



## From the editor's chair

What really matters to patients, what role does evidence play in stopping ineffective practice, and does telehealth improve outcomes for people with chronic illness?

These are just some of the questions examined in this edition of the HARC e-Bulletin.

In the area of **quality and safety**, we report on a US study that shows, like a good red, obstetricians improve with time. The study of obstetricians' maternal complication rates found that not only did their quality of practice improve 5-10 years after residency, it kept improving for the next 2-3 decades.

And researchers have found that having bedside intensivists at night in ICUs does not produce better outcomes than when daytime intensivists are available to provide support via the phone.

In this issue, we also focus on **evidence-based medicine**, including whether direct evidence is needed to address overuse of a service, and a UK study that found Cochrane systematic reviews were not enough for administrators and clinicians to put a stop to ineffective interventions.

Finally, we examine **effective health systems**, including a report on the emergency response when two bombs were detonated at the Boston marathon on 15 April. Reporting in the *New England Journal of Medicine*, emergency doctors said they drew on a decade of training and learning from the experiences of others to ensure a swift response. The result was extraordinary – none of the scores of patients who were transported to hospital that day died.

We welcome your feedback, and our contact details can be found at the end of the e-Bulletin. Enjoy the issue.

Marge Overs  
Acting Editor

### HARC Forum: Reducing diagnostic errors in medicine

No healthcare organisation in the world is measuring the scale of diagnostic error in its patients, international expert Dr Mark Graber told the 9th HARC Forum.

Dr Graber (pictured) said research data had estimated the incidence of diagnostic error at between 10% and 15%. Incidence data were needed to confirm what was happening in practice and determine what fraction of these errors resulted in harm.

Extrapolated estimates for Australia put the number of diagnostic errors at 140,000 cases per year, with 21,000 cases of serious harm and 2000–4000 deaths, he said.

Dr Graber, who founded the Society to Improve Diagnosis in Medicine and is a Professor Emeritus of Medicine, State University of New York, said diagnostic error was not being discussed, yet it was an important driver of medical malpractice claims.



While part of the problem was a lack of consensus on what constituted a diagnostic error, the most significant impediment was current patient safety monitoring tools failing to detect diagnostic errors.

Dr Graber said a number of possible ways to measure diagnostic error were worthy of trials, including: ‘trigger tools’ to prompt further investigation, such as unplanned hospital admissions within two weeks of a primary care visit; innovative ways to encourage doctors to report error; and following up patients after healthcare visits, and encouraging them to speak up and keep track of their healthcare records.

He said progress in addressing diagnostic error depended on overcoming a lack of ownership of the problem, and this was where policy makers could make a real difference.

Healthcare system managers could measure the diagnostic error rate, create ‘space’ to talk about error, address the common system flaws that contribute to diagnostic error, provide decision-support resources and develop pathways for feedback, Dr Graber said.

Doctors could bring system errors to attention, insist on feedback from patients and peers, and seek help through collaborating with colleagues and using decision-support resources.

A panel of speakers at the forum gave their perspective on diagnostic error in Australia. President of the Australian Patient Safety Foundation Professor Bill Runciman said Dr Graber’s work was highly relevant to Australia. There was a “stunning congruence” between the problems faced here and those experienced in other western countries, he said.

- [View](#) Dr Graber’s presentation or [watch](#) our short video: Five questions with Dr Mark Graber.

## Lack of 'conceptual backbone' impedes overuse fight

Growing momentum to reduce overuse of medical services will falter without a clear concept of what constitutes overuse, according to a viewpoint in [Journal of the American Medical Association](#).

While initiatives to address overuse of medical services were crucial to reduce healthcare spending and harm to patients, the meaning of overuse was often "conceptually vague", Drs Allison Lipitz-Snyderman and Peter M Bach, from Memorial Sloan-Kettering Cancer Center wrote.

"In our view, this lack of conceptual backbone will impede the acceptance of these initiatives by physicians."

Drs Lipitz-Snyderman and Bach proposed a conceptual framework for overuse with three categories:

- Benefit-harm tradeoff: services where potential harms exceed potential benefits, such as futile chemotherapy for dying patients
- Benefit-cost tradeoff: services where potential benefits are small relative to cost, such as expensive screening for osteoporosis for groups at low risk
- Consideration of patient preferences: situations where a provider's view about tradeoffs between survival and quality of life may be at odds with the patient's, or would be if the patient fully understood the implications of receiving treatment.

Overtesting continues to be debated in Australia, with GP and health commentator Dr Justin Coleman recently paying tribute to the late Gavin Mooney in a spirited address on the pitfalls of overtesting and overtreatment.

"His philosophy was that, sometimes, less is more. We must pare things back, strip away excesses and judiciously apply what we know works, rather than enthusiastically embrace what we wish would work," Dr Coleman told the Queensland RACGP Annual Clinical Update, in an address reported by [Croakey](#).

Dr Coleman, a GP at Inala Centre of Excellence in Aboriginal and Torres Strait Islander Health, said industry, the media and some doctors pushed the paradigm that the only important news "is a new invention, new drug, robotic surgery, more MRIs".

"As a GP, I am a gatekeeper to a most powerful, expensive, superb and dangerous health system and I must never forget that sometimes my job is to shut the gate."

In a timely contrast, a new report from the National Health Performance Authority has revealed disparities in health status and availability and use of health services depending on where people live.

The report, [Healthy Communities: Australians' experiences with access to health care in 2011-12](#), shows that the areas where people have poorer average health are not receiving a larger share of these health care services.

