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Integrating Choosing Wisely into a Statewide Health System: The Tasmanian Experience

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This presentation will describe the process to integrate the principles and practice of Choosing Wisely and reducing low value care into the Tasmanian Health Service at a statewide level.

This process involved a number of key steps over four years:

- building support for the concept among clinicians at the Royal Hobart Hospital
- achieving executive support for the program and becoming a Champion Health Service
- building an even broader coalition of clinical disciplines, consumers, community groups, academic and research institutions throughout Tasmania
- ultimately attracting the recognition and support of the broader Tasmanian Health Service with subsequent executive sponsorship, appointment of a statewide Program Manager and integration into clinical operations throughout the state.

A number of key learnings can be derived from the Tasmanian experience:

- building support from the "bottom up" from as broad a base as possible using safety and quality indicators as a conversation starter is essential
- a sound clinical concept and good intentions is not enough - clinicians must create a synergy by working with staff skilled in navigating complex health systems and processes. This is critical for program development and sustainability
- utilising the research, resources and learnings from other jurisdictions can help guide development and avoid duplication
- making a succinct, unambiguous and financially literate case to decision makers and funding bodies improves the attractiveness of the proposal

Combining the clinical "street credibility" of the Clinical Lead and the managerial and systems expertise of the Program Manager has created a synergy and led to the unique situation of Choosing Wisely being adopted and integrated into the structure and operations of the Tasmanian Health Service. This is expected to have a significant effect upon improving quality care and reducing low value care in this jurisdiction.



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Consumers and Clinicians: Shared Perspectives on Avoiding Defensive Practice and Achieving Better Care

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Background: This abstract will present findings from a qualitative interview study on defensive practice and low value care. This study sought the views of: healthcare consumers; clinicians from Choosing Wisely Australia champion health services; and representatives from medical organisations with expertise in medico-legal issues. Defensive practice drives low value care when clinicians order tests and procedures mainly to reduce their perceived legal risks, rather than to advance diagnosis and treatment.

Objectives: The interview study aimed to explore the views and experiences of consumers and clinicians in relation to defensive practice and low value care.

Methods, setting and scope: Semi-structured interviews were conducted with 26 participants: nine healthcare consumer representatives and 17 medical professionals, eight with medico-legal expertise and nine from Choosing Wisely Australia champion health services. Interviews were conducted between April 2019 and June 2020. They averaged around 60 minutes in length, were audio-recorded with participants' permission and transcribed for thematic analysis.

Findings: The interviews revealed shared perspectives across consumer and clinician participants in the following areas: the drivers of low value care; the harms of defensive practice; questioning low value care; effective communication; partnerships for better care; and fair complaint processes. Findings will be presented in each area to link with the theme of changing cultures. For example, both consumers and clinicians drew attention to the risks and costs of defensive practice: it is not evidence-based, it can increase anxiety, it wastes time and resources, and is not a foundation for a therapeutic relationship.

Participants articulated the importance of questioning the necessity of tests and procedures. Fair and just complaint processes can support quality and safety improvements.

Implications: While defensive practice generally assumes the threat of adversarialism between consumers and clinicians, our interview findings revealed many shared perspectives and common ground on which to build partnerships for better care.



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Supporting Medication Adherence in the Maori and Pacific Islander Community with Type 2 Diabetes in Australia

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Introduction: The Maori and Pacific Islander (MPI) population is significantly impacted by type 2 diabetes (T2D) and poor medication adherence has been identified as a factor that may lead to suboptimal health outcomes. Research is required to understand influences on medication adherence in the MPI community. **Objectives:** To explore illness beliefs and medication adherence behaviours and identify strategies for supporting medication adherence in MPI population with T2D.

Methods/Setting: MPI patients prescribed medications for T2D were recruited through community organizations. Interviews were conducted by phone/videoconference. The discussion focused on exploring participant beliefs about diabetes and medication management. Interviews were recorded and transcribed verbatim and analysed using inductive thematic analysis.

Findings: Of the 18 participants (8 Male and 10 Female), 7 were Fijian, 4 Samoan, 4 Tongan, 2 Cook Islander and 1 Maori. Themes included: 1) Cultural identity: including family and community collectivism, religious faith and food, had an important influence on how participants approached T2D and its management, 2) Health beliefs and perceptions: influenced by cultural identity or previous experiences, and participants tended not to perceive diabetes as a manageable, preventable, chronic health condition and 3) Experiences with the healthcare system: both supportive experiences and challenging experiences were identified. Some participants described a disconnect between their values, perceptions and needs and those delivered by healthcare professionals, leading to communication barriers and limited understanding around managing diabetes. Overall, participants expressed the need for better access to simplified information and a holistic approach that integrates aspects of culture and understands the ways MPI peoples approach diabetes and medications.

Implications: This study gives insight into the beliefs and behaviours around medication management for T2D in the MPI community in Australia and identifies important cultural concepts to consider and useful strategies to shape the development of resources to support the Maori and Pacific Islander community.



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Ordering practices of follow up x-rays for simple limb fractures in the Fracture Clinic, Women's and Children's Hospital

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¹*Women's and Children's Health Network, Adelaide*

Background: Primary care providers refer children to the Fracture Clinic, after initial assessment, for orthopaedic review and ongoing treatment. We wanted to know if the right children were having x-rays prior to their appointment, if these were necessary and the impact on clinic flow and the waiting times and experience of consumers.

Aims: To document the pattern of ordering follow-up x-rays in simple single limb fractures, identify the number of low-value x-rays and consider the impact on patient flow through the fracture clinic.

Problem Definition and Interventions. Prospective data collection on the timing (before or during clinic), necessity (impact on management), view, quality, and accessibility of x-rays and clinicians assessed appropriateness (value added) of the appointment.

The baseline data identified that 14% completion rate for x-rays required on arrival and 25% of fracture clinic appointments were unnecessary.

Process flow mapping with superimposed consumer feedback and audit data showed the convoluted flow through clinic when x-rays are ordered during clinic and identified the triage and referral process as the targets for change.

Two models, medical referral triaging and pre-referral discussion with orthopaedic staff were examined through PDSA cycles.

Results: Model 1 resulted in an increase in the x-rays required on arrival being pre-ordered (14% to 50%) and a reduction in unnecessary appointments (25% to 8%) but was time consuming and not sustainable.

Model 2 (pre-referral discussion with Orthopaedic staff) resulted in 100% completion of x-rays required on arrival and eliminated unnecessary appointments.

Discussion: The implementation of our second model was supported by WCHN COVID-19 response strategy that included minimising physical attendance. Unnecessary fracture clinic appointments were eliminated through a combination of increased definitive care in the PED and appropriate referral back to primary care providers.



