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N E W S L E T T E R

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WELCOME

It's been a busy start to the year in the simulation industry. Along with announced government funding, in March Dr. KT Waxman from the US presented in several locations around Australia. In this edition we feature articles on where she spent some time, namely Bond University and the Innovate & Educate conference in Queensland.

One recurrent theme at these events was how some delegates needed assistance getting the most from the technology available. To help with this Laerdal recently introduced a range of educational and technical courses to help you obtain the best training outcomes using your simulation equipment.

You may have noticed the new design and format of our Simulation Newsletter. We hope you like it and find it easy to read. Part of the improvements include using recycled paper.

As always we are proud to share news and exciting developments within the industry and our simulation user network. Your feedback and story ideas are always welcome; please email us at customerservice@laerdal.com.au (Australia) or customerservice@laerdal.co.nz (New Zealand)

'MANIKINS ACROSS THE LIFESPAN' AT BOND UNIVERSITY

A fascinating approach to simulation is being developed at Queensland's Bond University using adult, child and newborn manikins to teach a range of acute care skills.

The Clinical Skills Theme has developed as part of the Medical Program since 2005 under the leadership of Associate Professor Vivienne O'Connor. The Sim centre includes a full-time academic nurse and laboratory manager and an 8-bed dedicated ward. With two new paediatric manikins purchased last year the teaching staff were very keen to utilise the manikins to their fullest extent, and thus 'Manikins Across the Lifespan' was created.

Groups of 3-5 students rotate through stations: SimNewB, where they perform a newborn assessment and an APGAR score; Basic Life Support on a child who is near drowning; and diagnose a heart rhythm and administer the appropriate drug to a collapsed adult patient. One cohort of 82 students undertook the two-hour 'Manikins Across the Lifespan' session, which was evaluated as excellent by over 90 per cent of students.

Staff found that a range of manikins was a great advantage to student training. "Babies and children are not just smaller adults," observes Associate Professor of Clinical Skills Dr Patricia Johnson "Skill practice is essential in a simulation environment before and during clinical time on the wards".

Adding more realism to the scenarios, 'ward rounds' are now being incorporated into

the curriculum, which involve models and moulage, patient charts, IVs, wounds, oxygen therapy and manikins programmed with appropriate physical parameters.

At her recent Bond University seminar, visiting simulation specialist KT Waxman recently addressed the issue of what universities and hospitals could do when planning and investing in simulation.

Dr KT Waxman: Establishing Strategies for Your Simulation Program

KT has over 25 years of experience as a nurse leader in California, and is also the program director of the California Simulation Alliance (CSA). Using the premise that some institutions have purchased simulators but don't know what to do next, KT outlined in her 10 March seminar how other schools could benefit from simulation and transform the education process.

When integrating simulation into school curricula, KT proposed that rather than just an 'add-on' to a course, simulation should be incorporated into every course, from fundamentals to advanced. A vital part of this was in creating an early strategy to phase this in, with the full support and development of the faculty critical to its success. These days, California boasts an amazing 90 per cent of its 135 nursing schools with a simulation support program. KT noted that clinical placement hours were being replaced by simulation at around 25 percent, sometimes up to 50 per cent, with California now offering residency

programs for nursing graduates in hospitals and Oregon State offering a state curriculum for nursing.

KT presented her seminar at Bond University in Queensland, at University of Technology Sydney and at the Box Hill Institute in Melbourne, and presented 'Transforming Nursing Education: The California Model' at the Innovate and Educate 2010 conference on 11 March.



SMALL TEAM MAKES BIG STRIDES

A voluntary nursing training program is making big waves at Edith Cowan University's regional Bunbury campus, 175 km south of Perth. With limited resources the program enhances students' confidence in their clinical skills and forges excellent relationships with a multidisciplinary approach.

"The program was established in response to the widespread educational literature stating that nurses weren't industry-ready, and that some can really struggle in their first year out," says Senior Lecturer and Program Coordinator Sue Tencer. "We also noticed that many students had verbalised a low self efficacy prior to their final five-week practicum."

The voluntary 'Theory to Practice' (T2P) program for third year students is a safe environment for students in their final semester to strengthen their clinical skills, minus the stress of assessment. "The students identify the particular skills they need more exposure or practice in, and we as lecturers also identify those skill deficits. Then we match them to the appropriate patient with that skill set," says Sue.

Run over a week, the ten-bed training ward has ten medium-fidelity manikins, each with a different healthcare scenario. The 35 students were allocated a 'patient' during rotating four-hour shifts, and nursing care plans are developed by staff for each manikin. The student is also required to carry out doctors' orders after 'ward rounds' with realism heightened by all staff wearing uniforms and experiencing handover and documentation, as per a functioning ward. Described by Sue as the essential nursing care skills required to provide best practice patient care, the students practice delivering hygiene needs, vital sign observations, bladder scanning and managing intravenous therapy including blood

transfusions and administering medications in a timely manner.

With only eight staff in the nursing program, over the three years the program has evolved and T2P now includes medical students from the Rural Clinical School, ECU SW Social Work students and staff from the local South West Health Campus. This multidisciplinary approach works from all angles: medical students are provided with a diagnosis, write admission notes, order diagnostic tests and prescribe medications, social work students do discharge planning, general staff members act as disruptive family members and security manages them.

