AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE



On the Radar

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On the Radar

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AURA 2021. Fourth Australian report on antimicrobial use and resistance in human health

Australian Commission on Safety and Quality in Health Care

Sydney: ACSQHC; 2021. p. 328.

https://www.safetyandquality.gov.au/aura-2021

On 27 August 2021, the Commission launched AURA 2021. Fourth Australian report on antimicrobial use and resistance in human health at a webcast.

AURA 2021 provides the most comprehensive picture of antimicrobial resistance (AMR) and antimicrobial use (AU) ever produced in Australia.

AURA 2021 key findings, and areas of concern for public health include:

• It is projected that 10,430 people in Australia will die between 2015 and 2050 as a result of AMR.

- While antimicrobial use has decreased in the primary care setting, in 2019 more than 10 million people in Australia (40.3%) still had at least one antimicrobial dispensed under the Pharmaceutical Benefits Scheme (PBS) or the Repatriation Pharmaceutical Benefits Scheme (RPBS) in 2019. This is much higher than most European countries and in Canada.
- A very high percentage of patients attending participating NPS MedicineInsight practices continue to be prescribed antimicrobials for conditions for which there is no evidence of benefit 81.5% of patients with acute bronchitis and 80.1% of patients with acute sinusitis.
- Antimicrobial use has increased in hospitals, and there has been no improvement, over time, in overall appropriateness of prescribing. Inappropriate prescribing of several broad-spectrum antimicrobials was identified in 2019, including cefalexin, cefazolin, azithromycin and amoxicillin—clavulanic acid.
- The three indications with the most inappropriate prescribing were chronic obstructive pulmonary disease (COPD), surgical prophylaxis and surgical wounds. The trends for COPD prescribing require urgent intervention, as noncompliance with guidelines continues to increase.
- There were no significant improvements in antimicrobial use in residential aged care services between 2017 and 2019. There are ongoing high rates of PRN (as required) antimicrobial prescriptions, especially for topical antimicrobials, and there are high rates of prescriptions for prophylaxis for conditions where antimicrobials are not usually indicated.
- The COVID-19 pandemic has had a dramatic impact on antimicrobial dispensing rates. In 2020, there were substantial decreases in antimicrobial dispensing rates (between 22% and 49%) for several antimicrobials including amoxicillin, cefalexin and doxycycline. This decrease in dispensing for treatments for seasonal respiratory infections coincides with pandemic control measures such as physical distancing and hand hygiene practices. There are opportunities for intervention to sustain these lower levels of antimicrobial use for conditions for which antimicrobials are not generally recommended.
- It is of serious concern that resistances continue to increase to common agents used for treatment in *Escherichia coli*, which is the most common cause of urinary tract infections (UTIs) and septicaemia in the community, in otherwise healthy people. Rates of multidrug-resistant E. coli from patients with bacteraemia increased from 24.2% in 2015 to 26.0% in 2019.
- Resistance to both ciprofloxacin and ceftriaxone have increased over the last 5 years, despite access restrictions to these agents on the Pharmaceutical Benefits Scheme.
- Carbapenemase-producing *Enterobacterales* (CPE) comprised 81% of all critical antimicrobial resistances confirmed from blood culture specimens and reported to the National Alert System for Critical Antimicrobial Resistances (CARAlert) in 2019–2020.
- Antimicrobial resistance rates in northern Australia are often higher than national rates, or
 increasing, resistance to third-generation cephalosporins (ceftriaxone or cefotaxime) were
 higher in northern Australia and, increased between 2015 and 2019.

AURA 2021 includes sections in AURA 2021 on contemporary and important data not previously included, such as: AMR in far north of Australia reported to the HOTSpots program; the impact of COVID-19 on PBS/RPBS dispensing during COVID-19 (2020); and *Clostridioides difficile*, in addition to international comparisons with Australian AMR and AU data.