"Further, local area populations with poorer average health (and therefore greater average need for care) have similar cost barriers and waiting times than healthier Medicare Local populations whose need for health care is lower," the report said.

## AIHW rethink after WA study shows GP patients not jamming EDs

The Australian Institute of Health and Welfare (AIHW) will review its method for estimating GP-type presentations to emergency departments following a study that found flawed data had wrongly blamed GP patients for clogging up emergency departments.

Emergency physicians from WA led the study, published in the [Medical Journal of Australia](#). It compared four methods for estimating the number of GP-type patients presenting to EDs at three major tertiary hospitals in Perth between 2009 and 2011.

Three of the methods estimated that 10-12% of patients were GP-type patients, accounting for 3-5% of

the total ED stay. The AIHW method, which uses the Australian Triage Scale to define GP-type patients, estimated that more than 25% of patients might have been suitable for general practice.

The authors said the AIHW method consistently overestimated the proportion of GP-type patients because the Triage Scale was based on urgency rather than complexity. Patients could have a low triage category but still need complex care. The AIHW method also includes patients whose GPs had referred them to the ED.

The authors said it was essential to accurately estimate the proportion of general practice-type patients in the ED, as incorrect data led to poor policy and planning.

“This results in misdirected and costly interventions, which inevitably fail to resolve ED overcrowding or its underlying causes,” they said.

“The AIHW methodology overestimated general practice-type patient workload in EDs and should no longer be used to guide policy decisions.”

The authors said AIHW data were flawed and diverted attention from the real problems.

“The impact on the ED from diverting general practice-type patients is low, and inaccurate reporting of the true proportion of these patients results in policy and program initiatives that do not address the real cause of ED overcrowding, which is the lack of available inpatient beds.”

The AIHW said it was reviewing the methodology for this indicator, including consulting some of the researchers who contributed to the *MJA* article.

“Progress on this work includes a recent AIHW workshop which brought together representatives from the primary and tertiary healthcare, consumer and government sectors to discuss and improve the accuracy of the measure,” the AIHW said.

## Patient-centred care

### National patient surveys may encourage ‘tick-box mentality’

Results of national patient surveys are largely not used to drive improvements in the patient experience at the local level, UK researchers say.

The UK national patient survey program had led to a “tick the box or compliance mentality” on the part of management boards, King’s College researchers wrote in the [Journal of Health Services Research & Policy](#).

They said the NHS survey program, which led the way in mandating a national patient survey program in 2001, may have contributed to the failure of hospital management boards to consider their own responsibility for collecting and acting on patient data to improve the quality of local services.

“The survey program may have lulled them into thinking that they were paying attention to their patients’ experiences,” the editorial said, adding that patient experience data were rarely used to spark debate and action.

Also, there was little evidence that clinical teams used national patient survey data to drive local improvement, with many clinicians believing that generic surveys did not reflect their own patients’ experiences.

“Often, it appears that results of patient experiences surveys do not intrinsically appeal to clinicians and nor are they meaningful to patients,” they said.

The authors said an “overarching indicator of what matters to patients” was needed to ensure efforts to gauge patient experiences strengthened the patient voice and made health services more accountable to local communities.

That indicator, such as the Family and Friends test (“How likely are you to recommend our ward/A&E department to friends and family if they needed similar care or treatment?”) should be collected as near to real time as possible at the service level.

“In combination with local qualitative approaches (such as patient stories) that capture the rich details of patient experiences and a planned change process for improving services on the basis of patient feedback, we believe a national patient feedback program revised on these lines would better serve the health system and patients.”

Robert G, Cornwell J. Rethinking policy approaches to measuring and improving patient experience. [J Health Serv Res Policy 2013;18\(2\):67-69](#)

## Achieving a meaningful partnership with patients

Clinician-patient partnerships are much more than a push for efficiency – they are a fundamental shift in the power structure in healthcare, according to an editorial in the [British Medical Journal](#).

“We need to accept that expertise in health and illness lies outside as much as inside medical circles,” the editorial said.

After “eons of paternalism” it would not be easy for clinicians to work in partnership with patients, but good examples were showing the way, including:

- The Choosing Wisely initiative in the US, where patients and doctors work together to identify and reduce the use of unwarranted and ineffective interventions
- The James Lind Alliance in the UK and the Patient Centered Outcomes Research Institute in the US, which focus on the mismatch between the questions to which patients and doctors want answers and the ones that researchers are investigating
- Organisations that develop patient-doctor collaborations to design new services. Leaders in innovative partnership include ReshapeHealth ([www.radboudreshapecenter.com](http://www.radboudreshapecenter.com)), which is pioneering patient-led and “crowdfunded” research
- A growing number of healthcare organisations that are giving patients access to, and in some cases control over, their medical records, such as the Mayo Clinic, which has a free app that allows patients full access to their medical notes and test results.

“Revolution requires joint participation in the design and implementation of new policies, systems, and services, as well as in clinical decision making,” the *BMJ* editorial said.

“Much remains to be discovered, evaluated, and implemented to achieve meaningful partnership with patients.”

Richards T, Montori VM, Godlee FG, Lapsley P, Paul D. Let the patient revolution begin. [BMJ 2013;346:f2614](#)

## Need to define citizen role in healthcare

While citizen participation in healthcare has grown in popularity, there are “fundamental uncertainties about what it entails and its associated benefits”, says Scottish researcher Ellen Stewart.

Writing in the [Journal of Health Services Research & Policy](#), Ms Stewart, of the University of Edinburgh, said the rapid growth in literature on participation in healthcare had led to “terminological instability”.

