Hip fracture: the case for a funded national registry

Let’s implement what we know and avoid deaths from hip fracture

The value of orthogeriatric care for hip fracture patients has been known for years, and a recent summary of international evidence has acknowledged the benefits. The NHS in England considered this so important that it offers serious financial incentives for hospitals to achieve an evidence-based standard of care—a “best-practice tariff” rewards hospitals that achieve the following key quality criteria:

- surgery within 36 hours
- shared care by surgeon and geriatrician
- care protocol agreed to by geriatrician, surgeon and anaesthetist
- assessment by geriatrician within 72 hours of admission
- preoperative and postoperative abbreviated mental test score assessment
- geriatrician-led multidisciplinary rehabilitation
- secondary prevention of falls
- bone health assessment.2

This incentive, together with the United Kingdom’s long established National Hip Fracture Database, has enabled monitoring of care and tracking of definite improvements.3 Hospitals are identified in the UK audit, so the poor performers cannot hide; this provides additional incentive to get things right.

Orthogeriatric care is not particularly complex. Like much of geriatric medicine, it is about doing a number of fairly simple things well.1 Geriatric assessment will help identify easily reversible problems before surgery (eg, electrolyte abnormalities, drug errors, fluid balance). Early surgery is safe and is the best way of relieving the severe pain of a hip fracture. The main driver of the best-practice tariff—Keith Willett, Professor of Orthopaedic Trauma Surgery, University of Oxford—has said: “I don’t believe the sun should set twice on a hip fracture” (personal communication). Early mobilisation with multidisciplinary care and good secondary prevention are key interventions after surgery.

In this issue of the Journal, Zeltzer and colleagues describe their investigation of the effects of orthogeriatric care in New South Wales. Their data suggest that there is unacceptable clinical variation.4 They found a statistically significant and clinically important difference in median adjusted 30-day mortality rate between 14 hospitals with an orthogeriatric service (6.2%) and 23 without (8.4%). Data from the Bureau of Health Information in NSW have also revealed important clinical variation between hospitals.3

While these data can tell us which hospitals have problems, only more detailed process data, such as data variables within a prospective clinical register, can help tell us why there is variation. Such data can then be used to implement change and improve care. Zeltzer et al suggest that the new Australian and New Zealand Hip Fracture Registry (http://www.anzfrhfr.org) will help improve hip fracture care. It is highly likely that if the Australian states and territories funded this register and made registration a requirement for activity-based funding that similar benefits to those seen in the UK could be achieved. This would contribute to a healthier old age. The stroke community, through the Australian Stroke Coalition (http://australianstrokecoalition.com.au), are moving in the same direction, as care for stroke patients has remarkable similarities to care for hip fracture patients: an acute intervention that needs timely administration (thrombolysis), organised multidisciplinary care (stroke units) and good secondary prevention.

If a rich country like Australia struggles to implement effective care, what hope is there for the Asia-Pacific region? The global health challenge is enormous, with over 400 000 people dying from falls each year.7 Hip fracture rates in China are about to soar because of demographic change. The number of people aged over 80 years in China will increase from the current 8 million to some 100 million by 2050.8 It will be a medical disaster for low- and middle-income countries to adopt some aspects of hip fracture care (expensive prostheses and surgery) without the other essentials (orthogeriatric care). The global challenge is to find the right incentives, training, health care services and funding to implement affordable effective health care. Orthogeriatric care in these countries is not an impossible dream as these services depend on people, rather than expensive technology.

I recommend that the managers and clinicians in those 23 NSW hospitals without orthogeriatric services now reorganise their services so the next 5000 patients with hip fracture who arrive at their emergency departments in the next 2 years receive a higher standard of care, have a lower risk of dying, and have a higher chance of better quality of life.

The key challenge of 21st century medicine is finding and implementing affordable health care, not only in low-and middle-income countries but also in Australia.
Prevention and early detection in young children: challenges for policy and practice

Review and further development of the Healthy Kids Check are crucial

Evidence-based systems of prevention and early intervention have long been a far-reaching goal for health planners and academics. This notion has assumed even greater importance in paediatrics because of the robust research now emerging about the early-life origins of a range of problematic health and psychosocial conditions later in the life course. \(^1\) Conditions as diverse as diabetes, cardiovascular disease, mental health problems and criminality have been linked to the environments experienced by unborn and young children. The idea of introducing a health check for children in order to detect emerging problems and risk factors, and offer treatment early in life, seems a natural and welcome policy response.