AURA 2021, and a range of companion resources, including a Highlights Report and Consumer Guide, are available on the Commission's website. Visit https://www.safetyandquality.gov.au/aura-2021

Journal articles

Blood culture quality assurance: what Australasian laboratories are measuring and opportunities for improvement Elvy J, Walker D, Haremza E, Ryan K, Morris AJ Pathology. 2021;53(4):520-529.

thology. 2021,33(4).320-323.		
DOI	https://doi.org/10.1016/j.pathol.2020.09.020	
Notes	A paper reporting on the outcomes of a qualitative structured survey of Australian and New Zealand pathology laboratories that sought to understand current blood culture practices and if expected quality standards are being met. Blood cultures remain the gold standard diagnostic tool in the timely treatment and management of sepsis. The survey included questions about blood culture practice across the spectrum of care: before laboratory analysis (collection), laboratory analysis (testing) and after laboratory analysis (reporting and monitoring). Of the 203 Australasian laboratories enrolled in the Royal College of Pathologists of Australasia Quality Assurance Programs' Bacteriology External Quality Assurance Program, responses from 71 laboratories were analysed. The survey identified good compliance with analytical (testing) standards overall. However, there are opportunities for improvement, in particular monitoring of contamination rates and under-filling of bottles, which are linked to practices before and after laboratory analysis and beyond the control of laboratory professionals.	

Learning from patient safety incidents involving acutely sick adults in hospital assessment units in England and Wales: a mixed methods analysis for quality improvement

Urquhart A, Yardley S, Thomas E, Donaldson L, Carson-Stevens A Journal of the Royal Society of Medicine. 2021:01410768211032589.

DOI	https://doi.org/10.1177%2F01410768211032589
	Paper reporting on an analysis of 10 years of patient safety incident reports in the
	National Reporting and Learning System in England and Wales that looked at
	incidents involving acutely sick patients. The study sought to identify the most
	frequently reported incidents in acute medical units and their characteristics. Based on
	377 reports of severe harm or death, the analysis revealed:
	• The most common incident types were diagnostic errors ($n = 79$),
	medication-related errors ($n = 61$), and failures monitoring patients
Notes	(n = 57).
	Incidents commonly stemmed from lack of active decision-making during
	patient admissions and communication failures between teams.
	Patients were at heightened risk of unsafe care during handovers and
	transfers of care.
	The authors offer a number of 'recommendations to improve patient safety including:
	introduction of electronic prescribing and monitoring systems; forcing checklists to
	reduce diagnostic errors; and increased senior presence overnight and at weekends.'

Journal of Patient Safety

Volume 17 Issue 6 September 2021

URL	https://journals.lww.com/journalpatientsafety/toc/2021/09000
	A new issue of the <i>Journal of Patient Safety</i> been published. Articles in this issue of the <i>Journal of Patient Safety</i> include:
Notes	Quality of Handoffs in Community Pharmacies (Ephrem Abebe, Jamie A
	Stone, Corey A Lester, Michelle A Chui)