Debate revolved around a range of terms formed by adding a group of participants (‘public’ ‘patient’ ‘citizen’ ‘community’ or ‘user’) to a type of activity (‘involvement’ ‘engagement’ or ‘participation’).

These were not just merely semantic differences, she wrote, but revealed disagreement about the nature and purposes of participation.

“The lack of specification of participation allows policy makers, practitioners and researchers to go

about their business without having to resolve the uncertainties and conflicts contained within the phenomenon," she said.

"It is time to admit that participation rationales are far from self-evident and accept that participation is a site of disagreement, rather than an unqualified good."

Stewart E. What is the point of citizen participation in health care? [J Health Serv Res Policy 2013;18\(2\):124-26](#)

## Patients do better when doctors look beyond the consulting room

A US study has found that patients' health outcomes improve when their doctors notice and then deal with social and cultural factors in the patients' lives.

The study, in the [Annals of Internal Medicine](#), is the largest to use real patients to collect data about their doctors' behaviour using concealed audio recorders.

It aimed to determine if patient-centred decision-making – identifying clinically relevant information about a patient's circumstances – affected healthcare outcomes.

The study recruited 774 patients who recorded their visits with 139 resident physicians at two Chicago veterans' affairs clinics. The doctors had all agreed to take part in the study but did not know which patients were recording them.

Medical records of these encounters were then screened for "contextual red flags" that could reflect factors outside the consulting room. Red flags included missed appointments or deteriorating self-management of a chronic condition.

When a red flag was identified, either because the physician asked about it or because a patient offered information, physicians were scored on the basis of whether they adapted the care plan to it. Individualised outcome measures were based on the red flag, such as improved blood pressure control.

The researchers identified 208 consultations where there was a contextual red flag. Doctors noticed the red flag and adjusted the care plan in 59% of these consultations. The researchers found that 71% of patients with a contextualised care plan had improved health care outcomes compared with 46% of those whose did not have a contextualised care plan.

The researchers said their research "may be the first to document an association between contextualising patient care and patient care outcomes".

"Patient-centred decision-making requires answering the question, 'What is the best next thing for this patient at this time?'. Our findings suggest that when clinicians successfully answer the question, as reflected in their care plan, there is an associated benefit to the patient that is measurable and substantial."

Weiner SJ, Schwartz A, Sharma G, Binns-Calvey A, Ashley N, Kelly B, Dayal A, Patel S, Weaver FM, Harris I. Patient-centered decision making and health care outcomes: An observational study. [Ann Intern Med 2013;158\(8\):573-79](#)

## Evidence based medicine

### Halting ineffective practice needs more than evidence alone

Clinicians and health service managers need more than systematic review evidence to stop ineffective health practice, according to UK researchers.

Their study, published in the [Journal of Health Services Research & Policy](#), involved interviews with 23 clinicians and 15 commissioners from nine Primary Care Trusts in the south of England.

Participants were interviewed about five interventions used in primary or secondary care including arthroscopic debridement for knee osteoarthritis, grommets for otitis media in children and tonsillectomy versus non-surgical treatment for recurrent tonsillitis.

Participants identified a number of barriers to using Cochrane systematic reviews to stop ineffective interventions, including: policy contradictions; managing a high volume of evidence; difficulty in applying the evidence to the local context; and patient or parent expectations.

“The lack of an explicit framework can result in strong resistance and skepticism from clinicians, can lead to ambiguity within the health system and can create tension between clinicians and commissioners,” the researchers found.

“Some clinicians expressed a lack of faith in the process and concern that cost considerations were placed ahead of effectiveness.”

The main challenges for clinicians were dealing with clinical uncertainty, prevailing opinion, skills and training and patient expectation.

“Inevitably, if there is uncertainty about whether or not a health care intervention delivers benefit to a patient, some patients will receive an intervention unnecessarily,” the authors said.

With all five interventions, patient expectations were a powerful driver of continued use.

“If decommissioning is to be guided by evidence then adequate resources to support the process are necessary, including long-term engagement of clinicians, monitoring variation in implementation, providing alternatives and tackling perverse incentives.”

Shepperd S, Adams R, Hill A, Garner S, Dopson, S. Challenges to using evidence from systematic reviews to stop ineffective practice: an interview study. [J Health Serv Res Policy 2013;\(18\)3:160-66](#)

## Call to build on bowel screening program's early wins

The Cancer Council has called for the Federal Government to speed up the implementation of the National Bowel Screening Cancer Screening Program following its early success.

Writing in the [Medical Journal of Australia](#), CEO Professor Ian Olver and Advocacy Director Paul Grogan said results after five years of the program showed the government should actively promote it to eligible groups.

They were commenting on a [study](#) in the same issue that examined records from the SA Cancer Registry. It found that colorectal cancers were diagnosed at a significantly earlier stage in people invited to the National Bowel Cancer Screening Program compared with those who were not invited, regardless of participation status or test result.

They said the study results reflected a previous report where, of 1628 patients with bowel cancer diagnosed between May 2006 and June 2008, those diagnosed through the screening program had almost triple the rate of early-stage disease compared with patients who were not diagnosed until they developed symptoms.

Professor Olver and Mr Grogan said the bowel screening program's faecal immunochemical test (FIT) had no side effects apart from the psychological distress of receiving a positive result.

“However, patients who have positive results in the FIT are recommended to have a follow-up colonoscopy. The advantage of doing a FIT first is that the likelihood of finding a bowel cancer is 12 to 40 times greater if the FIT result is positive.”

The program, which has been progressively rolled out, aims to screen people aged 50-74 years every two years by 2030.

