills Training room – Infection control
N- Clinical Skills Training room -
O- Clinical Skills Training room -

Why was the centre implemented?

The main incentive for implementing the Clinical skills and Simulation Centre has been to facilitate more effective and efficient medical training. By using simulation training it allows for improved quality in patient care and patient safety.

Simulation as part of mandatory foundation training

The Kent, Surrey, and Sussex Deanery (KSS Deanery) have stated that simulation becomes an integral part of the local curriculum. Foundation level doctors must undergo simulation tuition during their training. It was decided by the Managers of Chichester Medical Education Centre, to hold this training on site and develop the facilities already in place.

Organizational Model

The centre is managed by the Clinical Skills Lead, who works 28hours a week over 3 days. In this role they co-ordinate the running of both simulation and clinical skills sessions. The centre follows the Simulation Policy and Strategy produced by The KSS Deanery. The Clinical Skills Lead is answerable to the Director of Medical Education and the Postgraduate Centre Manager. The motivation for making simulation compulsory has been to ensure higher competency levels among medical students and foundation doctors. Simulation is considered to be a means of providing Foundation doctors with an experience of independently managing a very sick patient, stabilising their condition and contributing to diagnosis. It provides an experience that trainees cannot get in practice.

Staff competency levels

All faculty members have a medical background and are of registrar or consultant level. The Foundation 1 and Foundation 2 leads have at least one of the following, ATLS instructor level, Train the Trainers qualification or QUESP Training level 1 and 2. The Clinical Skills Lead works closely with the faculty to ensure simulation scenarios are up to date. The Clinical Skills Lead has a background of Operating Department Practice, specialising in anaesthetics, which is still undertaken one day a week to ensure clinical skills are not lost. The majority of Clinical Skills Training is undertaken by the Clinical Skills Lead, where specific skills are required clinical leads in that particular area are used.

Staffing

Director of Medical Education

1 Postgraduate Manager

1 Clinical Skills Lead

Facilities

The Clinical Skills and Simulation centre is equipped with 1 Simulation suite, 1 Control room, 1 Large Clinical skills room, 10 small Clinical practice-training rooms, 1 large 'L' shaped training area.

Curriculum

The centre follows the Foundation Doctors curriculum for clinical skills training needs. The scenarios are developed to comply with selected learning objectives and identified educational needs of each participating group.

Financial model

The centre gets funding from the deaneries and medical schools. Course's that attract outside clientele generate extra income, which gets put back into centre to support development and maintenance of the centre. The KSS deanery gives extra one off funding payments per foundation doctor that has gone through the simulation centre.

Benefits model

Facilities: clinical skills and simulation training leads to higher level of care to patients. The centre has several areas to facilitate learning which allows several sessions to be run simultaneously enable a higher throughput of trainees. In-situ training is more feasible for skill and simulation training when provided close to core users.

Meeting educational needs: By involving specialist experts in the running and creation of sessions ensures there is clear understanding of core clientele's educational needs.

External clientele: Clinical Skills sessions run for external clientele to bring in some additional income.

Challenges with model

- At the current time there is only the clinical skills lead, who role it is, is to run both clinical skills and simulation training. This means that only one session can be run at a time.
- There is lack of support from doctors.
- Lack of medical lead/ medical faculty, who are involved in the centre and meet regularly too discuss the running and future of the centre.

Demographics of clientele

F1 and F2

Year 3 and 4 Medical Students

Paediatric Medical Team

Dentists

General Practitioners

Paramedics

Educational activities

Medical Emergencies for Dentists X4 a year

Trans-anal endoscopic micro-surgery (TEMS) X2 a year

Advanced Trauma Life Support Course (ATLS) X3 a Year

Paediatric Immediate Life Support (Pils) X 6 a year

Basic Surgical Skills Course (BSS) X 2 a Year

General Practitioners study day

Paramedics - emergency airways

Medical Students – Cannulation

Medical Students – Year 3 Clinical Skills Programme

Future Educational activities

January	Pils	Medical Emergencies for Dentists		
February				
March	ATLS	Medical Emergencies for Dentists	Pils	
April	Difficult airway			
May	ATLS	Pils	TEMS	
June	BSS			
July		Medical Emergencies for Dentists	Pils	
August				
September	Pils	TEMS		
October	ATLS	Medical Emergencies for Dentists		
November	BSS	Pils		
December				

As well as the above the Year 3 clinical skills programme will continue, year 5 training will be undertaken and F1 and F2 Clinical Skills and Simulation sessions run.