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The value of blood cultures in children with dental abscesses and facial cellulitis

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Background: Facial cellulitis secondary to dental abscess accounts for approximately 25% of emergency dental admissions at the Women's and Children's Hospital (WCH). In the absence of documented South Australian Guidelines for the management of facial cellulitis secondary to dental abscess, historical treatment included obtaining blood cultures, an abscess swab, commencement of antibiotics and dental management of the causative tooth (i.e. root canal treatment or extraction). Existing guidelines from several leading paediatric centers indicate that there is no need for blood cultures in the absence of signs of sepsis.

Aim: To determine the value of blood cultures in the management of facial cellulitis secondary to dental abscess in children aged 2 to 18 years who present to the WCH.

Methodology: A retrospective medical record review of children aged 2-18 years with facial cellulitis secondary to dental abscess who presented via the Paediatric Emergency Department (PED) for a 36-month period. Cases were identified by ICD 10 codes and verified with the Dental admissions data.

Results: In total, 86 medical records identified and reviewed. Nine cases did not meet the inclusion criteria and were excluded. Of the 77 cases, 38 (49%) had a blood culture taken. None of the cases with blood cultures taken met the sepsis pathway criteria or had a change in treatment subsequent to the blood culture results. In the blood culture group, 100% had at least one CBP/CRP and ELU with no evidence of any influence on treatment provided.

Discussion: There is limited value in collecting blood cultures/CBP/CRP in children with facial cellulitis secondary to dental abscesses in the absence of signs of sepsis. Investigations were initiated either by PED staff or the Dental team. These results highlight the need for education and awareness amongst staff on indications of ordering blood cultures.



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Choosing Wisely: Health Literacy Segmentation Research and the 5 questions to ask your pharmacist

Dr Penelope Bergen, Consumers Health Forum of Australia

The Consumers Health Forum of Australia was engaged by NPS MedicineWise to carry out Consumer Health Literacy Segmentation Research.

The research included a series of statements exploring the attitudes of nearly 1500 people in relation to the Quality Use of Medicines.

The findings revealed the need for a coordinated approach to identify and address health literacy and the medication literacy of higher-risk population segments.

One way of addressing this is to challenge the way we think about medicines in the same way Choosing Wisely's Five Questions to ask your doctor, challenges the notion that 'more is always better'.

This talk addresses medication literacy and keeping consumers at the centre of their own health care by proposing the development of Five Questions to ask your pharmacist.

Five Questions to ask your pharmacist would share the responsibility of improving consumers' understanding of medicines literacy in line with the central principles of the National Medicines Policy; it could help improve health literacy by progressing some of the key findings of the segmentation research, and it would contribute to Choosing Wisely's worldwide coordinated approach.



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Promoting Value-based care in Emergency Departments - The Clinical Excellence Queensland PROV-ED Project

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The division of Queensland Health (QH) into Health Services enables effective governance of facilities and services over a vast geographical area, but creates silos and limits dissemination of front-line innovations. Emergency Departments (EDs) present opportunity for significant impact from small changes due to the wide scope-of-practice and sheer volume of presentations.

The state-wide PROV-ED Project under Clinical Excellence Queensland, supports scaling of front-line value-based care, including empowering clinicians to reduce low-value care and promote high-value care.

A state-wide EOI identifies value-based initiatives with proven outcomes, and a multidisciplinary panel including Consumer Representatives selects those suitable for state-wide implementation. Resources are developed with engagement of appropriate state-wide stakeholders and ongoing consultation with clinician-developers throughout.

A staggered rollout involves direct engagement of ED clinical management and appropriate executive engagement. Initiatives are showcased to frontline staff and local stakeholders decide which to adopt and whether resources require modification to suit local needs. Project support including offline time for onsite clinical champions facilitates implementation and evaluation. Appealing digital messaging in clinical areas fosters informed clinical decision-making.

The first six initiatives selected in 2019 have been selectively implemented in 22 QH hospitals plus many rural and remote facilities. Delayed due to COVID, the second round of four initiatives is due for rollout.

Preliminary outcome highlights:

- \$1.16m consumables saved and 474 days released clinical time from reducing unnecessary PIVCs (CREDIT initiative)

- Establishment of a state-wide ED-specific QH cultural safety group under the ED Clinical Network from TECS (Transforming EDs towards Cultural Safety) to improve care for Aboriginal and Torres Strait Islander peoples

- Inclusion of Standardised and Safe Intubation package (SSIP) in 2020 Queensland Standardisation Guidelines – distributed to 160+ facilities during COVID

We plan to replicate this model to continue demonstrating significant, state-wide improvements in value-based care to benefit patients, empower clinicians and reduce strain on health services.



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Older patient engagement in medication conversations

Dr Georgia Tobiano^{1,2}, Professor Wendy Chaboyer¹, Mrs Gemma Dornan², Ms Trudy Teasdale², Professor Elizabeth Manias³

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Brief background which summarises the idea/issue/evidence the abstract intends to address:

In hospital, changes to older patients' medication regimen are common; yet, older patients are insufficiently involved in medication conversations. Once discharged, the responsibility for medications is rapidly shifted back to the patient, and medication-related harm in the community is common. In fact, 17–51% of older patients experience medication-related harm after hospital discharge. The Choosing Wisely initiative is about empowering consumers to ask questions and initiate conversations about medication-related concerns. It is currently unknown whether older patients want to or do participate in medication conversations in-hospital.

List the objectives, methods, setting and/or scope of the work: To measure older patients' preferences for and reported medication safety behaviours (i.e. asking questions and reporting wrong/forgotten medication). A survey, the 'Inpatient Medication Safety Involvement Scale' was administered to 200 older patients on medical wards at one hospital.

Describe the work so far and any findings and implications: Patients wanted to ask questions (59.5% n=119) and check with healthcare professionals if they thought a medication was wrongly prescribed (86.5% n=173) or forgotten (87.0% n=174). Patients' preferences correlated positively with their reported behaviours ($r = 0.46-0.58$, $n=200$, $p \leq 0.001$). Young-old patients (65-74 years) preferred notifying healthcare professionals of perceived medication errors more than middle-old (75-84 years) and old-old patients (≥ 85 years) ($p < 0.05$).

Choosing Wisely campaigns specifically targeting older patients may be required, as 40% of older people are not confident enough to ask questions, and middle-old and old-old patients are less likely to speak-up if they think medications are wrong or forgotten. These campaigns need to be individualised to older peoples' needs, including their fear of being confrontational towards healthcare professionals and the role that families play in their medication management.