Olver IN, Grogan PB. Early success for Australia's bowel screening program: let's move it along. [Med J Aust 2013;198\(6\):300-01](#)

## Quality and Safety

### Obstetricians just keep getting better

The clinical performance of obstetricians improves with years of experience, with the improvement steepest in a physician's first decade of practice after residency, US [study](#) has found.

The researchers said their goal was to see if an obstetrician's clinical performance, as measured by adverse maternal outcomes, changed over the course of a career.

"Intuitively, one might expect additional experience to improve performance early on, as physicians ascend a learning curve," they said.

They analysed more than 6 million deliveries by 5175 obstetricians at acute care hospitals in Florida and New York between 1992 and 2009.

Not only did quality improve to 5–10 years out, the authors wrote, but it kept improving.

They found that obstetricians' maternal complication rates declined during the first three decades after completion of residency. The improvement was largest in the first 10 years and diminished after that.

"Our findings that new obstetricians continue to improve for three decades have potentially important implications," the researchers said. "These results suggest that delivery outcomes might be improved by shifting cases from less experienced to more experienced obstetricians.

"Although we saw a diminishing marginal effect of experience on outcomes, obstetricians with three decades of experience still have fewer maternal complications than their peers near the start of their careers."

They said the results might also help guide patients in choosing their obstetrician, with years of experience one factor patients could consider.

AJ, Srinivas SK, Nicholson S, Herrin J, Asch DA. Association between physicians' experience after training and maternal obstetrical outcomes: cohort study [BMJ 2013;346:f1596](#)

### Patient demand can drive surgical audit

A leading surgeon says patients should insist their surgeon takes part in an audit of their practice and be more demanding in asking for the results.

"If patients expect such information, government will need to help the profession to provide useful outcome data," Professor Guy Maddern, of the University of Adelaide, wrote in an editorial in the [Medical Journal of Australia](#).

Professor Maddern was reviewing the lessons of the Australian and New Zealand Audit of Surgical Mortality (ANZASM), which has audited surgeons' activity in Australia since 2009.

Professor Maddern said the national audit gave feedback to surgeons on their cases, and instituted peer review of deaths of concerning cases where mortality may not have been an expected outcome.

The national annual reports for 2009–2011 allowed investigation of trends, and had shown surgeons the value of adequate DVT prophylaxis, early patient transfer and careful resuscitation.

"Careful review of all deaths should continue to be supported. More refined audits of outcome need to be established and the results provided to surgeons," he wrote.

"Non-participants should not be allowed to maintain registration. With our national medical board registration, such sanctions are now possible and should be used for those not prepared to report on their results."



“Better care and less enthusiasm for futile surgery appear to be leading to a real reduction in surgical mortality.”

Maddern G. Public reporting of surgeons' performance. [MJA 2013;198\(8\):399-400](#)

## Checklists can cut errors by 75%, WHO adviser says

Checklists can significantly reduce errors in intraoperative emergencies, a WHO surgical adviser believes.

Dr Atul Gawande, a surgeon at Brigham and Women's Hospital in Massachusetts, wrote that the results of a randomised study his group conducted early this year had shown that checklists could reduce errors by 75 per cent.

Quoted in an article in [British Medical Journal](#), Dr Gawande said the trial, which used a simulator, found that the use of a checklist reduced the likelihood of missing key lifesaving steps from 25% to 6% – a 75% reduction in errors.

Dr Gawande, the lead adviser on the WHO's Safe Surgery Saves Lives, said crisis checklists were the next step in surgical safety, following on from his earlier development of WHO surgical safety checklists, which are used for routine checks.

WHO believes that the use of these checklists in every operation would prevent over half a million deaths, after a number of studies confirmed reductions in complications and mortality.

Chinthapalli K. Checklists can reduce errors in intraoperative emergencies by 75%, says expert. [BMJ 2013;346:f2767](#)

## Roadmap for measuring healthcare quality

Measuring healthcare quality in a way that focuses on important outcomes, including the patient experience, is essential if the US Affordable Care Act is to achieve its goal of delivering high-quality, safe and affordable health care, according to a viewpoint in [JAMA](#).

The authors described the changes needed to achieve quality measurement that focuses on outcome. They said meaningful quality measures need to move from narrow snapshots that are setting-specific to “assessments that are broad based, meaningful, and patient centred in the continuum of time in which care is delivered”.

Performance in all six priority domains of the National Quality Strategy must be addressed, monitored and improved: clinical care, patient experience and engagement, population and community health, safety, care coordination and cost and efficiency, they wrote.

“The goal is to identify important measures, discontinue using those of little value ... and construct measures into a portfolio that meets the needs of payers, policy makers, and the public.”

In outlining a roadmap for these improvements, the authors said clinicians and hospitals should be required to submit clinical quality measures to obtain payment incentives and fulfill public reporting requirements.

Measurement systems should include ways to provide feedback to front-line clinical staff in as close to real time as possible and at the point of care whenever possible.

“For example, in some leading health systems, clinicians have an electronic health record linked to a registry and this system is used for benchmarking with peers via electronic dashboards, timely feedback of individual and group performance, and decision support to drive improvement.”

Conway PH, Mostashari, F, Clancy, C. The future of quality measurement for improvement and accountability. [JAMA 2013; 309\(21\):2215-16](#)

## Checklist for quality and safety measures

Two Queensland clinicians have proposed a checklist of criteria that decision-makers can use to see if quality and safety improvement interventions (QSII) warrant widespread adoption.

Writing in the [Medical Journal of Australia](#), Drs Ian Scott and John Wakefield said determining whether a specific intervention was fit for widespread intervention was controversial, with some large-scale QSIs shown to be less effective than expected.