- Safety Culture in the Operating Room: Variability Among Perioperative Healthcare Workers (Marc Philip T Pimentel, Stephanie Choi, Karen Fiumara, Allen Kachalia, Richard D Urman)
- Identifying **High-alert Medications** in a University Hospital by Applying Data From the Medication Error Reporting System (Lotta Tyynismaa, Anni Honkala, Marja Airaksinen, Kenneth Shermock, Lasse Lehtonen)
- Simulation-Based Education Enhances Patient Safety Behaviors During
 Central Venous Catheter Placement (Tonya Jagneaux, Terrell S Caffery, M
 W Musso, A C Long, L Zatarain, E Stopa, N Freeman, C C Quin, G N Jones)
- Intravenous Administration Errors Intercepted by Smart Infusion Technology in an Adult Intensive Care Unit (Rebecca Ibarra-Pérez, Fabiola Puértolas-Balint, E Lozano-Cruz, S E Zamora-Gómez, L I Castro-Pastrana)
- A SWIFT Method for Handing Off Obstetrical Patients on the Labor Floor (Jean-Ju Sheen, Laura Reimers, Shravya Govindappagari, Ivan M Ngai, D Garretto, R Donepudi, P Tropper, D Goffman, A K Dayal, P S Bernstein)
- Leapfrog Hospital Safety Score, Magnet Designation, and Healthcare-Associated Infections in United States Hospitals (Amy L Pakyz, Hui Wang, Yasar A Ozcan, Michael B Edmond, Timothy J Vogus)
- Adverse Events Detection Through Global Trigger Tool Methodology: Results From a 5-Year Study in an Italian Hospital and Opportunities to Improve Interrater Reliability (Alberto Mortaro, Francesca Moretti, Diana Pascu, Lorella Tessari, Stefano Tardivo, Serena Pancheri, Garon Marta, Gabriele Romano, Mariangela Mazzi, Paolo Montresor, James M Naessens
- TRIAD IX: Can a Patient Testimonial Safely Help Ensure **Prehospital Appropriate Critical Versus End-of-Life Care**? (Ferdinando Mirarchi,
 Christopher Cammarata, Timothy E Cooney, Kristin Juhasz, S A Terman)
- "Attention Everyone, Time Out!": Safety Attitudes and Checklist Practices in Anesthesiology in Germany. A Cross-Sectional Study (Christopher Neuhaus, Aline Spies, Henryk Wilk, Markus A Weigand, C Lichtenstern)
- Development of a Trigger Tool to Identify Adverse Drug Events in Elderly Patients With Multimorbidity (María Dolores Toscano Guzmán, Mercedes Galván Banqueri, María José Otero, Eva Rocío Alfaro Lara, Pilar Casajus Lagranja, Bernardo Santos Ramos)
- A Report of Information Technology and Health Deficiencies in U.S. Nursing Homes (Gregory L Alexander, Richard W Madsen)
- Simulation-Based Assessment Identifies Longitudinal Changes in Cognitive Skills in an Anesthesiology Residency Training Program (Avner Sidi, Nikolaus Gravenstein, Terrie Vasilopoulos, Samsun Lampotang)
- **Preoperative Site Marking**: Are We Adhering to Good Surgical Practice? (Sonia Bathla, Michael Chadwick, Edward J Nevins, Joanna Seward)
- Making Patient Safety Event Data Actionable: Understanding Patient Safety Analyst Needs (Joseph Stephen Puthumana, Allan Fong, Joseph Blumenthal, Raj M Ratwani)
- Assessment of Automating Safety Surveillance From Electronic Health Records: Analysis for the Quality and Safety Review System (Allan Fong, Katharine Adams, Anita Samarth, Laura McQueen, Manan Trivedi, Tahleah Chappel, Erin Grace, Susan Terrillion, Raj M Ratwani)
- Why an Open Disclosure Procedure Is and Is not Followed After an Avoidable Adverse Event (Irene Carrillo, José Joaquín Mira, M Guilabert, S Lorenzo, On behalf of the Second and Third Victim Research Group)