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Shared Decision Making in Perioperative care for Older People undergoing Surgery

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Building consumer confidence in shared decision making

Background: Shared Decision Making (SDM) is the process whereby patients and healthcare professionals work together to achieve a consensus management decision, based on best clinical evidence and patient's preferences. No formal approach to documentation of such SDM conversations exists in setting of perioperative medicine. The Choosing Wisely initiative aims to improve patient-clinician SDM. SDM should be considered whilst considering tests, treatment or management, in both primary and secondary setting. **Objectives:** To assess and improve the quality and consistency of documentation regarding SDM conversations in an outpatient population and appraise the satisfaction of patients and professionals in the process of preoperative shared decision making.

Methods: A five stage, mixed methods quality improvement programme was undertaken employing observational data, nominal group technique and survey methodology. The study was conducted in a geriatrician led Perioperative medicine for Older People undergoing Surgery (POPS) service, based at an inner-city teaching hospital serving a tertiary surgical referral population. Participants included clinicians of all grades and disciplines, and consecutive patients attending the clinic. Choosing Wisely UK framework – BRAN: Benefits, Risks, Alternatives and Nothing incorporated whilst discussing treatment plan.

Results: Clinician interviews revealed inconsistent documentation of SDM. Co-design of a SDM documentation tool by a wide stakeholder group achieved rapid, sustainable uptake with an uptake of 98% documentation of SDM. Targeted interventions were used to improve clinician satisfaction with SDM. Patients and clinicians were satisfied with SDM, 93% and 79% respectively.

Conclusion: BRAN framework can be effectively used to formalise documentation of SDM in a sustainable manner and achieve patient and professional satisfaction.



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Choosing Wisely Five Questions – are they a valuable resource for Youth?

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The Women's and Children's Health Network (WCHN) is South Australia's leading provider of specialty care and health services for women, babies, children and young people and their families in South Australia. Our consumers are predominantly young - children, adolescents and women seeking maternity services. During the consumer socialisation of Choosing Wisely, our core consumer bodies told us that the concept was great but the Choosing Wisely consumer resource design did not engage the younger consumer.

Approach: Broad consultation on resource design was undertaken with the established consumer groups including children (aged less than 13 years), youth (ages 14- 23 years) and adults as well as the online consumer feedback portal Basecamp. Input was sought from the Health Literacy, Consumer Engagement and Communication teams. Combining consumer feedback informed design and Choosing Wisely Australia wording resulted in bright eye-catching posters and resource cards.

Evaluation: On admission to the Adolescent Ward, nursing staff provided consumers with a WCHN Choosing Wisely card with the 5 Questions and how to participate in the anonymous evaluation survey.

Prominently displayed posters throughout the ward supported the Choosing Wisely message.

Results: 60% of respondents were aged 16 years (the age of medical consent in South Australia) or older.

65% of respondents had not previously used structured questions for health care, 66% thought the questions would be useful and 79% thought we should continue to provide the card on admission.

Conclusion: The WCHN supports shared decision-making and the use of a tailored resource supports young people in this endeavour and preparing them to take control of their health care as they reach the age of medical consent.



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What do we know about empowering consumers with information about overtesting and overdiagnosis? A meta-synthesis of qualitative studies

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We need to communicate with consumers about overtesting and overdiagnosis. A decade of research has examined how consumers understand these concepts. It became timely to generalise and re-examine this body of evidence. Our objective was to meta-synthesise qualitative research about patient and public understanding of overtesting and overdiagnosis.

Four databases (Scopus, CINAHL, Ovid MEDLINE, PsycINFO) were systematically searched in March 2020 to identify qualitative studies about patient/public understandings of overtesting/overdiagnosis. We included English language peer-reviewed research from all settings, any years and relating to any medical conditions. We excluded studies sampling experts or focusing only on overtreatment.

Two authors independently screened studies. We used the CASP tool to judge the methodological quality of individual included studies. We then synthesised those studies using two layers of analysis: i) thematic synthesis to systematise and describe patterns in the data; ii) discursive analysis to interpret the ideas underpinning the descriptive themes. We used the GRADE-CERQual approach to judge our degree of confidence in individual synthetic findings. We screened 2,754 unique records and synthesised data from 21 studies. Synthesised studies were from six high income countries, focused on five different conditions or overtesting/overdiagnosis in general, and comprised 1,638 participants.

Thematic analysis showed that consumers had strong trust in testing, found overtesting and overdiagnosis difficult to understand, and were sceptical about the concepts. However, consumers were also concerned about the risks of overtesting and overdiagnosis. They wanted more information about them, despite having limited intentions to change future screening behaviour.

Discursive analysis suggested that these themes related to consumer beliefs about the intrinsic value of being informed, as well as to distinct interpretations of medical overuse concepts and their clinical implications.

At Choosing Wisely 2021, we will discuss the implications of our findings for designing consumer communications about overuse, and for future research.



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Community views on a public health campaign to reduce unnecessary diagnostic imaging of low back pain: a qualitative study

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¹The University of Sydney, Sydney, Australia, ²Liverpool Hospital, Liverpool, Australia

Background: Community reactions to public health campaigns to reduce unnecessary tests and treatments are under-investigated.

Objective: To evaluate community responses to a public health campaign that raises awareness of harms of unnecessary diagnostic imaging for low back pain.

Methods: We did a qualitative study using two focus groups of community members in a socioeconomic and culturally diverse region of Sydney. Because low back pain is very common, and decisions about diagnostic imaging are relevant to many community members, we did not apply strict inclusion criteria. Community members with or without a history of low back pain were eligible. Focus group sessions evaluated reactions to components of a public health campaign; posters and patient information leaflets that focus on the harms of unnecessary imaging. We conducted thematic analysis to identify main themes.

Findings: The two focus groups included 19 members of the general public. Majority of the participants were female, born in Australia, did not have university education, had low back pain in past 12 months, and had imaging tests for their back pain. Each group had one community representative. Themes identified were: i) Messages were surprising and alarming; ii) Scepticism and mistrust of information; iii) Messages were useful and informative; iv) Cost saving initiative; v) More trust in doctors than public health messages.

Conclusion: Public health campaigns can raise awareness about overuse of imaging for low back pain and harms of overdiagnosis, but can generate negative reactions from the public.

Implications: This will provide insights into the acceptability of such information materials for patient who attend an emergency department for low back pain. Such insights will inform policy and a larger trial of an overdiagnosis awareness campaign designed for hospital emergency departments.



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Pre-operative testing for elective surgery at the Royal Hobart Hospital

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Pathology testing prior to elective surgery is organised by the surgical teams RMOs with little guidance or oversight. This has led to a culture of excessive pre-operative testing at the Royal Hobart Hospital (RHH). A local audit found frequent coagulation testing for minor surgery and blood group and hold (BGH) testing for surgery's without bleeding risk. Also routine tests are often repeated at the pre-assessment clinic (PAC) even when the same tests have recently been done by the patient's GP. Evidence for pre-operative testing is weak and shows that there is very little benefit in testing preformed in minor and moderate risk surgery.