They proposed 12 criteria that could be applied to research about QSIs to see if they warranted widespread adoption. The criteria, described in full in the *MJA* article, include questions such as: has the intervention had proof-of-concept testing; is the intervention standardised and replicable; and have the effects of the QSII and the potential adverse and unintended effects been evaluated been rigorously evaluated?

Scott IA, Wakefield JB. Deciding when quality and safety improvement interventions warrant widespread adoption. [MJA 2013;198\(8\):408-10](#)

## Health systems need to keep pace with point-of-care testing

The rise of rapid point-of-care testing can improve health outcomes in low- and middle-income countries, but health systems need to evolve to match the innovation in testing, according to an article in [New England Journal of Medicine](#).

Rapid point-of-care testing for diabetes, anaemia, pregnancy, HIV and malaria have long been available and have become common diagnostic tools in both high- and low-income countries, the authors said.

These tests have had huge benefits, with rapid HIV tests driving global efforts in HIV prevention and treatment while malaria tests had been instrumental in raising testing rates in Africa.

With new generations of rapid POC testing on the horizon, health systems need to adapt to make best use of the tests, they said.

The authors proposed four key changes:

- The WHO and other bodies should provide recommendations on how to use point-of-care tests; how to select the right products and where and how to use new technologies in relation to existing tests
- Innovate in the design, operation and workflow of clinics to ensure that testing is accessible and results are used in real time to guide treatment
- Take systematic steps to decentralise point-of-care testing and to improve the retention of patients both before and after testing
- Overcome operational challenges in implementing point-of-care testing, such as ensuring staff are trained to use the new technology.

“The investment in developing new point-of-care diagnostics has started to yield fruit. Now health systems need to evolve to reap the benefits,” the authors wrote.

Jani IV, Peter TF. How point-of-care testing could drive innovation in global health. [NEJM 2013; 368\(24\): 2319-24](#)

## Bedside intensivists at night do not boost outcomes, US study

Staffing an intensive care unit (ICU) with intensivists at night does not improve patient outcomes, a US study has found.

The study, published in the [New England Journal of Medicine](#), compared outcomes in an academic medical ICU unit staffed with intensivists with a model where daytime intensivists were available to

provide telephone advice at night.

The authors said increasing numbers of ICUs in the US and Europe were rostering intensivists at night despite the lack of evidence for effectiveness.

“Some authors argue that 24-hour presence of seasoned intensivists at the bedside of patients would improve diagnostic and therapeutic efficiency, particularly for high-risk patients,” they said.

They conducted a one-year randomised trial in the ICU of the Hospital of the University of Pennsylvania, involving more than 1500 patients.

They found no evidence that bedside intensivists in the ICU at night had a significant effect on length of stay, ICU or in-hospital mortality, readmission to the ICU, or the probability of discharge.

The authors offered several reasons for the lack of significant benefit of night-time intensivists, including that there may be limited room for improvement in ICUs that have daytime intensivists, that night-time intensivist staffing may disrupt continuity of care for some patients, and that bedside intensivists may not add to the quality of care provided by well-trained resident physicians who have telephone access to intensivists.

“Finally, night-time intensivists may truly have an effect on mortality in a small number of patients, but such patients may be so few in number that detecting these benefits would require a much larger study,” they said.

“Future research that investigates these and other potential explanations could inform broader debates about the best ways to use a limited intensivist workforce.”

Kerlin MP, Small DS, Cooney E, Fuchs BD, Bellini LM, Mikkelsen, ME, Schweickert WD, Bakhru RN, NB Gabler, Harhay MO, Hansen-Flaschen J, Halpern SD. Randomized Trial of Nighttime Physician Staffing in an Intensive Care Unit. [N Engl J Med 2013; 368\(23\): 2202–09](#)

## Call for flexibility on level of evidence when measuring overuse

Direct evidence is not always needed to address overuse of a service, according to a viewpoint in [Journal of the American Medical Association](#).

Unlike underuse measures, for which randomised controlled trial evidence is preferred, there are good arguments to consider developing an overuse measure for a service even if there is a lower level of evidence or lack of a guideline recommendation against the measure, the authors said.

“Some diagnostic and therapeutic services are widely used, even for patients for whom no clear indication exists,” they said. “Even if no direct evidence exists against a service, it is reasonable to undertake efforts to control its use if the service was never shown to be beneficial prior to widespread use and if the majority of experts doubt that the service is of value in a target population.”

The authors – doctors from the division of general internal medicine at Northwestern University in Chicago – said that compared with traditional underuse measures, the rules of evidence for developing overuse measures were less well defined, and thoughtful strategies were needed to avoid unintended consequences of overuse measures.

The level and strength of evidence for overuse measures may need to vary depending on the potential harms and benefits of the service under consideration, they argued.

“For a service with significant potential harms (eg, chemotherapy), even the absence of proven efficacy may justify developing an overuse measure.”

Also, overuse measures may lead to underuse of beneficial procedures, they said.

Mathias JS, Baker DW. Developing quality measures to address overuse. [JAMA 2013; 309\(18\):1897–98](#)

## Law reform will not close the open disclosure gap

Changes in the culture of health services, not increased legal protection, will encourage health professionals to disclose medical errors to their patients, according to an article in the [Medical Journal of Australia](#).

The authors, Mr Stuart McLennan and Dr Robert Truog, argued against calls for law reform that would provide stronger protections for open disclosure conversations.

They said many health professionals and medical indemnity organisations were often concerned that an apology to a patient would be seen as an admission of liability.

