AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

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On the Radar
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Reports

Specialist dementia care units. An Evidence Check rapid review brokered by the Sax Institute (www.saxinstituteorg.au) for the Commonwealth Department of Health
Masso M, Duncan C, Grootematt P, Phillipson L, Samsa P, Fildes D, et al
Sydney: Sax Institute; 2017. p. 62.

URL	https://www.saxinstitute.org.au/publications/specialist-dementia-care-units/
Notes	This rapid review examined the evidence on management and care of people with severe and extreme behavioural and psychological symptoms of dementia. The review team looked at specialist dementia care units seeking to identify common elements and critical success factors. The review found four units which demonstrated improvements in behavioural symptoms, and eight common elements, although evidence to support these was limited. The eight common elements across the included papers were: • Unit philosophy/approach to care • Supportive physical environment • Education, skills and training • Medical staffing • Allied health staffing • Therapeutic and meaningful activities • Assessment and care planning • Multidisciplinary approach.

Journal articles

Health service use in the older person with complex health needs
Bartlett M, Wang J, Hay L, Pang G
Australian Health Review. 2017 [epub]

DOI	https://doi.org/10.1071/AH16286
Notes	Patients with complex health needs are known to be high users of health services. This study sought to understand which services and to what extent older patients with complex needs use so as to inform the implementation and evaluation of the Building Partnerships Framework of the New South Wales Agency for Clinical Innovation. This Framework seeks to promote collaboration and integration among service providers. Using data from the 45 and Up Study linked with deaths and service data from hospitalisations and the Medicare Benefits Schedule (MBS), the study found that the rate of hospitalisation in the 2 years following index **admission** for the complex needs group was **18% greater** than the comparison group and **specialist physician attendance** was **13% greater**. The rate of general practitioner (**GP**) **attendances** was **2% greater** in the complex needs group, but this was not statistically significant. Patients with complex needs had almost twice the average number of days in hospital and their average length of stay was 50% greater than among the comparison group. The authors note that "Given the prominence of **primary care in service integration** literature, policy and strategy and the findings of the present study with regard to the relative level of GP involvement in the management of people with complex needs, careful policy implementation will be required to **ensure GPs are able to contribute significantly to coordinated cooperation between health services.**"

For information on the Commission's work on primary health care, including the current consultation on the *Patient safety and quality improvement in primary care* consultation paper, see https://www.safetyandquality.gov.au/our-work/primary-health-care/

Using Fault Trees to Advance Understanding of Diagnostic Errors
Rogith D, Iyengar MS, Singh H
The Joint Commission Journal on Quality and Patient Safety. 2017;43(11):598-605.

DOI	https://doi.org/10.1016/j.jcjq.2017.06.007
Notes	Errors in diagnosis and how to ameliorate them has been an emerging area for a while now. This paper describes the use fault-tree analysis, a form of root cause analysis, as one method to identify the contributory factors in diagnostic error. The authors suggest that "fault trees might provide a useful framework for both quantitative and qualitative analysis of diagnostic errors".

A Novel Process Audit for Standardized Perioperative Handoff Protocols
Pallekonda V, Scholl AT, McKelvey GM, Amhaz H, Essa D, Narreddy S, et al
The Joint Commission Journal on Quality and Patient Safety. 2017;43(11):611-8.

DOI	https://doi.org/10.1016/j.jcjq.2017.04.011
Notes	Clinical handover (or handoff) is a recognised opportunity for miscommunication and error. There have been many efforts at developing forms of standardised handover communication, including protocols, forms, checklists, etc. Thus paper describes a setting where a standardised perioperative handover protocol is designed to ensure a standardised communication from the operating room to the post-anaesthesia care unit or ICU. The protocol's success is partially dependent on its continued proper use over time. The paper focuses on the novel process audit that was developed to help ensure that the protocol was used accurately and appropriately over time.