This project will aim to reduce the amount of pathology testing ordered from the RHH PAC, with a focus on coagulation and BGH testing and identifying patients recent results to avoid repeating. To achieve this we are writing an RMOs guideline to pre-operative testing that has been agreed to by the Department of Anaesthetics and Perioperative Medicine and the Surgical Units. This guideline will be endorsed by heads of department and empower the RMOs to make appropriate decisions when seeing patients in pre-assessment clinic. The RMOs will also be educated in sourcing private pathology test results to avoid repeating test that are normal and less than six months old.

A small audit has already been done to identify the problem, we will perform a larger audit of testing to identify to scope of the issue. We will then instigate a change by introducing the new guideline and educate the RMOs on accessing private results. Then after three months repeat the audit to measure the reduction in testing ordered from the PAC by RMOs.



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Is there value in introducing the Choosing Wisely 5 Questions in Antenatal Education?

Ms Madeline Ashdown¹, Ms Julie Paholski¹, Ms Lisa Masters¹, Ms Julie Paholski¹

¹*Women's and Children's Health Network, Adelaide*

Aim: Antenatal education aims to prepare prospective parents for their progression through their pregnancy, delivery and immediate post-natal period. During this time they are provided with a wealth of new information and asked to make many health care decisions. What better way to prepare them than provide early education on the Choosing Wisely 5 Questions?

Method: Following a successful trial of a Choosing Wisely topic outline, the topic was introduced into the antenatal classes run by 2 Choosing Wisely knowledgeable and experienced parent educators. The topic was delivered during full day education forums for a 2 month period and the Choosing Wisely wallet card was provided to each participant. Qualitative evaluation was undertaken through thematic analysis of an anonymous survey conducted at the conclusion of each day.

Results: The response rate was 89% (40/45). One participant had previous knowledge of Choosing Wisely. The response to the Choosing Wisely 5 questions topic was extremely positive.

The key themes identified were:

- Permission to ask questions
- A reminder that they have the right to know and freely decide
- A guide and established thought process
- Increased confidence to ask questions

By using this approach consumers thought it helped them to understand and increase their knowledge about their health care and therefore “provide comfort and decrease stress during labour”.

Conclusions and Next Steps:

There is value in introducing Choosing Wisely 5 questions into antenatal education.

COVID 19 restrictions have changed the face of antenatal education from an intimate group to on-line delivery. The next challenge is adapting the information effectively to this format.

The prominent display of Choosing Wisely resources in the Woman's Outpatient Department and incorporation of the information and on the antenatal education internet site reinforces the antenatal education content.



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Promoting Self Care as an enabler of Wise Choices

Mr John Bell¹, Professor Rosemary Calder¹

¹*The Australian Self Care Alliance, Potts Point, Australia*

The World Health Organization defines self-care as: “The ability of individuals, families and communities to promote health, prevent disease, and maintain health and to cope with illness and disability with or without the support of a health-care provider.”

It is important that the concept of self-care in its broadest sense is embedded into health knowledge, health practice, health service provision and in individual awareness. Effective self-care is integral to enabling wise choices by health care consumers.

So, with this in mind a number of Expert Working Groups, under the auspices of then informal Self Care Alliance, met during 2020 to formulate a National Policy Blueprint.

The objectives of the work undertaken to develop the Blueprint were to:

1. Facilitate expert consideration and agreement on a comprehensive range of implementable policy options that will develop and embed self-care in health policy, services and practices.
 2. Provide a roadmap for Australian governments to integrate self-care into health policy that can also be utilised by stakeholder organisations and groups to use to inform policy and practice.
 3. Build a collaborative network to inform and influence policy and practice developments and service models that will implement and support self-care health practice throughout the Australian health system.
- Self-Care for Health – a National Policy Blueprint to enable more informed choices for better health outcomes was launched in October 2020 by the Commonwealth Health Minister, the Hon Greg Hunt, who referred it to the National Preventative Health Strategy.

Nine national priority proposals were developed. Which will be pursued by the now formally established Australian Self Care Alliance, an organisation of policy experts, consumers and advocates, and supportive professional, industry and governmental groups. The first of these priorities is to develop a national health literacy strategy aimed at improving health literacy and self-care capability for all.



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Rethinking birth plans – facilitating communication and informed decision making

Ms Catherine Bell¹

¹Self, Braidwood, Australia, ²University of Canberra, Bruce, Australia

Aim: To share a new communication approach to birth preparation, bridging the knowledge and power gaps, for a collaborative and positive birth experience.

Description: Through a systematic review, an in-depth analysis of the varying process of birth plans found that the act of collaboratively creating a birth plan strengthened knowledge, assisted communication and, importantly, lead to more realistic expectations. However, the term 'plan' is problematic, and there is no universal or collaborative approach to birth preparation. A new model that embraces woman-centred care, in accordance with effective communication and respectful maternity care guidelines was recommended. With communication at the core, it was found that drawing the partner, if there is one, into the process improves the outcomes. A new term to differentiate this new model from established birth plans was also be recommended.

Rationale: Women are required to provide informed consent (or refusal) at various decision points, with various procedures for themselves and their baby. Finding the power balance between care providers and women seems to be a key ingredient in successful birth preparation. We know that effective communication is critical to positive experiences, as is respectful maternity care.

Implication: This communication-focused process gives women agency, includes partners and preserves professional autonomy. With a focus on being informed, supported and confident, this is a Win Win Win approach to birth preparation. It is hypothesised that this approach will reduce birth trauma and the risk of postnatal depression for parents, and burnout in midwives.



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Opioid medicines in pain management: New online hub guides smart, safe decisions

Miss Kathleen Carpenter¹

¹*Healthdirect Australia, Sydney, Australia*

In collaboration with the Therapeutic Goods Administration (TGA), in January 2021 Healthdirect Australia launched a pain management hub.

Hosted on the healthdirect website, which averages 4.37 million monthly visits, the hub brings together easy-to-read information about pain and the role and safe use of opioid medicines.

The hub aims to help people understand if their pain medication is an opioid, possible risks and side effects, potential alternative pain treatments, and where to seek advice or assistance.

The hub launch supports an Australian Government public education campaign to 'be aware for better care,' and a TGA program of Opioid Regulatory Reforms.

This lightning talk will detail how the hub can be used to facilitate understanding and shared decision-making around prescribing and safe opioid use, and how it supports increased health literacy through easily understood information and actionable next steps.