Of this inclusive approach, Sue notes: "It may be difficult to implement in a larger campus, but our staff-student ratios are the same. The bottom line is the dedication of the nursing program team to do it outside of the curriculum." In such a small team as ECU Bunbury, every person is as vital to

the program's success as the other person, from the program coordinator to the lab technician."

The future of this small yet high-impact program looks very bright, with an excellent response from all participants. After a late-2009 session, staff were amazed to find the students were reluctant to be sent home earlier on the last day—with many of them staying on to complete their 'shift' and complete the necessary documentation. T2P was also recognised this year when they received the 2010 Vice-Chancellor's Learning and Teaching Award for Programs that Enhance Learning, and a range of clinical placement facilities reported that the new graduates show excellent clinical skills and a marked confidence in their new role.

"Further opportunities are only limited by our imagination," says Sue. "Staff see T2P as a catalyst of richer interdisciplinary learning occurring well into the future."



Helping improve patient outcomes

ALS Simulator Advanced



The ALS Simulator Advanced is a realistic interactive training manikin for simulating a wide range of advanced life saving skills in medical emergencies. The simulator responds to clinical intervention, instructor control, and pre-programmed scenarios for effective practice of diagnosis and treatment of a patient.

The ALS Simulator's new peripheral kit and software has added the following advanced features:

- Manikin is controlled via laptop PC based on well proven SimMan software
- A Graphical User interface to write and run a wider range of simulations
- Integrated video recording & debriefing
- Programmable scenarios with Trends & Handlers
- Inclusion of media files: video, sounds etc.

* existing ALS Simulators can be upgraded by adding the new peripheral kit and software. Vital Sim Unit still needed on Advanced version.

SUCCESSFUL NewB PROGRAM AT RBWH

With over 200 retrievals over 60 sites per year, the neonatal retrieval unit at Royal Brisbane and Women's Hospital (RBWH) is well placed for the introduction of a specialised simulation program for neonatal retrieval training. Since 2009, monthly programs have been run in conjunction with the Skills Development Centre at RBWH, and are proving to be very successful with participants.

The four-hour program is usually attended by two doctors and two nurses (two retrieval teams), and uses the SimNewB manikin. Participants initially receive an introduction to Crisis Resource Management, which looks at the non-clinical or human factors in dealing with emergencies. One team is then 'sent on retrieval'; they receive a scenario and manage the SimNewB as if this were a neonate on an actual retrieval. Team members wear a retrieval uniform and use the neonatal transport cot and retrieval pack. Twenty- to thirty-minute scenarios are videotaped and observed by the other course attendees, and are followed by a debriefing session. The teams then reverse roles, and a second scenario is conducted.

Participants are at varied levels of experience, from those who have never gone on retrieval before, to those who are very experienced. Future plans include training up doctors and nurses with no experience of retrieval to do the simulation program prior to their first retrieval.



Staff in action at RBWH

The RBWH's approach to simulation training is proving so successful that participants often comment that they forgot they were working with a manikin during the highly realistic scenarios. With respiratory disease the most common reason for neonatal retrieval, this interactive program is set to improve the future of treatment for critically ill newborns and infants.

UPCOMING 2010 CONFERENCE

SimTect Conference (Melbourne)

August 30- September 2

SOCIETY FOR SIMULATION IN HEALTHCARE WEBSITE

The Society for Simulation in Healthcare (SSH) updated its website this year, and is now offering members links to videos, events and a monthly newsletter.

The US-based SSH was established in 2004 to represent the educators and researchers who utilise simulation for education, testing, and research in health care. With a membership base of 2,000, SSH recognises that simulation represents a paradigm shift in health care education, and works to promote improvements in technology, educational methods, practitioner assessment and patient safety.

This comprehensive site also includes a blog, as well as links to worldwide Sim Centres. It is found at www.ssih.org.

INAUGURAL INNOVATION & EDUCATION CONFERENCE

The use of latex in patient simulation, a new simulation Graduate Certificate and rolling out a national strategy for healthcare reform were just some of the thought-provoking topics covered in the recent 'Innovate and Educate Conference' at the Brisbane Convention and Exhibition Centre, held 11-12 March.

Dr Kerry Reid Searl discussed her teaching strategy: 'High fidelity latex patient simulation (HFLPS)', which is in use at an undergraduate nursing program at CQ University, Adelaide. Addressing some of the limitations of manikins to produce realistic human responses, HFLPS uses life-like latex masks and body parts adorned over the body of the educator to mimic patient responses.

Searl's paper included a 'hands on' presentation, where the audience engaged with her (masked as the patient), to experience how the learning occurs. They discovered that students who train in this way are able to practice skills, receive immediate feedback and react to unpredictable responses as though the situation was real.

Developing the capacity of simulation coordinators was the topic of Dylan Campher's (Queensland Health) presentation. He discussed how the training of simulation coordinators is centre-dependent, with no formal training framework in Australasia, and suggested

Visit the SUN website to keep up-to-date with the latest news and events, share ideas, scenario files and learn more about Laerdal simulation products.

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- Online Tutorials

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