A Theoretical Model of Flow Disruptions for the Anesthesia Team During Cardiovascular Surgery (Albert Boquet, Tara Cohen, Fawaaz Diljohn, Jennifer Cabrera, Scott Reeves, Scott Shappell) Classifying Adverse Events in the Dental Office (Elsbeth Kalenderian, Enihomo Obadan-Udoh, Peter Maramaldi, Jini Etolue, Alfa Yansane, Denice Stewart, Joel White, Ram Vaderhobli, Karla Kent, Nutan B Hebballi, Veronique Delattre, Maria Kahn, O Tokede, R B Ramoni, M F Walji) Continuous Capnography Reduces the Incidence of Opioid-Induced Respiratory Rescue by Hospital Rapid Resuscitation Team (Mindy Stites, Jennifer Surprise, Jennifer McNiel, David Northrop, Martin De Ruyter) Life-Threatening and Fatal **Adverse Drug Events** in a Danish University Hospital (Olga A Tchijevitch, Lars Peter Nielsen, Marianne Lisby) The Consequences of Whistle-blowing: An Integrative Review (Charmaine R Lim, Melvyn W B Zhang, Syeda F Hussain, Roger C M Ho) Using Prospective Risk Analysis Tools to Improve Safety in Pharmacy **Settings**: A Systematic Review and Critical Appraisal (Tatjana Stojkovic, Valentina Marinkovic, Tanja Manser) Using Economic Evaluation to Illustrate Value of Care for Improving Patient Safety and Quality: Choosing the Right Method (William V Padula, Ken K H Lee, Peter J Pronovost) Patient Recall of **Informed Consent** at 4 Weeks After Total Hip Replacement With Standardized Versus Procedure-Specific Consent Forms (Eoghan Pomeroy, Shahril Shaarani, Robert Kenyon, James Cashman)

BMI Quality & Safety online first articles

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URL	https://qualitysafety.bmj.com/content/early/recent		
	BMJ Quality & Safety has published a number of 'online first' articles, including:		
Notes	 Improving diagnostic performance through feedback: the Diagnosis Learning Cycle (Carolina Fernandez Branson, Michelle Williams, Teresa M Chan, Mark L Graber, Kathleen P Lane, Skip Grieser, Zach Landis-Lewis, James Cooke, Divvy K Upadhyay, Shawn Mondoux, Hardeep Singh, Laura Zwaan, Charles Friedman, Andrew P J Olson) Editorial: Interruptive alerts: only one part of the solution for clinical decision support (Yogini H Jani, Bryony Dean Franklin) Development and pilot testing of survey items to assess the culture of value and efficiency in hospitals and medical offices (Joann Sorra, Katarzyna Zebrak, Naomi Yount, Theresa Famolaro, Laura Gray, Martha Franklin, Scott Allan Smith, Suzanne Streagle) Editorial: Is it time for greater patient involvement to enhance transitional medication safety? (Tamasine C Grimes) 		

International Journal for Quality in Health Care online first articles

URL	https://academic.oup.com/intqhc/advance-articles
	International Journal for Quality in Health Care has published a number of 'online first' articles, including:
Notes	 Boxed in But Out of the Box: Novel Approaches to Addressing Obstacles to Specialty Care (Hilary J Goldberg)
	 Extended Roles in Primary Care When Physiotherapist-Initiated Referral to X-Ray Can Save Time and Reduce Costs (Gunnel Peterson, Marie Portström, Jens Frick)

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• Gender in the Consolidated Criteria for Reporting Qualitative Research (COREQ) Checklist (Charlotte Albury, Catherine Pope, Sara Shaw, Trisha Greenhalgh, Sue Ziebland, Sam Martin, Tanvi Rai, Alison Chisholm, Rebecca Barnes, Ashley White, Marta Wanat, Marta Santillo, Anne-Marie Boylan, Madeline Tremblett, Sarah Tonkin-Crine, Aleksandra Borek, Ruth Sanders, Dimitrios Koutoukidis, Jadine Scragg, Charlotte Lee, Siabhainn Russell, Magdalena Mikulak, Mary Logan, Tanisha Spratt, Jonathan Livingston-Banks, Abigail McNiven, Melissa Stepney, Amelia Talbot, Joanna Crocker, John Powell, Sara Paparini, Helene-Mari Van Der Westhuizen, Jackie Walumbe, Nicola Newhouse, Sara Ryan, Helena Webb, Katie Mellor, Caroline Potter, Ailsa Butler, Caitlin Pilbeam)

Online resources

Evidence briefings on interventions to improve medication safety

https://www.safetyandquality.gov.au/our-work/medication-safety/medication-safety-resources-and-tools/interventions-improve-medication-safety-evidence-briefs

The Australian Commission on Safety and Quality in Health Care commissioned a series of short evidence briefings summarising the evidence on the effectiveness of safety interventions that aim to improve medication administration. The briefings include

- Double-checking medication administration
- Reducing interruptions during medication prescribing, preparation and administration
- Electronic medication administration records
- Closed-loop medication management systems
- Electronic prescribing systems and their impact on patient safety in hospitals
- Scanning medication administration systems.