Features of the pain management hub:

- Evidence-based information and resources from a range of trusted health organisations (TGA, Alcohol and Drug Foundation, NPS MedicineWise) and specialist pain management organisations (Pain Australia, Chronic Pain Australia), among others.
- A digital tool which assists consumers to develop a set of questions prior to a GP appointment to discuss pain management or medication.
- A digital tool which assists consumers to identify their risk of opioid addiction and recommends next steps, based on the Monash Addiction Research Centre's OWLS screening tool for prescription opioid use disorder.
- Integration with the healthdirect medicines information service, connecting people looking online for information about opioid medicines with relevant hub content.

Next steps: Since launch, the pain management hub has received more than 30,000 visits – analysing what people are viewing most is helping us make relevant content improvements. We plan to expand the hub to feature more self-help tools and a greater range of information and resources.



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Choosing Wisely: Opioid Prescribing in Sunshine Coast University Hospital Emergency Department

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We aimed to create an awareness and change the culture around opioid prescribing to discharging patients within the emergency department of the Sunshine Coast University Hospital in Birtinya, Queensland. In particular, we were interested in the prescribing practices for immediate release oxycodone.

Nationally and at a state level we have seen a notable increase of opioid prescribing in the past decade. Of all the opioids, oxycodone has seen the most dramatic increase. With this we have seen an increase in the social, psychological, and physical consequences associated with opioid use.

Our aim was to firstly, educate our prescribers and limit prescriptions of oxycodone to ≤ 10 tablets per prescription. Secondly, to increase the quality of discharge letters to general practitioners in the community after patients had been discharged on opioid medications. Finally, through our discussions with consumers we created an informative handout for distribution to patients being discharged from the emergency department with opioid medications.

We utilised a weekly tally of total oxycodone prescriptions and oxycodone prescriptions ≤ 10 tablets, we displayed this tally to our prescribers in the department. Audits of discharge letters to general practitioners and chart documentation occurred in different cycles. Through the input of our consumer group, a handout was developed and has recently been approved for dissemination to patients.

The average percentage of scripts ≤ 10 tabs improved from 62.6% initially to over 90% ($p < 0.05$). The number of total prescriptions had no statistically significant change over the audit period. The overall quality of the discharge letters had no significant change over the audit period.

In conclusion, there was a statistically significant increase in immediate release oxycodone scripts of quantity ≤ 10 . The total number of prescriptions did not change significantly and overall, quality of discharge letters did not improve.



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Integrating the Choosing Wisely Five Questions into Family Meetings in the Intensive Care Unit (ICU)

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Introduction: Despite developments in family satisfaction in the level of care provided to patients in the ICU, there remains significant room for improvement in the communication of ICU staff with families who act as surrogate decision makers for ICU patients. ICU physicians often fail to discuss patients' values and raise end-of-life issues when conducting family meetings. This may result in families not having the opportunity to act as surrogate decision makers in a substantive way for their loved one. This study aimed to build consumer confidence in shared decision making on behalf of their loved one in the ICU.

Methods: This two-arm, randomised controlled trial was performed over an 18 month period from 2019 to 2020, and investigated whether the provision of the five Choosing Wisely questions to family members before family meetings in the ICU improved the level of family perceived involvement in decision making. 62 families were randomised, and the intervention group provided with the five Choosing Wisely questions as well as an explanation of how to apply them to the unique ICU setting. Following a family meeting, the family and ICU physician completed a survey that adapted questions from the Family Satisfaction with Care in the ICU survey.

Findings: The primary outcome, perceived involvement in decision making by surrogate decision makers in the ICU, was not significantly altered by the study intervention. 86.2% of control and 80.6% of intervention participants stated that they felt "very included" in the decision making process ($p=0.380$). There was also no reported difference in how supported families felt, how well the ICU physician provided explanations and whether families had adequate decision making time. Comments provided by families, however, offered valuable insight into the families' values and needs in this context, and could be the basis for further work in this field.



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The COACH Program® Building consumer confidence in shared decision making

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¹NPS MedicineWise

Background and aim: NPS MedicineWise has been delivering The COACH Program® since January 2016. The COACH Program® is a standardised telephone-based coaching program delivered by highly qualified pharmacists and dietitians (coaches). The coaches assist patients over a six-month period, to achieve national guideline-recommended target levels for their biomedical and lifestyle risk factors.

The NPS MedicineWise coaches provide consumers with verbal and written guidelines to improve their communication with their health professionals to support shared decision making in the management of their chronic conditions. This is achieved by consumers starting conversations with their doctors regarding medications, medical conditions and being involved in the decision making for their own health.

This study aims to illustrate an improvement in consumers’ biomedical and lifestyle risk factors for coronary heart disease

Method: Patients with the primary diagnosis of coronary heart disease enrolled in The COACH Program® between 1 July 2016 to 31 December 2020 from two health funds were included. The program ran for a maximum of six months for each patient. Laboratory results and lifestyle risk factors were compared at entry and graduation from the program.

Findings: 1063 patients were enrolled. Paired results on entry and graduation demonstrated marked improvements in guideline recommended targets and lifestyle risk factors: (a) 28% met the low-density lipoprotein cholesterol (LDL-C) target at initial session and 58% at graduation; (b) 80% met the blood pressure target at initial session and 92% at graduation; (c) 66% without diabetes met the fasting glucose level target at initial session and 84% at graduation; (d) 63% met the physical activity target at initial session and 84% at graduation; and (e) 78% met the alcohol intake target at initial and 90% at graduation.

NPS MedicineWise would like to acknowledge nib and Peoplecare for funding the delivery of The COACH Program®.



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A novel use of social media to empower patients to choose wisely for Anterior Cruciate Ligament injuries

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Background: Anterior Cruciate Ligament (ACL) injury is a common soft tissue injury to the knee that typically happens during sports participation. Traditionally, ACL injuries are managed with surgery and 6-12 months of physiotherapy. Australia has the highest rate of surgery in the world, and increasing annually at a rate of 43% (Rooney 2018; Zbrojkiewicz et al 2018). This is despite current best evidence showing that for many, surgery is not superior to exercise therapy, a non-invasive and far less expensive management option (Filbay and Gindem 2019; Monk 2016; Frobell et al 2010).

A societal and healthcare narrative that surgery is almost always required for this injury obscures patient empowerment to consider alternative management options. Few education resources exist for patients empower themselves to understand their ACL tear management options and enable a shared management decision with their health professional. This is reflected in evidence showing that patients typically have unreasonable expectations of the procedure and low awareness and expectations of exercise therapy (Webster and Feller 2019; Thorstensson et al 2009).