The centre is looking into running more large scale courses and these may include
Basic Surgical Skills course – Obstetrics and Gynaecology
Basic Techniques in Arthroscopic surgery
Advanced skills in laparoscopic Surgery (Bariatric)
Specialty skills in Vascular Surgery

The idea would be to run a large scale course once a month. August would be kept clear, due to the lack of attendance on courses at this time of year due to annual leave and the change of doctors during induction. Simulation full and half days would be run throughout the year. As well as smaller one day courses.

Simulation

Simulation Future Plans

Since starting the post of Clinical Skills lead, in January 2009, I am pleased to see the construction and development of the Simulation centre. A variety of small simulation sessions, which have included, year 3 and 5 Medical students, F1's and F2's, as well as members of the paediatric team, nursing staff, GP's and paramedics.

After spending a day with Helen Flanagan, Clinical Skills and Simulation Manager at Brighton and Sussex Medical School, I feel we at the Simpson Clinical Skills and Simulation Centre have an exciting and busy future ahead of us.

We are lucky that the foundations have already been put into place and it would require a relatively small amount of work to move our centre forward.

The main expenditures that would have to be considered are:

- The purchasing of microphones for the individuals in the simulation room,
- A microphone which can be turned on and off from the control room to SimMan.
- A telephone system needs to be set up between the control room and simulation room.
- A shelving system on wheels would be of benefit in the simulation room where equipment can be stored and accessed easily.
- Several trolleys would be required to be used as storage and workstations.
- It would be good to look at setting the video link system up to relay the simulation room into a separate area and not to have the candidates in the control room as scenarios are being performed.
- At a later date a camera system that can pick up a variety of angles.

Jobs for the Clinical Skills Lead to do include:

- A PowerPoint on the introduction of the simulator
- A PowerPoint on the MEWS scoring system
- Arrange a faculty this needs to include 2 consultants one to act in the scenario and one to give a debrief, 2 control room operators and a nurse in the simulation room.
- Scenario cards for the faculty – setting the scene of the scenario.
- Provide the simulation room with all clinical equipment that would be required.

Patient's notes need to be written to accompany each scenario and assistance from a consultant or registrar would ensure these are as authentic as possible.

There is a potential issue in the fact that the candidates can hear what is said in the control room. This could be rectified by purchasing sound insulation or using egg boxes which have been proven to work in the roll of sound insulation.

I see the centre being used by the medical students and F1 and F2 doctors that are based in the Hospital. I would hope that the deanery would financially support this; I feel we would be able to open the centre up to outside participants, such as external F1 and F2's, Medical Students, paramedics and alike. This would provide us with an external income.

I feel that this is an exciting time for the simulation centre if time and a small amount of money can be put into it. It will allow us to become a reputable, superior and efficiently run simulation centre.

Simulation Methodology

Brief - Simulation sessions begin with lectures on medical simulation, what the clientele can expect throughout the session. Clientele are then introduced to the layout of the simulation room and equipment with special focus on the manikin various workings.

Validity – The simulation scenarios will be of the highest degree of validity to ensure the best possible experience is gained from the session. The desired degree of realism will vary on the level of the group. A more novice group may require more input throughout the scenario. Props and outfits for manikins will be used to gain the highest level of realism that is possible.

Interactive approach

If the participants reveal difficulty in dealing with a scenario or would benefit from greater challenges then the Simulation can be simplified or complicated as required. If the participants are unable to move on in the scenario then the simulation can be stopped and instructors and constructively suggest solutions and the scenario restarted.

Scenarios

There is a selection of scenarios for the simulators some have been self made others taken from the software. Hard copies of all scenarios are kept in the simulation control room.

Debriefing

The emphasis on debriefing is high.

Each session must be debriefed. The computer simulation software has built in debrief facilities. This records the data that has been logged throughout the scenario. A camera link can also be set up to assist with the debrief. Notes are taken by the instructors and Collaboration between the Simulation controller and instructor.

Focus

Team performance throughout the simulation

Individual performance

Protocol Training