AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

On the Radar

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On the Radar
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Antimicrobial Prescribing and Infections in Australian Aged Care Homes: Results of the 2018 Aged Care National Antimicrobial Prescribing Survey

National Centre for Antimicrobial Stewardship and Australian Commission on Safety and Quality in Health Care
Sydney: ACSQHC; 2019. p. 45.
https://www.safetyandquality.gov.au/publications-and-resources/resource-library/2018-aged-care-national-antimicrobial-prescribing-survey-report

The report of the 2018 Aged Care National Antimicrobial Prescribing Survey (AC NAPS) identifies ongoing issues that place the safety of care provided to residents of aged care facilities at risk. These include concerning high levels of inappropriate prescribing of antimicrobials in participating aged care homes and multi-purpose services. For example, prolonged duration of prescriptions, inadequate documentation of indication and review and start dates, use of antimicrobials for unspecified infections and very high levels of use of topical antimicrobials. In 2018, for the first time, data were also collected on prn (as needed) prescriptions; these accounted for 19% of prescriptions, largely for topical agents. Analyses of trends for facilities that participated each year from 2016 to 2018, did not find improvement in any quality indicators except documentation of indication, which suggests the data may not be used for improvement action by these facilities.

To address these findings, and improve the safety of care provided to residents, the Commission is promoting:

- Use of evidence-based infection assessment tools, such as those included in *Therapeutic Guidelines: Antibiotic* https://tgldcdp.tg.org.au/topicTeaser?guidelinePage=Antibiotic&etgAccess=true
- Implementation of infection prevention and control practices consistent with the *Australian Guidelines for the Prevention and Control of Infection in Health Care* (https://www.nhmrc.gov.au/health-advice/public-health/preventing-infection) to reduce the risk of residents acquiring a preventable infection and support appropriate management of infections if they occur
- Use of microbiological testing to confirm infections and inform antimicrobial treatment choices
- Access to and use of evidence-based guidelines for prescribing antimicrobial treatment to improve appropriateness in relation to choice of agent, duration of use and the volume of topical antimicrobial use
- Use of medication charts that are consistent with the Commission's *National Residential Medication Chart* (https://www.safetyandquality.gov.au/our-work/medication-safety/national-residential-medication-chart) to improve the documentation for antimicrobial prescriptions
- Routine antimicrobial therapy review, including prescriptions for prophylaxis, prn administration and topical antimicrobial use.

Books

Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being
National Academy of Medicine; National Academies of Sciences, Engineering, and Medicine. Washington, DC: The National Academies Press; 2019.

DOI	https://doi.org/10.17226/25521
Notes	Burnout of healthcare workers has been recognised as a significant issue, with safety and quality implications. This report from an ad hoc committee under the auspices of the USA's National Academies of Sciences, Engineering, and Medicine examined the scientific evidence regarding the causes of clinician burnout as well as the consequences for both clinicians and patients, and interventions to support clinician well-being and resilience. The committee recommended guidelines for designing and implementing work system changes that foster and sustain professional well-being among clinicians and learners reflect evidence-based principles for creating high-functioning systems and healthy work environments. The committee proposed six goals and recommended system-wide actions to accelerate progress toward burnout prevention and reduction for clinicians and learners. 1. **Create Positive Work Environments**: Transform health care work systems by creating positive work environments that prevent and reduce burnout, foster professional well-being, and support quality care. 2. **Create Positive Learning Environments**: Transform health professions education and training to optimize learning environments that prevent and reduce burnout and foster professional well-being. 3. **Reduce Administrative Burden**: Prevent and reduce the negative consequences on clinicians' professional well-being that result from laws, regulations, policies, and standards promulgated by health care policy, regulatory, and standards-setting entities, including government agencies (federal, state, and local), professional organizations, and accreditors. 4. **Enable Technology Solutions**: Optimize the use of health information technologies to support clinicians in providing high-quality patient care.

	5. **Provide Support to Clinicians and Learners**: Reduce the stigma and eliminate the barriers associated with obtaining the support and services needed to prevent and alleviate burnout symptoms, facilitate recovery from burnout, and foster professional well-being among learners and practicing clinicians. 6. **Invest in Research**: Provide dedicated funding for research on clinician professional well-being.

Reports

Investigation into electronic prescribing and medicines administration systems and safe discharge
Healthcare Safety Investigation I2018/018
Healthcare Safety Investigation Branch
Farnborough: HSIB; 2019. p. 72.