However, what seems such an intuitive concept faces a number of significant challenges in its implementation. \(^2\) These include the improbability of being able to check all children (with those most at risk being least likely to present for a check); the lack of reliable and valid measures in many domains (not fulfilling the scientific criteria for a screening test or program); the considerable developmental variability in young children (so that many problems are transient); and the difficulty in timely access to assessment and treatment services (cost, long waiting lists, and uneven coverage especially in rural areas).

In 2008, the Australian Government introduced the Healthy Kids Check (HKC). This was designed to be administrated to all 4-year-olds before starting school, to promote “early detection of lifestyle risk factors, delayed development and illness, and … introduce guidance for healthy lifestyle and early intervention strategies” (http://www.health.gov.au/internet/main/publishing.nsf/Content/Health_Kids_Check_Factsheet). The HKC has been critcised for not being evidence-based \(^3\) and for its timing (many conditions and risk factors emerge earlier than 4 years of age). In addition, the focus is narrowly on health and largely excludes developmental and behavioural issues. On the other hand, a recent limited evaluation of the HKC in two general practices found that general practitioners “are identifying important child health concerns … using appropriate clinical judgement for the management of some conditions, and referring when concerned”. \(^4\)

In 2012, the government established a multidisciplinary expert working group to provide advice about the introduction of an expanded Healthy Kids Check (EHKC), designed to be administered at 3 years of age and to replace the HKC. The working group systematically and carefully worked through the various issues — methods of early detection, selection of domains, professional training and expertise, referral and follow-up arrangements — and made a series of recommendations to government. The EHKC was designed to elicit and respond to any parent concerns about the child’s health, development and behaviour, along with providing a physical assessment including measurement of height and growth and calculation of body mass index (http://www.health.gov.au/internet/main/publishing.nsf/Content/healthy-kidschk). The check itself was but one part of the process — also included were online training modules and a mapping template to facilitate referral for assessment and intervention. Pilotting of the EHKC was undertaken in several states by the Australian Medicare Local Alliance, which submitted an evaluation report to government in November 2013.

The process of designing the EHKC highlighted some of the challenges in developing and introducing an approach to prevention and early intervention in child health. There was uninformed criticism — in the media as well as in peer-reviewed journals \(^5,6\) — that this was a mental health check and that the EHKC was designed to screen...
for mental health problems. This perception may have arisen from the inclusion of questions designed to elicit parent concerns about the child’s behaviour, and because funding for the development of the EHKC was provided by the mental health branch of the Department of Health. Rather than being a screening test, the EHKC was conceptualised as providing an opportunity for parents to raise any concerns with their child’s GP. These would be addressed using the GP’s clinical judgement — reassurance, providing appropriate advice, or referral for further assessment and management — facilitated by appropriate training and a mapping template to document local community supports and referral agencies. The government is apparently considering the evaluation report, generally very positive, but no decision has been made about the introduction of the EHKC. Meanwhile, the HKC continues as a Medicare-funded check for 4-year-olds.

While the idea of prevention and intervention early in life is compelling and the research underpinning it largely uncontested, it is a hard sell to government and there are many challenges in its implementation. Early detection of emerging problems is problematic. Many issues in young children are transient, and we do not have reliable and valid methods to know which children we should be concerned about. The evidence suggests that systematically eliciting and responding to parent concerns is the best method for early detection (Murdoch Child Health; submission to the Victorian Government, March 2009). Making the check part of Medicare removes a potential financial barrier for uptake but still does not ensure that all children, especially those at risk, are seen in a timely fashion.

The primary health care system must be at the heart of efforts to refocus the health system towards prevention and early intervention, so GP involvement in undertaking the child health checks is important. It is to be hoped that the government persists with the ongoing review and informed evolution of the child health check, and that the challenges and concerns that are an inevitable accompaniment to introducing any population health measure are addressed appropriately.

Competing interests: I chaired the expert working group that made recommendations to the government about the EHKC.

Provenance: Commissioned; externally peer reviewed.