Patient safety: time for a transformational change in medical education

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A major change in medical teaching practices is needed to improve patient safety

The Lucien Leape Institute, in Boston, USA, was formed in 2007 to provide a strategic vision for improving patient safety, and is composed of national "thought leaders" (http://www.npsf.org/lli/). The Institute has produced a report on the urgent need to reform medical education,[1] and states that many believe we are at a transformational moment similar to that which led to the profound changes in medical education following the release of the Flexner report in the United States 100 years ago.[2]

It is a decade since the release of national reports on patient safety that triggered a wake-up call,[3-5] and 15 years since the publication of the Quality in Australian Health Care study.[6] However, progress has been much slower than we would have liked. System-based changes, although desirable and necessary, have not done the job of improving patient safety. Although there have been some notable successes and high-profile champions of safety, we are unable to measure progress or to reassure patients that they will receive safe, high-quality care.[7,8] It's time to turn to those who will actually provide the health care to the patients of the future.

Health care is characterised by islands of excellence in a sea of mediocrity, and it is into this sea that our new health sciences graduates are launched. By the time of graduation, most will have been exposed to enough facts and figures about health care-associated harm to find them alarming, and most will have sufficient insight into the dysfunctional nature of "the system" to feel apprehensive about their preparedness for the voyage ahead of them.[9]

The good news is that the actual delivery of health care takes place at the interface between individual health care professionals and patients (and their carers).[9] Although this is where the final link in a chain of errors may be forged, it is also where constant vigilance and attention to detail by both individuals and members of multidisciplinary teams can ensure, on a daily basis, that what needs to happen, does in fact happen.[10] Much is said about clinical autonomy, and daily interaction is the sphere in which individual medical and nursing clinicians can have a massive impact on "getting it right".[9] But clinical interaction must be from the perspective of the patient, and in line with best practice, not with old habits, new fashions or outdated dictates from an incumbent hierarchy. Structured, evidence-based care plans provide transparency and allow all team members to monitor patient compliance with treatment, and intervene when necessary. James Reason, who has written extensively on error and safety, has exhorted us to celebrate the remarkable capacity of individual team members to continuously turn potential adverse events into "near misses" in high-risk systems.[10]

Although altruistic, well intentioned young graduates are forced by the system into moulds and practices they may not like, and over which they have little control, the majority will, against considerable odds, manage to provide high-quality, patient-centred care. However, they could and should be better equipped for the formidable tasks they face. Most new graduates are well equipped to deal with the technical aspects of health care, and are well mentored in these by their seniors,[1] but transformational change is needed to produce a new generation of clinicians endowed with a proper understanding of what is wrong. They need to be equipped with non-technical skills such as situation awareness, communication techniques, empathy and graded assertiveness,[9] and to be imbued with an understanding that real change is urgently needed and must come from them.

The 12 recommendations for transformational change made by the Leape report[1] are paraphrased here. The first four address the organisational context, recommending that leaders in medical teaching should:

- place the highest priority on creating learning cultures that emphasise patient safety;
- launch a broad effort to promote the development and display of the necessary personal attributes, such as professionalism, collaborative behaviour and transparency;
- provide incentives and resources to support this effort; and
- place greater emphasis on screening prospective students for the appropriate attributes.

The next three recommendations in the report are about strategies for teaching patient safety, recommending that:

- patient safety be treated as a science;
- the shaping of the desired skills, attitudes and behaviours becomes an integral part of the core competencies required by accreditation bodies; and
- patient safety education becomes a life-long process.

The final five recommendations deal with strategies to "leverage acceleration of the desired changes" so as to:

- modify accreditation standards so that these become curricular requirements, with required competencies at graduation;
- expand program requirements in postgraduate training programs;
- direct attention to safety-related preparation of graduates entering clinical training;
- ensure that medical schools are evaluated with respect to their performance in these areas; and
- establish incentives to achieve these changes.

Health sciences students in Australia are now variously exposed to teaching about systems thinking, interprofessional learning, human error, incident reporting and open disclosure. This is a good start, but an evident lack of system-wide progress, and the robust homeostatic mechanisms that tend to maintain the system's status quo, show that more than this is needed. Patient safety is not just another technical problem to be added to the curriculum. It is a serious, enormously costly, multidimensional problem[8] that can only be addressed by transformational change in the attitudes and behaviours of the people who will be in a position to dictate how medicine will be practised[1] where it matters: at the interface between them and the patients of the future.[9]

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Competing interests

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