URL	https://www.hsib.org.uk/investigations-cases/epma-systems-and-safe-discharge/final-report/
Notes	The UK's Healthcare Safety Investigation Branch (HSIB) has just released its final report (and summary report) of an investigation into the impact of electronic prescribing and medicines administration (ePMA) systems on the safe discharge of patients and the influence of weekend working on patient safety in the context of the availability of support services and specialist input. The HSIB made a number of recommendations and observations that may have application beyond the UK context. The recommendations include: • NHSX develops a process to recognise and act on digital issues reported from the Patient Safety Incident Management System. • NHSX supports the development of **interoperability standards for medication messaging**. • NHSX continues its assessment of the ePRaSE pilot and considers making ePRaSE a mandatory annual reporting requirement for the assessment and assurance of electronic prescribing and medicines administration safety. • Department of Health and Social Care should consider how to prioritise the commissioning of research on **human factors and clinical decision support systems**; particularly in relation to the configuration of software system alerting and alert fatigue, to establish how best to maximise clinician response to high risk medication alerts. • NHS England and NHS Improvement include in the Medication Safety Programme **shared decision making** and improved **patient access to medication information** across all sectors of care, to ensure a **person-centred approach to safe and effective medicines use**. • NHSX produces guidance for configuring the electronic discharge process, and how electronic prescribing and medicines administration systems The observations include: • The **use of paper and electronic systems in parallel should be minimised** to reduce the risk of error caused by multiple data entry/retrieval sources. • The practice of documenting only newly **prescribed medication on discharge summaries** should be reviewed from a patient safety and medicines management perspective. • Counselling of patients newly commenced on a **direct oral anticoagulant** is critical to the safe use of these medicines. It would be helpful if NHS trusts reviewed this practice paying particular consideration to the communication of changes in medication and the initiation of new medication

	• There may be benefit for healthcare professionals to receive training in **handover communications** which should include integrating clinical information with full medicines information, and to share this information with patients and carers in writing and verbally. • During the **implementation of any new digital system**, benefits may be realised by redesigning work practices to ensure the new system is **fully embedded**, with staff training/engagement to support this. • It would be beneficial to the users of electronic prescribing and medicines administration systems if the **system vendors raised awareness of the safety limitations** of their products and had a system for collating **safety feedback** to inform future development and a mechanism for **sharing feedback** with other users. • The processes for **medicines reconciliation** in the community would benefit from being reviewed, taking into account the intent for practice-based pharmacists outlined in NHS England's Long Term Plan (NHS England, 2019). • National, peer-reviewed, standardised lists of **alerts for clinical decision support systems** should be the gold standard, to enable consistency of approach and to promote evidence-based safety improvements. • In acute trusts where digital systems are in place, the **prioritisation of medicines reconciliation and medication reviews** supports the consistent delivery of these core functions, across seven-day services.

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

Reforming for Value: Opportunities for Outcome Focused National Health Policy
Deeble Institute Issues Brief No. 33
Raymond, K
Canberra: Australian Healthcare and Hospitals Association; 2019. p. 30.

URL	https://ahha.asn.au/publication/health-policy-issue-briefs/deeble-issues-brief-no-33-reforming-value-opportunities
Notes	The Deeble Institute has published this Issues Brief (and summary) that suggests a move away from focusing on volume to outcomes and value. The Brief includes recommendations that: • The National Health Agreement and related National Partnership Agreements must establish mechanisms to develop and report on health outcome indicators. • A national framework for outcome-commissioning accompanied by an Implementation Plan to progressively shift toward an outcome-focused health system should form part of a reformed National Health Agreement. • Mandatory development and linkage of health outcome data should be embedded in all national partnership reporting requirements, to be held in a national health outcome data repository under centralised custodianship. • The Australian Commission on Safety and Quality in Health Care (ACSQHC) of validated patient-reported health and experience outcomes directory should be supported for initial work and ongoing development. • National metadata architecture should be used across all national health data collections to facilitate linkage and modelling.

	• Modelling of unwarranted variation in healthcare and differential costs of care should be mandated for all bilateral and multilateral funding agreements, commencing with existing data collections from activity-based National Partnership Agreements on healthcare currently in the Commonwealth's possession. • Governing agreements for national healthcare funding should be revised to mandate independent cost modelling for all bilateral or multilateral health agreements and should mandate efficiencies through population-based prevention and mitigation of disease.