[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:

- NICE Guideline NG202 *Obstructive sleep apnoea/hypopnoea syndrome* and obesity hypoventilation syndrome in over 16s https://www.nice.org.uk/guidance/ng202
- NICE Guideline NG203 *Chronic kidney disease*: assessment and management https://www.nice.org.uk/guidance/ng203
- NICE Guideline NG204 Babies, children and young people's experience of healthcare https://www.nice.org.uk/guidance/ng204

[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:

• Standardized Library of Lung Cancer Outcome Measures
https://effectivehealthcare.ahrq.gov/products/nav-model-lung-cancer/white-paper

COVID-19 resources

https://www.safetyandquality.gov.au/covid-19

The Australian Commission on Safety and Quality in Health Care has developed a number of resources to assist healthcare organisations, facilities and clinicians. These and other material on COVID-19 are available at https://www.safetyandquality.gov.au/covid-19

These resource include:

• Poster - PPE use for aged care staff caring for residents with COVID-19

https://www.safetyandquality.gov.au/publications-and-resources/resource-library/poster-ppe-use-aged-care-staff-caring-residents-covid-19



*There are many types of respirator masks. Follow the manufacturer's instructions for the brand you are using

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The contant of this positer was informed by resources developed by the NSW Clinical Excellence. Commission and the Victorian Department of Health and Human Services. Photos reproduced with permission from the NSW Clinical Excellence Commission.

Poster – Combined contact and droplet precautions
https://www.safetyandquality.gov.au/publications-and-resources/resource-library/poster-combined-contact-and-droplet-precautions



VISITOR RESTRICTIONS IN PLACE

For all staff

Combined contact & droplet precautions

in addition to standard precautions*

Before entering room/care area



Perform hand hygiene



Put on gown



Put on a surgical mask



Put on protective eyewear



Perform hand hygiene



Put on gloves

At doorway prior to leaving room/care area



Remove and dispose of gloves



Perform hand hygiene



Remove and dispose of gown



Perform hand hygiene



Remove protective eyewear



Perform hand hygiene



Remove and dispose of mask



Leave the room/care area



After leaving the room/care area perform hand hygiene

*e.g. Acute respiratory tract infection with unknown aetiology (low COVID-19 risk), seasonal influenza and RSV

For more detail, refer to the Australian Guidelines for the Prevention and Control of Infection in Healthcare, your state and territory guidance and

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Developed by the NSW Clinical Excellence Commission, Australia. Adapted with permission.

Poster – Combined airborne and contact precautions
 https://www.safetyandquality.gov.au/publications-and-resources/resource-library/poster-combined-airborne-and-contact-precautions



- Environmental Cleaning and Infection Prevention and Control www.safetyandquality.gov.au/environmental-cleaning
- Infection prevention and control Covid-19 PPE poster https://www.safetyandquality.gov.au/publications-and-resources/resource-library/infection-prevention-and-control-covid-19-personal-protective-equipment
- COVID-19 infection prevention and control risk management Guidance
 https://www.safetyandquality.gov.au/publications-and-resources/resource-library/covid-19-infection-prevention-and-control-risk-management-guidance
- Safe care for people with cognitive impairment during COVID-19
 https://www.safetyandquality.gov.au/our-work/cognitive-impairment/cognitive-impairment-and-covid-19
- Stop COVID-19: Break the chain of infection poster https://www.safetyandquality.gov.au/publications-and-resources/resource-library/break-chain-poster-a3



