

In this issue

In this issue – patient risks are ignored at organisation level

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INTRODUCTION AND EDITOR'S CHOICE

The paper we publish by Mark-Alexander Sujan is timely.¹ We publish his recommendations for managing patient safety risks, in a week, when a report was published setting out how there are estimated to be 237 million medication errors that occur at some point in the medication process in England per year. Of these errors, 66 million (28%) errors are thought to be clinically significant.² Sujan makes three key recommendations:

- 1) Focus on organisational learning
- 2) Promote proactive risk management
- 3) Make risk management decisions transparent and explicit

He recommends bottom-up innovation alongside implementation of little-known standards as the way forward.

BAWA-GARBA EDITORIAL – CALL FOR ACTION TO THE HEALTH AND CARE INFORMATICS COMMUNITY

The Editorial in this issue calls for the informatics community to think what systems could so easily have been in place that might have reduced the chance of such a tragedy occurring; we appear not to have learnt lessons known for many years.³ Laurence Weed not only developed problem-oriented medical records (POMR), but also computerised them. His computerised system: problem-oriented medical information system (PROMIS) was ahead of its time.⁴

Box 1 Weed's first computerised medical record (CMR) system (from Wright *et al.*)⁴

PROMIS was the first clinical information system to use a touch screen terminal. PROMIS was driven by a large medical knowledge base that was initially developed by Dr Weed and his wife Laura Weed¹ and later by a team of clinicians, librarians and systems analysts. PROMIS was organised entirely around the POMR concept, with the nurse beginning to populate the database, followed by the patient, who would complete a 275-question review-of-systems. Medical students and residents then added additional information, and documented a physical exam – all in structured form. Once the database was populated, the problem list was constructed, plans were developed and progress notes developed. The knowledge base required to support all of these modules was vast, and eventually specialists were brought in to extend it.

IMPLEMENTATION AND INTEGRATION INTO CLINICAL WORKFLOW

Implementation and integration of telemedicine into clinical workflow has long been a challenge. Your editor was involved in a controlled telemedicine pilot back in the last century! Honest!^{5,6} Even when the technology was offered to the NHS free – there was no interest from our local commissioners! The paper by Reed *et al.*⁷ reminds us that corporate culture and the skills to implement technology are as much needed now as they were 20 years ago! Perhaps even more so, as the technology is so much smarter.

CHILD HEALTH

A paper by Carsley *et al.* sets out to report completeness of data about obesity in childhood records. They found that over 90% of records had valid information about their Canadian network.⁸ My sense is that the completeness of data in computerised medical records is improving over time, and with obesity, such an international problem having data about complete cohorts is really valuable.

A GOOD THEORETICAL BASIS WILL STRENGTHEN OUR DISCIPLINE!

Don't let mention of Q-methodologies, technology acceptance model (TAM) or unified theory of acceptance and use of technology (UTAUT) put you off an excellent article by Ladan *et al.*⁹ To start with let me give each of the above a brief explanation:

- **Q-methodology** (also called Q-sort) is the systematic study of participant viewpoints. It is a key element of many evaluations. Multiple participant opinions might be ranked (the Q-sort) into those that area are most important.

- **TAM** – explores how two constructs: (1) Usefulness and (2) Ease of use often determine if a technology is used.
- **UTAUT** – is more complex and has four constructs (1) Users expectation about performance; (2) The effort required; (3) Social influences; and (4) What support there is.

The article explores these theories. Jump to Figures 1 and 2 in the paper by Ladan *et al.*⁹ to see how TAM and UTAUT are set out diagrammatically; then Figure 4, where they draw things together. As informatics develops as a discipline, we need to strengthen our theoretical underpinnings and define our core theory. This will add rigour to our discipline and its research.¹⁰

ROBOT WARD ROUNDS COMING SOON!

We report the findings from the comparative use of a robot (mobile, eye level and video-linked) that substituted for the surgeon on the ward round. This had good user and patient acceptance.¹¹ (Though did not use Q-methodology, TAM or UTAUT!).

LEARNING HEALTH SYSTEM AND STUDY PROTOCOL USING MIXED METHODS

We publish an interesting letter calling for better development and theoretical underpinning of the learning health system (LHS).¹² This letter is pertinent to our first paper which includes the call to focus on organisational learning to reduce risk.¹ An effective LHS might know how to implement telemedicine too!⁵ Finally, Wiggins *et al.*¹³ present a protocol of how to undertake a mixed methods assessment of a decision support tool to improve decision making around a mother's choice of place of birth.

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