Journal articles

Influence of Burnout on Patient Safety: Systematic Review and Meta-Analysis
Garcia CdLG, de Abreu LC, Ramos JLS, de Castro CFD, Smiderle FRN, dos Santos JA, et al
Medicina. 2019;55(9):553.

DOI	https://doi.org/10.3390/medicina55090553
Notes	This systematic review and meta-analysis sought to assess the literature on the relationship between burnout and patient safety. Based on 21 studies, the authors conclude that **there is a relationship between high levels of burnout and worsening patient safety**. The authors observe 'High levels of burnout is more common among physicians and nurses, and it is associated with external factors such as: high workload, long journeys, and ineffective interpersonal relationships. Good patient safety practices are influenced by organized workflows that generate autonomy for health professionals.'

Multi-site Evaluation of Partnered Pharmacist Medication Charting and in-hospital Length of Stay
Tong EY, Mitra B, Yip G, Galbraith K, Roman C, Smit DV, et al
British Journal of Clinical Pharmacology. 2019 [epub].

DOI	https://doi.org/10.1111/bcp.14128
Notes	The study, led by Monash University and Alfred Health researchers evaluating a collaborative model to reduce medication errors and length of hospital stay, is the largest study of its kind conducted across multiple hospitals in Victoria. **Medication errors often occur at hospital admission**, the study of 8,648 patients across seven hospitals found. It examined the outcomes of an intervention involving medication charting by pharmacists using a partnered pharmacist model compared to traditional medication charting. The authors indicated that the primary outcome variable was the length of inpatient hospital stay, and that secondary outcome measures were medication errors detected within 24 hours of the patients' admission. The authors report that the patients who had the intervention (Partnered Pharmacist Model of Care or PPMC) had '**reduced median length of inpatient hospital stay** from 4.7 (IQR 2.8-8.2) days to 4.2 (IQR 2.3-7.5) days ($p<0.001$). PPMC was associated with a **reduction in the proportion of patients with at least one medication error** from 66% to 3.6% with a NNT [number needed to treat] to prevent one error of 1.6 (95% CI: 1.57-1.64).'

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

Drug Regulation in the Era of Individualized Therapies
Woodcock J, Marks P
New England Journal of Medicine. 2019;381(17):1678-1680.

DOI	https://doi.org/10.1056/NEJMe1911295
Notes	Editorial in the *New England Journal of Medicine* speculating on the implications for regulation (and safety monitoring) of highly targeted drug development. As the author states, 'This new drug-discovery paradigm also raises many ethical and societal issues.' These include how 'Patients and their families, of necessity, function more like project collaborators than traditional trial participants', but also extend to considerations of the types of evidence, especially in very small studies, for determining safety, efficacy, dosing, regimen, adverse event detection, etc. and to issues of funding, sustainability and equity.

Are we there yet? Exploring the journey to quality stroke care for Aboriginal and Torres Strait Islander peoples in rural and remote Queensland
Quigley R, Mann J, Robertson J, Bonython-Ericson S
Rural and Remote Health. 2019;19(3).

DOI	https://doi.org/10.22605/RRH4850
Notes	Paper reporting on a project that used interviews with patients, carers and other stakeholders to inform the development of an integrated patient centred model of care that spans the care continuum and places value on an extended role for the Aboriginal and Torres Strait Islander health worker workforce.

For information on the Commission's work on person-centred care, see
https://www.safetyandquality.gov.au/our-work/partnering-consumers/person-centred-care

Diagnostic errors reported in primary healthcare and emergency departments: A retrospective and descriptive cohort study of 4830 reported cases of preventable harm in Sweden
Fernholm R, Pukk Härenstam K, Wachtler C, Nilsson GH, Holzmann MJ, Carlsson AC
European Journal of General Practice. 2019;25(3):128-135.

DOI	https://doi.org/10.1080/13814788.2019.1625886
Notes	Paper reporting on a study that sought to understand diagnostic errors in primary care and emergency care. This was a retrospective and descriptive cohort study that used a nationwide cohort collected from two Swedish databases over a five-year period. The study identified 4830 cases of preventable harm with 2208 (46%) attributed to diagnostic errors. The authors report that '**Diagnoses affected in primary care** were **cancer** (37% and 23%, respectively, in the two databases; mostly colon and skin), **fractures** (mostly hand), heart disease (mostly **myocardial infarction**), and **rupture of tendons** (mostly Achilles). Of the diagnostic errors in the **emergency department**, **fractures** constituted 24% (mostly hand and wrist, 29%). Rupture/injury of **muscle/tendon** constituted 19% (mostly finger tendons, rotator cuff tendons, and Achilles tendon).'