- FAQs for clinicians on elective surgery https://www.safetyandquality.gov.au/node/5724
- FAQs for consumers on elective surgery https://www.safetyandquality.gov.au/node/5725
- FAQs on community use of face masks

https://www.safetyandquality.gov.au/faqs-community-use-face-masks

COVID-19 and face masks – Information for consumers
 https://www.safetyandquality.gov.au/publications-and-resources/resource-library/covid-19-and-face-masks-information-consumers

The Commission's fact sheet on use of face masks in the community to reduce the spread of COVID-19 is now available in Easy English and 10 other community languages from https://www.safetyandquality.gov.au/wearing-face-masks-community.

The factsheet was developed to help people understand when it is important to wear a mask to reduce the risk of the spread of COVID-19, and to explain how to safely put on and remove face masks. It also reinforces the importance of staying home if you have symptoms, physical distancing, hand hygiene and cough etiquette.

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INFORMATION for consumers

COVID-19 and face masks

Should I use a face mask?

Wearing face masks may protect you from droplets (small drops) when a person with COVID-19 coughs, speaks or sneezes, and you are less than 1.5 metres away from them. Wearing a mask will also help protect others if you are infected with the virus, but do not have symptoms of infection.

Wearing a face mask in Australia is recommended by health experts in areas where community transmission of COVID-19 is high, whenever physical distancing is not possible. Deciding whether to wear a face mask is your personal choice. Some people may feel more comfortable wearing a face mask in the community.

When thinking about whether wearing a face mask is right for you, consider the following:

- Face masks may protect you when it is not possible to maintain the 1.5 metre physical distance from other people e.g. on a crowded bus or train
- Are you older or do you have other medical conditions like heart disease, diabetes or respiratory illness? People in these groups may get more severe illness if they are infected with COVID-19
- Wearing a face mask will reduce the spread of droplets from your coughs and sneezes to others (however, if you have any cold or flu-like symptoms you should stay home)
- A face mask will not provide you with complete protection from COVID-19. You should also do all of the other things listed below to prevent the spread of COVID-19.

What can you do to prevent the spread of COVID-19?

Stopping the spread of COVID-19 is everyone's responsibility. The most important things that you can do to protect yourself and others are to:

- Stay at home when you are unwell, with even mild respiratory symptoms
- Regularly wash your hands with soap and water or use an alcohol-based hand rub
- Do not touch your face
- Do not touch surfaces that may be contaminated with the virus
- Stay at least 1.5 metres away from other people (physical distancing)
- Cover your mouth when you cough by coughing into your elbow, or into a tissue. Throw the tissue away immediately.



National COVID-19 Clinical Evidence Taskforce

https://covid19evidence.net.au/

The National COVID-19 Clinical Evidence Taskforce is a collaboration of peak health professional bodies across Australia whose members are providing clinical care to people with COVID-19. The taskforce is undertaking continuous evidence surveillance to identify and rapidly synthesise emerging research in order to provide national, evidence-based guidelines and clinical flowcharts for the clinical care of people with COVID-19. The guidelines address questions that are specific to managing COVID-19 and cover the full disease course across mild, moderate, severe and critical illness. These are 'living' guidelines, updated with new research in near real-time in order to give reliable, up-to-the minute advice to clinicians providing frontline care in this unprecedented global health crisis.

COVID-19 Critical Intelligence Unit

https://www.aci.health.nsw.gov.au/covid-19/critical-intelligence-unit

The Agency for Clinical Innovation (ACI) in New South Wales has developed this page summarising rapid, evidence-based advice during the COVID-19 pandemic. Its operations focus on systems intelligence, clinical intelligence and evidence integration. The content includes a daily evidence digest and evidence checks on a discrete topic or question relating to the current COVID-19 pandemic. There is also a 'Living evidence' section summarising key studies and emerging evidence on **COVID-19** vaccines and **SARS-CoV-2** variants.

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