Methods/objectives: Social media platforms have been used effectively in healthcare to enable social and emotional support, disseminate evidence-based information and enhance patient autonomy (Smailhodzic et al 2016). In August 2019, inspired by Choosing Wisely's key aims, two physiotherapists and one consumer advocate conceived a Facebook group titled "ACL tear recovery without surgery" (now ACL + Meniscus Tear Recovery Without Surgery). This has the aim of providing a platform for those choosing an exercise therapy pathway to provide support to others and discuss their own recovery, as well as to access evidence-based resources.

Findings/implications: By March 2021, this group has acquired ~4500 members with active engagement in the group from many. It is believed this group has contributed strongly to patient empowerment to enable patients to 'choose wisely' for ACL injuries.



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Let sleeping bubs lie –reducing unnecessary intervention for low heart rates during sleep

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Background: Sleeping bradycardia is a normal phenomenon when the heart rate lowers physiologically during deep relaxation. The observation chart used at our institution is based on Bonafide's large dataset of hospitalised children and does not account for variation in heart rate (HR) between arousal states.

Mandatory review criteria specify that observations outside of normal ranges result in medical review.

Medical staff have responded to rapid review requests by ordering electrocardiograms (ECGs) to rule out cardiac causes. ECGs cause unnecessary sleep interruption, cost nursing time, require cardiology review and often lead to spurious results.

Aim and Methods: We aimed to reduce ECG ordering overnight for the indication of sleeping bradycardia. Following a literature review we developed an inaugural guideline to support Junior Medical Staff, interpreting sleeping bradycardia as normal.

We collected pre-intervention data between August 2017 – September 2019 on all children admitted to the ward overnight with a HR value below the lower limit of normal (based on existing VICTOR observation charts) excluding those in intensive care units. This included a total of 7033 patients with a rate of ECG use of 31.6% (n = 2221). A chart review was performed on 50 patients with the HR falling between new and old limits, which demonstrated the adoption of new parameters would not have led to a missed diagnosis in any case. We therefore aimed to reduced ECG rates for sleeping bradycardia overnight from 31.6% to under 15%.

Results and Discussion: The introduction of a new guideline reduced rates of ECG ordering from 31.6% to 20%. However the EMR did not reinforce the notion that low HR in sleeping children are normal. Next steps will look at adapting the EMR to support non-intervention for the sleeping relaxed child and looking to reduce medical and nursing review time.



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Patient-centred care in the use of Immunoglobulins in Australia

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The Value in Prescribing Immunoglobulins Program, funded by the Australian Department of Health, aims to improve health outcomes for patients prescribed immunoglobulins through access to better information.

Developed in consultation and with support from key organisations and opinion leaders, leveraging clinical experience and best available evidence, the program will deliver a cohesive suite of resources to support treatment optimisation. The interventions in development include clinical evidence summaries and tools to support conversations between consumers and clinicians and shared decision making.

Immunoglobulins are a precious resource used to manage a diverse range of medical conditions. Their use is strictly regulated by The Criteria for Immunoglobulin Use in Australia.

In gathering program requirements, clinicians and patients alike described how the regulations governing supply of immunoglobulins can result in perceived loss of control over treatment decisions. Patients and their carers found the rare nature of their condition to be isolating and the complexity and perceived inflexibility of their treatment challenging. Clinicians identified the challenges of setting patient expectations in this complex environment.

The program aims to address these challenges by providing tools to build consumer confidence in navigating treatment. The program also promotes patient-centric care by providing clinicians with resources to assist with challenging conversations in situations where personal treatment choices may be limited.

The program is utilising consumer experience stories to build meaningful resources that facilitate patient-centred care and promote opportunities for prescribers to ensure optimal stewardship of immunoglobulin supply in Australia.

This talk will discuss the challenges of collaboration across multiple specialties, jurisdictions and demographics, as well as insights and lessons learnt through the development of the program to encourage a patient-centred approach to care in a highly regulated context.



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What proportion of patients with chronic non-cancer pain are prescribed an opioid analgesic? Systematic review and meta-regression of observational studies

Dr Stephanie Mathieson^{1,2}, Dr Graeme Wertheimer³, Professor Christopher Maher^{1,2}, Professor Christine Lin^{1,2}, Professor Andrew McLachlan², Professor Rachelle Buchbinder^{4,5}, Professor Sallie-Anne Pearson⁶, Professor Martin Underwood⁷

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Background: Guidelines now discourage opioid analgesics for chronic non-cancer pain because the benefits frequently do not outweigh the harms. We aimed to determine the proportion of patients with chronic non-cancer pain who were prescribed an opioid, the types prescribed, and factors associated with prescribing.

Methods: We searched electronic databases without restrictions. We included observational studies of adults with chronic non-cancer pain that were prescribed opioids for pain management. We included population-based studies (such as databases, including dispensing data) and studies from clinical settings. We excluded studies of self-report opioid use. Opioid prescribing was determined as the proportion of patients with chronic non-cancer pain that were prescribed opioids. Opioids were categorised as weak (e.g. codeine) or strong (e.g. oxycodone). Study quality was assessed using a risk of bias tool designed for observational studies measuring prevalence. Individual study results were pooled using a random-effects model. Meta-regression investigated study level factors associated with prescribing. Overall quality was assessed using Grading of Recommendations Assessment, Development and Evaluation criteria.

Outcomes: Of the 42 studies (5,244,313 participants) identified, the majority (n = 28) were from North America. Eleven studies had low risk of bias. The pooled estimate of the proportion of patients with chronic non-cancer pain prescribed opioids was 30.9% (95%CI 28.9% to 33.0%, 42 studies, moderate-quality evidence). Strong opioids were more frequently prescribed than weak opioids (18.4% (95%CI 16.0% to 21.0%, n = 15 studies, low-quality evidence), versus 8.5% (95%CI 7.2% to 9.9%, n = 15 studies, low-quality evidence)). Meta-regression determined opioid prescribing was associated with year of sampling (more prescribing in recent years) (P = 0.015), geographic region (P = 0.048; Asia prescribing less than North America, P = 0.006) but not by setting (P = 0.972). In conclusion, opioid prescribing for patients with chronic non-cancer pain is common and has increased over time.



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What is the prevalence of opioid analgesic use in people with chronic non-cancer pain? Systematic review and meta-regression of observational studies

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Background: Opioid analgesics are commonly used to manage chronic non-cancer pain. The prevalence of opioid use in people with chronic non-cancer pain is unclear as there is yet to be a systematic overview. Reviews of opioid prescribing rates may not indicate the actual use of opioids as not all prescriptions are filled.

Aims: To review studies examining the proportion of people with chronic non-cancer pain who report consuming opioids and characteristics associated with use.

Methods: We searched databases from inception to 8th February 2020. We included observational studies reporting the proportion of adults with chronic non-cancer pain who used opioid analgesics. Opioids were categorised as weak (e.g. codeine) or strong (e.g. oxycodone). Study risk of bias was assessed, and Grading of Recommendations Assessment, Development and Evaluation provided the overall quality. Results were pooled using random-effects. Meta-regression determined factors associated with opioid use.