Building an organization culture of patient safety
Tan KH, Pang NL, Siau C, Foo Z, Fong KY
Journal of Patient Safety and Risk Management. 2019 [epub].

DOI	https://doi.org/10.1177/2516043519878979
Notes	Culture is seen as the predisposing feature to the safety and quality ethos of a health service or facility. A positive and supportive culture is seen as a necessary precondition for an environment that fosters open, transparent consideration of safety and quality issues. This article describes how one health service, SingHealth Duke-NUS Academic Medical Centre in Singapore, sought to develop a positive safety culture. These efforts included launching the SingHealth Duke-NUS Institute for Patient Safety & Quality.

A governance framework for development and assessment of national action plans on antimicrobial resistance
Anderson M, Schulze K, Cassini A, Plachouras D, Mossialos E
The Lancet Infectious Diseases. 2019;19(11):e371-e384.

Health workers' education and training on antimicrobial resistance: curricula guide
World Health Organization, Public Health England
Geneva: World Health Organization; 2019. p. 96.

DOI	Anderson et al https://doi.org/10.1016/S1473-3099(19)30415-3 WHO and Public Health England https://apps.who.int/iris/bitstream/handle/10665/329380/9789241516358-eng.pdf
Notes	Article in *The Lancet Infectious Diseases* describing a governance framework to offer guidance for both the development and assessment of national action plans on antimicrobial resistance (AMR). The proposed framework consists of 18 domains with 52 indicators that are contained within three governance areas: policy design, implementation tools, and monitoring and evaluation. To consider the dynamic nature of AMR, the framework is conceptualised as a cyclical process, which is responsive to the context and allows for continuous improvement and adaptation of national action plans on AMR. The World Health Organization and Public Health England have developed the *Health workers' education and training on AMR: curricula guide* setting out learning objectives and outcomes for health worker groups involved in antimicrobial stewardship.

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

BMJ Quality & Safety
November 2019 - Volume 28 - 11

URL	https://qualitysafety.bmj.com/content/28/11
Notes	A new issue of *BMJ Quality & Safety* has been published. Many of the papers in this issue have been referred to in previous editions of *On the Radar* (when they were released online). Articles in this issue of *BMJ Quality & Safety* include: • Editorial: **Language, culture and preventable readmissions**: pragmatic, intervention studies needed (Elaine C Khoong, Alicia Fernandez) • Editorial: Connecting **simulation and quality improvement**: how can healthcare simulation really improve patient care? (Victoria Brazil, Eve Isabelle Purdy, Komal Bajaj) • Association between **cultural factors and readmissions**: the mediating effect of hospital discharge practices and care-transition preparedness (Nosaiba Rayan-Gharra, Ran D. Balicer, Boaz Tadmor, Efrat Shadmi) • Patients' perspective on how to improve the care of people with **chronic conditions** in France: a citizen science study within the ComPaRe e-cohort (Viet-Thi Tran, Carolina Riveros, Clarisse Péan, A Czarnobroda, P Ravaud) • Can a patient-directed video improve **inpatient advance care planning**? A prospective pre-post cohort study (Rajesh Nair, Samuel Abuaf Kohen) • Putting out fires: a qualitative study exploring the use of **patient complaints to drive improvement** at three academic hospitals (Jessica J Liu, Leahora Rotteau, Chaim M Bell, Kaveh G Shojania) • **Home care nursing after elective vascular surgery**: an opportunity to reduce emergency department visits and hospital readmission (Charles de Mestral, Ahmed Kayssi, Mohammed Al-Omran, Konrad Salata, Mohamad Anas Hussain, Graham Roche-Nagle) • **Automated detection of wrong-drug prescribing errors** (Bruce L Lambert, William Galanter, King Lup Liu, Suzanne Falck, Gordon Schiff, Christine Rash-Foanio, Kelly Schmidt, Neeha Shrestha, Allen J Vaida, Michael J Gaunt) • Nursing roles for **in-hospital cardiac arrest response**: higher versus lower performing hospitals (Timothy C Guetterman, Joan E Kellenberg, Sarah L Krein, Molly Harrod, Jessica L Lehrich, Theodore J Iwashyna, Steven L Kronick, Saket Girotra, Paul S Chan, Brahmajee K Nallamothu) • Validity evidence for **Quality Improvement Knowledge Application Tool Revised (QIKAT-R)** scores: consequences of rater number and type using neurology cases (Charles Kassardjian, Yoon Soo Park, Sherri Braksick, Jeremy Cutsforth-Gregory, Carrie Robertson, Nathan Young, Andrea L Hunderfund) • **Patient safety superheroes** in training: using a comic book to teach patient safety to residents (Theresa Camille Maatman, Heather Prigmore, Joni Strom Williams, Kathlyn E Fletcher) • Reducing **door-to-needle times in stroke thrombolysis** to 13 min through protocol revision and simulation training: a quality improvement project in a Norwegian stroke centre (Soffien Chadli Ajmi, Rajiv Advani, Lars Fjetland, Kathinka Dehli Kurz, Thomas Lindner, Sigrunn Anna Qvindesland, Hege Ersdal, Mayank Goyal, Jan Terje Kvaløy, Martin Kurz) • **Quality and safety in the literature**: November 2019 (Ashwin Gupta, Jennifer Meddings, Nathan Houchens) • **Inter-hospital transfer and patient outcomes**: a retrospective cohort study (Stephanie Mueller, Jie Zheng, Endel John Orav, Jeffrey L Schnipper)