A review of Australian law in 2010 suggested that a legal protection of existing law did little to reduce professionals' anxiety – and this fear likely deterred them from open disclosure.

That review argued for law reform that would strengthen protection for health professionals who had open disclosure conversations with their patients.

In the *MJA* article, the authors said the assumption that legal protections could narrow the disclosure gap was misguided.

While medicolegal risk played a role in professionals' reluctance to disclose errors, the true reasons included a range of factors including "a professional and organisational culture of secrecy and blame, professionals lacking confidence in their communication skills and the shame and humiliation associated with acknowledging an error – to oneself, one's patient, and one's peers".

"Making the contents of open disclosure conversations legally inadmissible in legal proceedings is therefore unlikely to significantly change practice," they wrote.

Instead, the authors argued for measures that support clinicians to admit errors, as proposed in the [Australian Open Disclosure Framework](#) consultation draft.

The framework says health service organisations should create an environment in which all staff are encouraged and able to recognise and report adverse events; are prepared through training and education to participate in open disclosure; and supported through the open disclosure process.

"In our view, these measures would have a far greater impact on closing the disclosure gap than law reform strengthening already unnecessary legal protections," the authors said.

McLennan SR, Truog RD. Apology laws and open disclosure. [Med J Aust 2013;198\(8\): 411-12](#)

## Health workforce

### 'Illusions of necessity' drive workforce planning

Health workforce planners have failed to develop methods that integrate with health system planning and focus on population needs, according to UK health economists, who propose a new model for estimating future workforce needs.

Writing in the [Journal of Health Services Research & Policy](#), they argued that provider workloads had been a strong driver of estimated requirements, with providers able to maintain workloads and protect incomes by identifying other things to do for patients, "creating illusions of necessity".

The authors said health workforce planning in the UK was driven largely by provider-population ratios applied to population projections, without considering health care needs and productivity.

"Levels of health (or sickness) and hence need for health care are absent. Two populations identical in size but with different levels of health would have the same provider requirements and would be independent of changes in population health over time," they said.

“What providers do, how they do it and what they achieve by doing it are implicitly assumed fixed. The adoption of laser treatment and micro surgery in ophthalmology, although reducing the time required by an ophthalmologist to provide treatment for patients with cataracts, would not affect the estimated requirements for ophthalmologists.”

With workforce planning performed in isolation of other health service planning, providers had been able to expand services to meet their workload preferences, they said.

The authors proposed a model of workforce planning that takes into account four variables: demography, epidemiology, level of service and productivity.

They said the needs-based model ensures that workforce expansions were the result of explicit plans of ministries of health or local health authorities “as opposed to uncontrolled consequences of providers and professional bodies seeking to maintain demands for their services”.

Birch S, Mason T, Sutton M, Whittaker W. Not enough doctors or not enough needs? Refocusing health workforce planning from providers and services to populations and needs. [Health Serv Res Policy 2013; 18:107-13](#)

## Nursing revival overcomes expected shortfall

The nursing workforce in the US has achieved a major and surprising turnaround in the past decade, with the expected shortfall of nurses failing to materialise, according to perspective in the [New England Journal of Medicine](#).

Two broad factors seemed to have contributed to this surge in new registered nurses graduates, the authors said.

Firstly, there had been an increase in interest in nursing as a career, due to media attention on the nursing shortage and a national campaign in 2002, where Johnson & Johnson had promoted the importance of nursing and its positive image.

The second contributor was the expansion of existing nursing programs and opening of new programs, with the total number of programs growing from 1800 in 2002 to 2600 in 2010. Also nursing education had become more innovative and had designed programs to appeal to both younger and older students.

“Despite the projections of severe shortages made just 10 years ago, a combination of policy efforts, a responsive education system, private-sector initiatives, and the effects of the recession has led to unexpected growth in the nursing workforce.”

However, the future potential of the nursing workforce to meet health system needs was not assured, if certain things did not happen, such as lack of preparation in meeting the challenges of the fast-changing health care delivery system.

Auerbach DI, Staiger DO, Muench U, Buerhaus PI. The nursing workforce in an era of health care reform. [N Engl J Med 2013; 368:1470-72](#)

## Effective health systems

### Medicaid coverage boosts services use but not physical outcomes

Medicaid coverage does not improve physical health outcomes in the first two years of coverage, a study has shown. The 2008 expansion of Medicaid in Oregon provided the opportunity to study the effects of Medicaid with random assignment.

The expansion was based on a lottery where adults whose names were drawn from a waiting list won the

chance to enroll if they met eligibility requirements.

The researchers collected various data to assess health outcomes, including the results of detailed health questionnaires. More than 12,000 people in the study sample responded to survey, achieving a response rate of 73 per cent.

The results, published in the [New England Journal of Medicine](#), showed that Medicaid coverage increased overall healthcare use, improved self-reported health and reduced financial strain, but it had no significant effect on the prevalence or diagnosis of hypertension or high cholesterol levels or on the use of medication for these conditions.

“It increased the probability of a diagnosis of diabetes and the use of medication for diabetes, but it had no significant effect on the prevalence of measured glycated haemoglobin levels of 6.5% or higher,” the researchers said.

Medicaid coverage led to a substantial reduction in the risk of a positive screening result for depression, with the authors saying coverage seemed to improve mental health but not physical health.

“Our study provides evidence of the effects of expanding Medicaid to low-income adults on the basis of a randomised design, which is rarely available in the evaluation of social insurance programs.”

