

## MEETING REPORT

# Report on ‘Striving Towards the High Reliability Organisation’: Fourth Annual Simulation Conference, Homerton University Hospital NHS Foundation Trust, 11 December 2014

**M.H. Ornstein**

*Barts Cancer Institute, Queen Mary University of London, Charterhouse Square, London EC1M 6BQ, UK*

*Email: mornstein@nhs.net*

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### Abstract

The Homerton Simulation Centre held its fourth annual conference, ‘Striving Towards the High Reliability Organisation’, on 11 December 2014 at Homerton University Hospital, London UK. The eight lectures are reviewed in this report.

**Keywords:** *Simulation; patient safety; checklists; crisis resource management; safety in industry; systematic approach to training*

### Introduction

One of the speakers pointed out that Homerton is a small oasis, remaining an independent trust, in the recent conglomeration of hospitals in East London which form Barts Health NHS Trust, the largest NHS Trust in the country. Homerton may be small but it has an extremely active simulation unit, used by medical students and qualified staff, both doctors and nurses. The conference they put together on 11 December was excellent.

The theme running through the day was patient safety which, to my mind, should not have been missing from the title. The day was divided into three sessions.

### Morning session

This two-hour session consisted of three talks setting the scene, so to speak, for the rest of the day.

#### **Margaret Murphy, WHO Patients for Patient Safety Programme External Lead Advisor**

The conference opened with a heart-rending story of the death of her son by Mrs Margaret Murphy. She called it ‘*The Patient Experience as a Catalyst for Change*’ and she described the sad saga of her son’s death from multi-organ failure due to hypercalcaemia despite repeated blood tests showing raised serum calcium levels and increasing renal failure. She highlighted repeatedly missed opportunities for diagnosis but also, and of more relevance to this conference,

how many attempts were made to cover up and excuse the errors. Results of blood tests had not been acted upon and senior advice over a weekend had not been obtained when needed. Her conclusion was that a style of leadership is needed that engages with patients and acknowledges error in a way that accepts shortcomings and facilitates learning from them to prevent recurrences; doctors and nurses must be prepared to learn from mistakes.

#### **Dr Tom Smith, Consultant in Anaesthesia and Intensive Care Medicine, and Patient Safety Lead for Surgery & Oncology, Barts Health**

Dr Smith’s paper was entitled ‘*Patient Safety - Defining the Problems, How to Manage Error and Strategies to Address Them*’ and he talked about defining the problems, managing error and how a ‘patient safety lead’ in a large acute trust can move concepts forward. He described how difficult it is to effect change, but that tools do exist for examining practice and safety incidents and for introducing strategies to implement safer care. He taught us the meanings of ‘safety action planning’ and ‘resilience engineering’ and he emphasized the important role of simulation in this.

#### **Dr Marc Lazarovici, Lead Physician, Human Simulation Center, Institute for Emergency Medicine, Munich University**

The last paper of the morning was a beautifully illustrated talk by Dr Marc Lazarovici about ‘*Crisis Resource Management - The Concept to Avoid and Manage Crisis*’.

With short video clips illustrating real-life situations, his talk was clear and to the point, defining crisis resource management (CRM) and team resource management for us. He told us of the 15 principles of CRM as defined by David Gaba and Marcus Rall, which are tools to avoid the development of catastrophes from critical clinical situations. A main theme was the problem of guilt felt by all of us when errors occur and the mistaken feeling that only incompetent, lazy, weak people make errors, whereas more often they are due to inadequate systems.

## First afternoon session

This two-hour session consisted of two papers illustrating how we might learn about patient safety from outside medicine.

### Mr Steve Naylor, Nuclear Power Academy Training Manager, EDF Energy

Mr Naylor described, in his *'Lessons in Safety from Nuclear Power'*, the special characteristics of nuclear power generation and the dangers inherent in such high-powered confined organizations making safety training paramount. One example he used to illustrate the energy pent up in a single nuclear power generator is that at any one time it has sufficient energy to power all of the electrical needs of the UK for four weeks; and nuclear power generators cannot just be shut down and worked on 24 hours later as can coal-fired generators. He reminded us of the Chernobyl disaster of 1986 when radiation from Ukraine spread even beyond the UK. He described performance improvement programmes, the systematic approach to training (SAT) and the use of simulators to validate procedures, develop skills and assess job candidates. To my mind particularly apposite to medicine is the way the nuclear industry uses simulators to assess the assertiveness of junior team members during emergency exercises.