Results: Sixty studies (N = 3,961,739) reported data on opioid use in people with chronic non-cancer pain from 1990 to 2017. Of these, 46 (77%) had moderate risk of bias. Opioid use was reported by 26.8% (95%CI 23.1% to 30.8%; moderate quality evidence) of people with chronic non-cancer pain. The use of weak opioids (17.3% (95%CI 11.9% to 24.4%; moderate quality evidence) was more common than strong opioids (9.8% (95%CI 6.8% to 14.0%; low quality evidence). Meta-regression determined opioid use was associated with geographic region (P = 0.02; lower in Europe than North America), but not sampling year (P = 0.77), setting (P = 0.06), diagnosis (P = 0.34) or disclosure of funding (P = 0.77).

Conclusions: Our review summarised data from over 3.9 million people with chronic non-cancer pain reporting their opioid use. Between 1990 to 2017, one quarter of people with chronic non-cancer pain reported taking opioids and this proportion did not change over time.



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‘Making the right choice’ – teaching GP registrars about the rational use of tests

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Background: Pathology, imaging and other tests have an essential role in the diagnosis, monitoring, and screening for disease in modern medical practice. However, over-testing is a significant issue and has implications for the patient, doctor and health system. Over-testing is especially problematic in general practice, a setting where the pre-test probability of serious disease is low. Data from Australian general practice suggests that pathology testing is frequently inconsistent with best practice or clinical guidelines.

Vocational GP training is arguably the most critical period in the development of future patterns of practice, including test ordering behaviour. Compared with established GPs, registrars order more pathology tests per problem managed and in a higher proportion of consultations. A low tolerance of uncertainty has been described as one of the factors in over-testing and is likely to be particularly problematic for GP registrars.

As part of the external registrar teaching program delivered by GP Synergy, the organisation responsible for training GP registrars in NSW and ACT, a session on the rational use of tests is delivered. It discusses the drivers and harms of over-testing and proposes strategies to minimise non-rational use of tests. It covers multiple clinical scenarios and heavily references the list of Choosing Wisely Australia recommendations.

Objectives: To describe one general practice training provider’s approach to teaching registrars about the rational use of tests, including the incorporation of Choosing Wisely recommendations.

Description: The ‘Making the Right Choice’ workshop session is a core teaching topic for GP registrars. It has significant implications for reducing the costs and harms of over-testing in Australian general practice, as well as adaptation to other education and training settings.



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Evaluation of the Choosing Wisely questions and a shared decision-making preparation video: Findings from a randomised online experiment

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Background: Research suggests that interventions to support consumers to be involved in decisions about eliminating the use of unnecessary/harmful tests, treatments, and procedures should include two stages: 'preparation' followed by 'enablement'. However, this has not been evaluated among people with different levels of health literacy (HL).

Objectives+Methods: Building on a feasibility study presented at the 2019 National Meeting, this study aimed to evaluate the impact of the Choosing Wisely 5 questions and a video designed to prepare patients for question-asking and shared decision-making (SDM) on a) self-efficacy to ask questions and participate in SDM, b) intention to participate in SDM and c) a range of secondary outcomes. The secondary aim was to determine whether HL modifies intervention effects.

We used a 2×2 between-subjects factorial design (preparation video: yes/no × Choosing Wisely questions: yes/no × HL: adequate/inadequate). Participants were recruited online, presented with a hypothetical non-specific low back pain scenario, and randomised to study groups stratified by HL. Data was analysed as intention-to-treat using appropriate regression models.

Findings+Implications: Intention to participate in SDM was significantly higher in people randomised to the preparation video (MD=0.24, 95%CI:0.14-0.35, p<0.001), the 5 Questions (MD=0.12, 95%CI:0.01-0.22, p=0.03, d=0.10), and both interventions (MD=0.33, 95%CI:0.23-0.44, p<0.001) compared to control.

Pairwise comparisons suggest that combining the interventions has a greater impact than presenting the 5 Questions alone (p<0.001). No main effect of either intervention (or their interaction) was found for self-efficacy outcomes. Individuals with limited HL had lower self-efficacy and SDM intention at baseline compared to those with adequate HL; after controlling for these differences, the magnitude of improvement in primary outcomes at follow-up did not vary by HL level (p>0.05).

Our findings suggest that the Choosing Wisely questions and a preparation video are both likely to improve intentions to participate in decision-making with similar efficacy across HL groups.



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The role Medicines Line plays in contributing to medication literacy and empowering consumer confidence in shared decision making.

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Background: Since 1 July 2010, NPS MedicineWise has been delivering Medicines Line to Australian consumers. This national telephone service is staffed by pharmacists and provides access to independent and evidence-based information on medicines. In July 2012, NPS MedicineWise began delivering the Adverse Medicine Events (AME) Line. This service provides consumers with an avenue for reporting and discussing adverse experiences with medicines.

Issue: Shared decision making involves discussion and collaboration between a consumer and their healthcare provider. It brings together a person's intentions, beliefs, and preferences with the best available evidence about a treatment's benefits and risks, to reach the most appropriate healthcare decisions for that person. However, consumers often feel that they do not have the information or tools to confidently be involved in decisions about their medicines.

Objectives/scope: The poster/lightning talk will present case studies (with feedback from the consumer) that show how Medicines Line and AME Line can assist consumers to move towards shared decision making about their medicines.

Findings: An interaction with the Medicines Line and/or AME Line empower consumers to work with their health care professionals and become involved in decisions around their healthcare. As the only nationwide consumer medicines information service, Medicines Line is uniquely placed to contribute to the medication literacy of its callers and provide consumers with up-to-date, accessible, evidence-based information to support them to make good decisions about their medicines.

By speaking with pharmacists on the Medicines Line or AME Line, consumers can become involved in decisions around their healthcare. This includes playing an active collaborative role with their healthcare provider in areas such as medication choice, choice of medication in pregnancy and breast feeding, medication administration time and duration of therapy.



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Empowering conversations about opioids

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Background: Conversations about opioids and pain management can be challenging for all involved. Recent research found that patients are not provided with sufficient information when discharged from hospital with opioids. These findings are supported by numerous research papers showing low consumer health literacy related to opioids and pain medicine.

With the prescribing rates of opioids in Australia remaining high, NPS MedicineWise and the Choosing Wisely Australia initiative developed a new resource for people who are prescribed opioids for chronic non-cancer pain in hospital, seeking to encourage conversations between patients and health professionals.

Objective: The resource aims to support shared decision-making process and to ensure consumers are well informed about the risks and benefits associated with opioid use as well as alternative pain management options available.