Pediatric Quality & Safety
Vol. 4, No. 5, September/October 2019

URL	https://journals.lww.com/pqs/toc/2019/09000
Notes	A new issue of *Pediatric Quality & Safety* has been published. Articles in this issue of *Pediatric Quality & Safety* include: • Creating a Defined Process to Improve the **Timeliness of Serious Safety Event Determination and Root Cause Analysis** (Donnelly, Lane F.; Palangyo, Tua; Bargmann-Losche, Jessey; Rogers, K.; Wood, M.; Shin, A.Y.) • Improving Recognition and Reporting of **Adverse Drug Reactions in the NICU**: A Quality Improvement Project (Cammack, Betsy; Oschman, Alexandra; Lewis, Tamorah) • A Quality Improvement Project to Increase **Mother's Milk Use** in an Inner-City **NICU** (Kalluri, Nikita S.; Burnham, Laura A.; Lopera, Adriana M.; Stickney, D.M.; Combs, G.L.; Levesque, B.M.; Philipp, B.L.; Parker, M.G.) • Development and Implementation of a **Surgical Quality Improvement Pathway for Pediatric Intussusception Patients** (Chalphin, Alexander V.; Serres, Stephanie K.; Micalizzi, Rosella A.; Dawson, M.; Phinney, C.; Hrycko, A.; Martin-Quashie, A.; Pepin, M.J.; Smithers, C.J.; Rangel, S.J.; Chen, C.) • Impact of Positive Feedback on **Antimicrobial Stewardship in a Pediatric Intensive Care Unit**: A Quality Improvement Project (Jones, Alison S.; Isaac, Rhian E.; Price, Katie L.; Plunkett, Adrian C.) • Experience with **Combining Pediatric Procedures into a Single Anesthetic** (Miketic, R.M.; Uffman, J.; Tumin, D.; Tobias, J.D.; Raman, V.T.) • **Pediatric Inpatient Antimicrobial Stewardship** Program Safely Reduces Antibiotic Use in Patients with Bronchiolitis Caused by Respiratory Syncytial Virus: A Retrospective Chart Review (Kalil, Jennifer; Bowes, Jennifer; Reddy, Deepti; Barrowman, Nick; Le Saux, Nicole) • Reducing Healthcare Costs in the Management of **Pediatric Metacarpal Neck Fractures** (Beals, Corey; Lin, James; Holstine, Jessica B.; Samora, J.B.) • A Quality Improvement Intervention to Reduce **Necrotizing Enterocolitis** in premature infants with Probiotic Supplementation (Rolnitsky, Asaph; Ng, Eugene; Asztalos, Elizabeth; Shama, Yasmin; Karol, Dalia; Findlater, Carla; Garsch, Maren; Dunn, Michael) • **Becoming Trauma Informed**: Validating a Tool to Assess Health Professional's Knowledge, Attitude, and Practice (King, Simmy; Chen, Kuan-Lung Daniel; Chokshi, Binny) • Quality Improvement Project to Evaluate **Discharge Prescriptions in Children With Cystic Fibrosis** (Merino Sanjuán, Matilde; Chorro-Mari, Veronica; Nwokoro, Chinedu; Christiansen, Nanna; Pao, Caroline; Gomez-Pastrana Duran, David; Climente Marti, Monica) • **Lung Transplant Index**: A Quality Improvement Initiative (Hayes, Don Jr; Feeney, Bob; O'Connor, Donna J.; Nicholson, Kerri L.; Nance, Ashley E.; Sakellaris, Kelly K.; Dempster, Nicole R.; Groh, Jaclyn D.; Kirkby, Stephen E.) • Addressing Challenges of **Baseline Variability in the Clinical Setting**: Lessons from an Emergency Department (Berkowitz, Deena; Chamberlain, James; Provost, Lloyd P.) • Using a Second Stakeholder-Driven Variance Reporting System Improves **Pediatric Perioperative Safety** (Kawaguchi, Akemi L.; Jain, Ranu; Hebballi, Nutan B.; Pham, Dean H.; Putnam, Luke R.; Kao, Lillian S.; Lally, Kevin P.; Tsao, Kuojen)