### Mr Archie Naughton, Crew Resource Management Examiner, Airbus Training

Even though he showed us that flight is the safest form of travel overall, Mr Naughton illustrated his talk with horror stories of worldwide aeronautical accidents. He described the importance of a safety culture and how this has developed over the years in the aviation industry, with the introduction of checklists, standard operating procedures and human factors training. He emphasized the difference between fatigue and tiredness: we can manage tiredness but fatigue leads to errors. He was surprised that we do not, in British hospitals, have anything like Mandatory Occurrence Reporting (MOR), which they have in his industry. MOR is the confidential, wide reporting of all

untoward events so that we can learn from them. He pointed out that checklists stabilize an unstable situation; they are not an attack on autonomy, something emphasized by others during the question sessions, and they should be introduced gradually, taking the team with the introducer. He stressed the importance of communication, which has to be accurate, and how the non-standard use of language in stressful situations can lead to disaster.

## Third session

The last two-hour session again consisted of three papers, bringing the meeting to a satisfactory conclusion.

### Dr Sam Murray, Gastroenterology SpR & Education Fellow, Homerton UHFT

Dr Sam Murray kicked off with his *'In Situ Simulation Programme at Homerton University Hospital'*. He told us of the innovation of taking simulation to the workplace and the study he had conducted at Homerton in the medical Acute Care Unit (ACU) where a series of scenarios could be set up in very realistic surroundings. Patients on the unit were told what was happening and were later quizzed for their reactions, which were uniformly positive, and they were pleased that doctors are trained in this way. On-call registrars and their teams took thirty minutes off to simulate emergency situations and discuss the results and Dr Murray highlighted the particular effectiveness of the feedback sessions.

### Mr Ed Fitzgerald, Consultant Surgeon, Lifebox

*'Checklists, Never Events, Lifebox'* was a wake-up call that some errors in particular, such as wrong side surgery, should never happen. However, Mr Fitzgerald used the quotation 'never events will never be reported' to illustrate how difficult this term, never event, is because it leads to blame and incrimination and therefore a reluctance to report. Compare the MORs of Mr Naughton. We were given a critique of the recent Canadian study apparently showing that the WHO Surgical Safety Checklist, which we all (?) adhere to now, made no difference to the numbers of reported incidents; in particular pointing out the poor way the checklist had been introduced and the short run-in time before it was assessed for the paper.

Mr Fitzgerald told us about the charity 'Lifebox' to which all the proceeds from the conference will be donated. Lifebox's vision is to work for sustainable changes of practice that will ultimately raise the safety and quality standards of global health care. Its aim is to preserve and protect the health of patients worldwide by providing equipment and support services in low resource and lower-middle income countries

at no or reduced cost; by advancing education in health care of the general public and especially those in the health professions; and by acknowledging that surgical safety knows no religion, nationality or race, and therefore collaborating with a range of secular and faith-based organizations that share this principle.

#### **Dr Marc Lazarovici**

Dr Lazarovici returned to bring the meeting to a well-rounded conclusion with *'The Future of Patient Safety'*. He summarized what we had been hearing and reminded us of the three words, 'standardize', 'educate' and 'harmonize' which had been a theme running through the meeting. He pointed out that the science of medicine is concerned with diagnosis and therapeutics but the delivery of medicine is considered the 'art' of medicine so there has been little science to it. But this is changing with meetings such as today's conference.

## **Conclusion**

I have two reservations about this otherwise very good meeting. First, I did not properly understand the title beforehand and I am not sure I do so now. Patient safety was a thread throughout, so why was it not in the title?

But this is a minor consideration about this very well attended and useful day of learning about patient safety. Which brings me to my second concern: I came away still not knowing how to deal with the problem we have in medicine, which they do not have in the aeronautical industry or the nuclear power industry, of a blame culture. If there was no blame culture, incidents would be reported more readily and everyone would learn. Perhaps next year's conference will get to grips with this vexed problem.

## **Conflict of Interest**

No conflicts of interest have been declared.