For information on the Commission's work on clinical communications, including clinical handover, see https://www.safetyandquality.gov.au/our-work/clinical-communications/

Sustained User Engagement in Health Information Technology: The Long Road from Implementation to System Optimization of Computerized Physician Order Entry and Clinical Decision Support Systems for Prescribing in Hospitals in England
Cresswell KM, Lee L, Mozaffar H, Williams R, Sheikh A, on behalf of the NePT
Health Services Research. 2017;52(5):1928-57.

DOI	http://dx.doi.org/10.1111/1475-6773.12581
Notes	Successfully introducing and sustaining change in some workplaces can be difficult, perhaps particularly so when new technologies are involved. This paper discusses the approaches to user engagement of health care workers and organisations around the introduction of computerized physician order entry (CPOE) and computerized decision support (CDS) for hospital prescribing in six English hospitals. From 173 interviews, 24 observations, various 17 documents the study found that perceived individual and safety benefits among different user groups tended to facilitate engagement in some, while other less engaged groups developed resistance and unsanctioned workarounds if systems were perceived to be inadequate. They also identified both the opportunity and need for sustained engagement across user groups around system enhancement (e.g., through customizing software) and the development of user competencies and effective use. One of the key messages is the importance of properly supporting the frontline users, not just at implementation but as a key component to sustaining and normalising the changes.

For information on the Commission's work on safety in e-Health, see
https://www.safetyandquality.gov.au/our-work/safety-in-e-health/

Non–Health Care Facility Cardiovascular Medication Errors in the United States
Kamboj AK, Spiller HA, Casavant MJ, Hodges NL, Chounthirath T, Smith GA
Annals of Pharmacotherapy. 2017;51(10):825-33.

DOI	http://dx.doi.org/10.1177/1060028017714271
Notes	Medications errors are not uncommon. This study looked at medication errors involving cardiovascular medications that occurred in the community (that is, not in healthcare facilities). The study used information for 2000–2012 from poison control centres in the United States as recorded in the National Poison Data System database. 278 444 medication errors associated with cardiovascular drugs were reported, averaging 21 419 annually. The overall rate of cardiovascular medication errors per 100 000 population increased 104.6% from 2000 to 2012 and the highest rates were among older adults. Most cases (83.6%) did not require medical treatment, but serious medical outcomes were reported in 4.0% of exposures. The cardiovascular drugs most commonly implicated in medication errors were β-blockers (28.2%), calcium antagonists (17.7%), and angiotensin-converting enzyme inhibitors (15.9%). Most of the 114 deaths were associated with cardiac glycosides (47.4%) or calcium antagonists (29.8%). Most medication errors involved taking or being given a medication twice (52.6%). The number and rate of cardiovascular medication errors increased steadily from 2000 to 2012, with the highest error rates among older adults.

For information on the Commission's work on medication safety, see
https://www.safetyandquality.gov.au/our-work/medication-safety/

A Comparison of Error Rates Between Intravenous Push Methods: A Prospective, Multisite, Observational Study
Hertig JB, Degnan DD, Scott CR, Lenz JR, Li X, Anderson CM
Journal of Patient Safety. 2017 [epub].

DOI	http://dx.doi.org/10.1097/PTS.0000000000000419
Notes	In the work health and safety (WHS) space there is hierarchy of responses to risks that sees elimination of risk as the preferred option and then descends through substitution, isolation, engineering to administrative actions and personal protective equipment. This paper looks at an engineering response to a medication administration issue. Reporting on an industry-funded study that sought to compare medication preparation and administration errors between ready-to-administer product and IV push traditional practice, including a cartridge-based syringe system and vials and syringes. Based on 329 observations (ready to administer = 102; traditional practice = 227) the study observed 260 errors (ready to administer = 25; traditional practice = 235). The overall observed error rate for ready-to-administer products was 2.5%, and the observed error rate for IV push traditional practice was 10.4%.