	• Quality Improvement Interventions to Improve **Critical Congenital Heart Disease Screening** (Hom, Lisa A.; Chan Salcedo, Clarissa; Revenis, Mary; Martin, Gerard R.) • Utilization of a **Neonatal Early-Onset Sepsis** Calculator to Guide Initial Newborn Management (Leonardi, Bianca M.; Binder, Margaret; Griswold, Katherine J.; Yalcinkaya, Gulgun F.; Walsh, Michele C.) • Impact of a Quality Improvement Initiative to Optimize the **Discharge Process of Pediatric Gastroenterology Patients** at an Academic Children's Hospital (Moo-Young, Joseph A.; Sylvester, Francisco A.; Dancel, Ria D.; Galin, Sheryl; Troxler, Heidi; Bradford, Kathleen K.) • Cluster Randomized Trial Reducing Missed **Elevated Blood Pressure in Pediatric Primary Care**: Project RedDE (Rinke, Michael L.; Singh, Hardeep; Brady, Tammy M.; Heo, Moonseong; Kairys, Steven W.; Orringer, Kelly; Dadlez, Nina M.; Bundy, David G.) • Increasing Recognition and Diagnosis of **Adolescent Depression**: Project RedDE: A Cluster Randomized Trial (Rinke, Michael L.; Bundy, David G.; Stein, Ruth E.K.; O'Donnell, Heather C.; Heo, Moonseong; Sangvai, Shilpa; Lilienfeld, Harris; Singh, Hardeep) • Project RedDE: Cluster Randomized Trial to Reduce **Missed or Delayed Abnormal Laboratory Value Actions** (Rinke, Michael L.; Bundy, David G.; Lehmann, Christoph U.; Heo, Moonseong; Adelman, Jason S.; Norton, Amanda; Singh, Hardeep) • Improving **Diagnostic Performance in Pediatrics**: Three Steps Ahead (Olson, Andrew P.J.) • Learning From Experience: Avoiding **Common Pitfalls in Multicenter Quality Improvement Collaboratives** (Thackeray, Jonathan D.; Baker, Carrie A.; Berger, Rachel P.)

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: • Passing the acid test? Evaluating the impact of national education initiatives to reduce **proton pump inhibitor use** in Australia (Claudia Bruno, Benjamin Daniels, Sallie-Anne Pearson, Nicholas A Buckley, Andrea Schaffer, H Zoega) • **Measuring low-value care**: learning from the US experience measuring quality (Leah M Marcotte, Linnaea Schuttner, Joshua M Liao) • Comparative effectiveness of risk mitigation strategies to prevent **fetal exposure to mycophenolate** (Amir Sarayani, Yasser Albogami, Mohannad Elkhider, Juan M Hincapie-Castillo, Babette A Brumback, Almut G Winterstein) • Reflections on implementing a hospital-wide provider-based **electronic inpatient mortality review system**: lessons learnt (Mallika L Mendu, Yi Lu, Alec Petersen, Melinda Gomez Tellez, Jennifer Beloff, Karen Fiumara, Allen Kachalia)

Online resources

[UK] NICE Guidelines and Quality Standards
https://www.nice.org.uk/guidance
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:

- Clinical Guideline CG184 ***Gastro-oesophageal reflux disease*** *and* ***dyspepsia*** *in adults: investigation and management* https://www.nice.org.uk/guidance/cg184
- NICE Guideline NG142 ***End of life care*** *for adults: service delivery* https://www.nice.org.uk/guidance/ng142