Baicker K, Taubman SL, Allen HL, Bernstein M, Gruber JH, Newhouse JP, Schneider EC, Wright BJ, Zaslavsky AM, Finkelstein AN. The Oregon experiment — Effects of Medicaid on clinical outcomes. [N Engl J Med 2013; 368: 1713–22](#)

### Telehealth unlikely to be cost-effective for long-term conditions

Telehealth does not appear to be a cost-effective addition to standard treatment for people with long-term conditions, a study published in the [British Medical Journal](#) has found.

Telehealth was being promoted for improving care and quality of life, but there were little data on cost-effectiveness, the researchers said.

In the largest randomised controlled trial of telehealth in England, they gathered cost and outcome data in three local health areas. They tested the cost-effectiveness of adding telehealth to standard care for people with chronic conditions such as heart failure, COPD and diabetes.

Around 550 participants received a package of telehealth equipment and monitoring services, while 450 controls received usual health and social care.

The main measure of cost-effectiveness was cost per quality adjusted life year (QALY) gained.

The researchers found that the QALY gain by people using telehealth as well as standard care was similar to those receiving usual care, and that total costs for the telehealth group were higher than for the usual care group.

The QALY of telehealth when added to usual care was £92,000, which is more than triple the cost-effectiveness threshold of £30,000 set by the UK National Institute for Health and Clinical Excellence.

Henderson C, Knapp M, Fernández J-L, Beecham J, Hirani SP, Cartwright M, Rixon L, Beynon M, Rogers A, Bower P, Doll H, Fitzpatrick R, Steventon A, Bardsley M, Hendy J, Newman SP. Cost effectiveness of telehealth for patients with long term conditions (Whole Systems Demonstrator telehealth questionnaire study): nested economic evaluation in a pragmatic, cluster randomised controlled trial. [BMJ 2013; 346: f1035](#)

### Preparation the key to Boston’s response to bombing

When two improvised explosive devices (IEDs) were detonated at the Boston marathon on 15 April, emergency medical services drew on a decade of training and planning to ensure a swift response.

A perspective in the [New England Journal of Medicine](#) analysed the efficient emergency response in

the face of “catastrophic injuries not commonly seen in civilian medicine”.

“Victims at the blast scene received immediate, lifesaving aid,” the authors wrote. “Crucial stabilisation of trauma injuries was provided in the medical tent near the marathon finish line.”

“Patients were rapidly triaged and loaded into ambulances. Within 45 minutes, the last of the injured patients was transported from the scene. Each of the city’s major trauma centers received approximately equal numbers of critically injured victims. No one who was transported to hospital died.”

That there was not more loss of life could be attributed to the medical community’s prior efforts to build and sustain emergency-preparedness programs, they said.

The Boston medical community, like those in other cities, had been refining plans for mass-casualty events. In 2008 and 2009, Boston hosted two conferences on responding to terrorist bombing incidents, where speakers from London, Mumbai, Madrid and Israel shared their lessons.

Boston authorities used this knowledge when planning for special events such as the marathon. They had tested disaster-response protocols for all emergency services at the marathon in previous years.

Boston hospitals had also learned how to rapidly create capacity to receive incoming patients. At the time of the explosions, the city’s hospital operating-room schedules were booked and most EDs were full.

“We believe that the speed and coordination of the response is partially attributable to reviewing other cities’ experiences, adjusting our plans, and repeatedly training staff in implementing those plans,” said the authors, adding that budget cuts may restrict such planning in the future.

Biddinger PD, Baggish A, Harrington L, d’Hemecourt P, Hooley J, Jones J, Kue R, Troyanos C, Dyer KS. Be Prepared — The Boston Marathon and Mass-Casualty Events. [N Engl J Med 2013; 368\(21\):1958–59](#)

## Defining ‘surge capacity’ will help policy disaster planning

As natural disasters become more common, there is a need to define the concept of ‘surge capacity’ in health systems, according to a systematic review in the [Milbank Quarterly](#).

Surge capacity is a useful addition to the study of how health systems plan and respond to disasters, the authors said, but there was considerable variation in academic literature in defining and applying the term.

This lack of agreement had meant that the growing body of research on the issue had yet to fulfill its potential to generate knowledge that informed policy.

Despite these difficulties, defining a concept for the study of health systems’ disaster and pandemic readiness and response had “far-reaching policy relevance for public health and health systems interventions and investments”.

Watson SK, Rudge JW, Coker R. Health systems’ surge capacity: state of the art and priorities for future research. [Milbank Q. 2013; 91\(1\):78–122](#)

## Report round-up

### Emergency wait times fall while patient numbers increase

Waiting times have fallen across NSW emergency departments, a Bureau of Health Information report has found. The Bureau’s [Hospital Quarterly](#) report for January to March 2013 also found that the number of people visiting emergency departments had increased by 13,000 compared with the same quarter last year. The Bureau said 65% of all patients left the emergency department within four hours, an improvement of five percentage points on the same time last year. Bureau Chief Executive Dr Jean-Frederic Levesque said the times that patients waited for treatment in emergency departments had

decreased over the past two years and were similar to the times seen five years ago, despite an increase in patients.

### Women doctors dominate younger ranks while nursing workforce ages

The number of female doctors in Australia is increasing, according to an [Australian Bureau of Statistics report](#), which says women make up 57% of the medical workforce aged under 30 years, compared with around 50% in 2001. The report analysed data about the medical and nursing workforce from the 2011 census. It found that although most specialists were men, women dominated certain specialties, such as endocrinology, pathology and paediatrics. In nursing, the report found there had been little change over the past decade, with women making up 90% of nurses. The report found that the nursing workforce is ageing. In 2001, one in five nurses were aged 40-44 years, making this the largest age group, compared with 2011, when nurses aged 50-54 years made up the largest age group. Health Workforce Australia has released a detailed analysis of Australia's nursing workforce. The [Nurses in Focus](#) report combines information from various data sources to provide a picture of the nursing workforce in Australia.