BMJ Quality and Safety online first articles

URL	https://qualitysafety.bmj.com/content/early/recent
Notes	*BMJ Quality and Safety* has published a number of 'online first' articles, including: • Reorganisation of **stroke care** and impact on **mortality** in patients admitted during weekends: a national descriptive study based on administrative data (Violeta Balinskaite, Alex Bottle, Louise Johanna Shaw, Azeem Majeed, Paul Aylin) • Value of small sample sizes in rapid-cycle quality improvement projects 2: assessing **fidelity of implementation for improvement interventions** (Edward Etchells, Thomas Woodcock)

Online resources

[UK] NICE Guidelines and Quality Standards
https://www.nice.org.uk
The UK's National Institute for Health and Care Excellence (NICE) has published new (or updated) guidelines and quality standards. The latest reviews or updates are:

- NICE Guideline NG79 ***Sinusitis*** *(acute):* ***antimicrobial*** *prescribing*
  https://www.nice.org.uk/guidance/ng79
- NICE Guideline NG81 ***Glaucoma****: diagnosis and management*
  https://www.nice.org.uk/guidance/ng81
- NICE Quality Standard QS7 ***Glaucoma*** *in adults* https://www.nice.org.uk/guidance/qs7
- Clinical Guideline CG71 *Familial* ***hypercholesterolaemia****: identification and management*
  https://www.nice.org.uk/guidance/cg71

[USA] Effective Health Care Program reports
https://effectivehealthcare.ahrq.gov/
The US Agency for Healthcare Research and Quality (AHRQ) has an Effective Health Care (EHC) Program. The EHC has released the following final reports and updates:

- *Treatment for Adults With* ***Schizophrenia***
  https://effectivehealthcare.ahrq.gov/topics/schizophrenia-adult/research-2017/

[UK] National Institute for Health Research
https://discover.dc.nihr.ac.uk/portal/search/signals
The UK's National Institute for Health Research (NIHR) Dissemination Centre has released the latest 'Signals' research summaries. This latest release includes:

- **Multiple illnesses** and **end-of-life care** drive high **healthcare costs in old age**
- Terbinafine is probably first choice oral drug for **fungal toenail infection**
- Talking therapy may relieve high levels of **anxiety** about health conditions
- Placing wet gauze on **babies'** tummies speeds up **urine collection**
- Long-term antibiotics likely to reduce risk of **recurrent cellulitis**
- Carefully managed antibiotic use could halve **antibiotic-resistant infections**
- **Second-hand smoke** levels in Scottish prisons equivalent to living with a smoker
- Wider **stakeholder involvement** could overcome resistance to modernising healthcare services
- Individual support of nurses using electronic medicine monitors can improve **HIV treatment**
- Older people with **acute coronary syndromes** may benefit from routine invasive therapy.

[Canada] CanMEDS Resource Stewardship Curriculum Toolkit Series
http://www.royalcollege.ca/rcsite/canmeds/resource-stewardship-e
The Royal College of Physicians and Surgeons of Canada (along with the College of Family Physicians and Choosing Wisely Canada) have developed three toolkits to help clinicians teach medical residents about the basics of resource stewardship, including antimicrobial stewardship and appropriate antibiotic use. The toolkits include things like modifiable PowerPoint slide decks, annotated bibliographies, how-to guides, roadmaps, assessment tools, etc. The three toolkits are:

- Foundations Toolkit: Foundations of Resource Stewardship
- Projects Toolkit: Undertaking a Resource Stewardship Project During Postgraduate Training
- Communication Toolkit: Communicating with Patients and Families About Resource Stewardship.

[USA] Better Care Playbook
http://www.bettercareplaybook.org/
The (US) Institute for Healthcare Improvement has added some new resources to its Better Care Playbook. The new resources include:

- Interventions for improving outcomes in patients with multiple co-morbidities in primary care and community settings
- The cost-effectiveness of clinical nurse specialist-led interventions in palliative care
- Non-nursing staff interventions to improve nutritional support in nursing homes: A cost-effectiveness analysis

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