### Fund expands training places

The Clinical Training Fund (CTF) program has expanded the availability of training placements for Australian students, a [Health Workforce Australia report](#) has found. The report, which presents the findings of a census into clinical placements in Australia, said the CTF had expanded physical infrastructure and training capacity, especially in regional, rural and remote settings. The report found that the number of equivalent full-time students doing clinical placements had increased from 92,831 in 2010 to 101,709 in 2011. Health Workforce Australia said the CTF program provided funds to ensure there were sufficient training places to meet Australia's health workforce needs and to allow students to fulfill their clinical training requirements.

### Emergency the path to admission for 40% of patients

Emergency patients account for 40% of admissions to public hospitals in Australia, according to an [Australian Institute of Health and Welfare report](#). The report, *Australian Hospital Statistics 2011-12*, also found that hospital admissions for people aged 85 and over increased by 9% each year between 2007-2008 and 2011-2012, compared with an average increase of 4% per year overall for hospital admissions in the same period. The report presents an overview of activity in Australia's public and private hospitals.

### AIHW revises care types

The Australian Institute of Health and Welfare has released a [report](#) that presents consistent definitions and guidelines for subacute and non-acute admitted patient care and care types for implementation in national hospital datasets. The definitions were implemented in July 2013 to support activity-based funding.

### Public hospitals correctly identify Indigenous patients

Around 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011-12, according to a [report](#) from the Australian Institute of Health and Welfare. The report said improving the accuracy of Indigenous identification in a number of data collections was an important and ongoing body of work for all states and territories.



## Profile



### Barbara Stretles

*Agency for Clinical  
Innovation Brain Injury  
Rehabilitation Directorate  
Network Manager*

*HARC Scholarship Recipient*

Improving services for patients with traumatic brain injury does not happen by simply collecting data, Barbara Stretles says. Interpretation of the data and implementing change based on what it reveals is just as vital, the advocate for evidence-based practice said.

A HARC Scholarship provided the Agency for Clinical Innovation's Brain Injury Rehabilitation directorate network manager an opportunity to strengthen her knowledge about data and how best to collect, collate and use it.

The network's aim is to improve rehabilitation outcomes for patients following traumatic brain injury. It supports clinicians and consumers to develop and implement best-practice treatment across inpatient, transitional and community settings.

"Always, we have to challenge what do we do, look at what does the evidence say, what is best practice," Ms Stretles said.

"Research and critical investigation is a core focus. Looking at whether what we do is the right thing to do, whether it works."

The scholarship financed a 2011 study trip to the US. Ms Stretles attended a conference in Washington and visited services in Philadelphia and New York, and attended the national data statistical and knowledge translation centres in Denver and Seattle, to learn about traumatic brain injury model systems.

She was exposed to enormous databases producing huge amounts of research on traumatic brain injury.

Ms Stretles said the funding and patient base behind the US systems were far greater than what could be achieved in NSW. But quality was what counted.

"It's one thing to collect the information. It's another thing to use that information in a meaningful way," she said. Quality data could help the network plan for and assess benefits of patient therapy, or help make a case for employing extra therapy staff, she said.

HARC scholarships of up to \$10,000 are available to employees of the Agency for Clinical Innovation, Clinical Excellence Commission and the Sax Institute, to investigate challenges facing their agency. For more information about the scholarship program, visit the [HARC section](#) of the Sax Institute website.

## Forthcoming events

### PHAA 42nd Annual Conference: September 16-18, Melbourne

The Public Health Association of Australia conference will bring together researchers, practitioners and policy workers who are taking action on social inequalities in health. Attendees will also have the opportunity to learn about and contribute to the development of PHAA policy and advocacy on issues of concern to public health. Go to the [association's website](#) for more information.

### 2013 CRANApplus Conference: September 25-28, Darwin

This conference from CRANApplus - a member-based national health organisation for remote health - will examine the latest developments in remote health care policy, drug therapies, technologies and therapeutic treatments. It is designed to help professionals in remote health practice keep abreast of the latest information and technology available in the field and network with colleagues. Go to the [organisation's website](#) for more details.

### 2nd Annual NHMRC Symposium on Research Translation: October 2-3, Sydney

The aim of this multi-disciplinary event is to showcase Australia's talent and creativity across the spectrum of research translation, from advances in innovation and industry, through to clinical and public health practice and health policy. It will provide an opportunity for exchange about research translation across disciplines. For information, go to the [National Health and Medical Research Council website](#).

### Health Professionals' Health Conference: October 3-5, Brisbane

From professionals in small private practice to those in large health institutions, the conference will challenge attendees to make personal and organisational decisions to enhance their own health - promoting resilience and balance to enhance the capacity to deliver better quality care to patients. Researchers, clinicians and medico-legal experts will be among the presenters at the event, hosted by the Doctors' Health Advisory Service (Queensland) on behalf of the Australasian Doctors' Health Network. For information, go to the [conference website](#).

### 8th Health Services and Policy Research Conference: December 2-4, Wellington, NZ

The theme for this Health Services Research Association of Australia and New Zealand conference is "Doing better with less: Enhancing health system performance in difficult times". Topics to be addressed through presentations and papers include health policy and governance, indigenous health services, Pacific health services research, priority setting and disinvestment, service delivery and models of care, quality and safety, health services research methods, evaluation of health services and health information systems. Go to the [conference website](#) for more information.



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