Method: The resource was modelled on the Choosing Wisely 5 questions to ask your doctor resource and developed in consultation with the Queensland Clinical Senate and the Society of Hospital Pharmacists of Australia (SHPA).

It was tested with consumers and health professionals in surgical wards and emergency departments of four hospitals in Victoria and Queensland, in collaboration with the Queensland Opioid Stewardship Program and SHPA. The resource was further tested with consumer representatives from PainAustralia Consumer Advisory Group and the Agency for Clinical Innovation NSW.

Findings: The resource has been promoted for its potential to facilitate conversations between patients and health professionals, thus improving consumer confidence in the shared decision-making process.

The resource was well received by consumers and health professionals as demonstrated by anecdotal feedback and download rates. It has since been redeveloped into a resource for people with back pain and osteoarthritis in partnership with the University of Sydney and the Institute of Musculoskeletal Health. Further work is underway to adapt the resource to a paediatric version in collaboration with Clinical Excellence Queensland.



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Parathyroid Localisation Imaging in Primary Hyperparathyroidism: A Tertiary Hospital Audit

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Background: Primary hyperparathyroidism (PHPT) is a biochemical diagnosis. Where clinically indicated, surgical removal of the culprit gland(s) offers potential cure however PHPT may be managed conservatively. Parathyroid localisation imaging (PLI) cannot diagnose PHPT, but guides surgery, and so should be undertaken if (focused) parathyroidectomy is contemplated.

Objective: Determine if PLI is optimally utilised (surgical planning for established PHPT) in a tertiary hospital. Secondly, in discussing findings, we aim to foster a culture of requesting imaging for optimum utility within our institution and other health-care settings.

Methods: Retrospective audit of reports of imaging studies undertaken at Royal Perth Hospital over one-year containing the keyword “parathyroid”, limited to PLI modalities in patients without end-stage renal failure. Additional clinical and biochemical data were obtained using electronic sources.

Results: There were 58 PLI studies performed in 45 patients. Only 38 (84%) patients had an established biochemical PHPT diagnosis. Of those with PHPT, only 28 (74%) proceeded to parathyroidectomy. There were 21 PLI studies (36% of total) performed in patients without established PHPT, or in those with PHPT but who did not proceed to surgery. PLI studies were requested most frequently by Endocrine Surgeons (31 [53%]) and Endocrinologists (22 [38%]). Patients investigated by Endocrine Surgeons (71%) and Endocrinologists (67%) were similarly likely to proceed to parathyroidectomy, whereas none of the patients investigated by other clinicians proceeded to surgery.

Conclusion: Most PLI studies (37 [64%]) were performed in patients with established PHPT who proceeded to surgery, however a significant proportion were undertaken without clear indication or utility. Confirming a biochemical diagnosis of PHPT and the patient’s suitability for surgery prior to requesting PLI could decrease the number of low-value investigations performed. These findings have been presented at our hospital and the message is relevant to secondary and primary health-care settings as well as tertiary institutions.



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Reducing the prevalence of antecubital fossa (ACF) peripheral intravenous cannulation (PIVC)

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Peripheral Intravenous Cannula (PIVC) placement and prolonged dwell time are associated with Health care Associated Staphylococcus aureus bacteraemia (HA SAB). Antecubital fossa (ACF) insertions have a higher risk of infection. Avoiding non-essential placement in the ACF may reduce HA SAB.

From January 2018 to March 2019 there were 13 Health care acquired blood stream infections (HCA BSIs) including 10 HA SAB attributed to PIVC in our health service. 77% of the PIVCs attributable to the BSI were inserted in the ACF. Institutional PIVC surveillance demonstrates 69% of all PIVCs are inserted in ACF.

To undertake a quality improvement (QI) activity to reduce the prevalence of ACF placed PIVC.

A 12-week focussed intervention in the Emergency Department and four key wards included:

- digital survey (assessing knowledge of cannulation practices)
- clinical change champions
- education and training (posters across campus/PIVC trolleys, education - grand rounds, nursing, medical handovers)
- surveillance and feedback to the wards over 12-week period identifying all PIVC, location and indication for ACF PIVC

581 staff completed the survey. 75% believed all inpatients should have a PIVC. 22% did not know when to remove or replace a PIVC or who is responsible for removal. 79% knew the clinical indications for ACF PIVC. At the start of the intervention period, 69% of all PIVCs were inserted in ACF of which 12% were clinically indicated. The lowest ACF rate was observed in week 9, 32% with an improvement of indication to 37%. On week 12 the ACF rate increased to 60%, coincidentally was the week the new junior doctors commenced. During the intervention period, no ACF PIVC attributable HCA BSI were reported.

Engaging clinical champions to lead change, using patient outcome data e.g. HCABSI to assist healthcare staff to embrace changing practices was imperative to this choosing wisely activity.



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Hearing the consumer voice in reducing low value care

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Background: While clinicians often cite consumer demand as a driver of low value care (LVC), many consumers wish to avoid it.

Objectives and Methods: This study aimed to determine effectiveness of consumer-mediated strategies in avoiding LVC. PubMed was searched January 2000 to December 2020 for studies specifically reporting interventions that engaged consumers in efforts to reduce LVC within patient-clinician interactions.

Findings: One high-quality 2020 systematic review comprised 22 studies (9 randomised trials [RTs]; 13 non-RTs) using one or more strategies: patient-oriented educational materials (n = 18, 82%); shared decision-making (n = 5, 23%); social media campaigns (n = 4, 18%). Overall, 19 (86%) studies reported significant reductions in the targeted LVC, averaging 26% and 39% decrease in RTs and non-RTs respectively. Low value medications (principally antibiotics and benzodiazepines) saw 15% to 25% absolute reductions, low value procedures (eg. Caesarean sections, knee/hip surgery) dropped by 20% to 80%, and low value diagnostic tests (eg. CT head scans for mild head injury, cardiac stress testing in low risk patients) reduced by 8% to 41%. Shared decision-making interventions performed better than educational interventions (42% vs 34% decrease).

Another 2020 systematic review of 16 RTs targeting low value investigations in primary care found patient engagement strategies (eg educational brochures, waiting room posters) reduced testing by median 51% compared to 17% for clinician-directed strategies. In a 2018 systematic review of 25 RTs, clinicians provided guideline-concordant high value care more often when patients were explicit about their needs and concerns (26% vs 17%), were more informed of their care (32% vs 20%), and were more aware of their condition and different care options (46% vs 35%), whereas decision aids had no effect.

Implications: While clinician-directed strategies should not be de-emphasised, more intense efforts are warranted in increasing consumer empowerment when interacting with clinicians in reducing LVC.



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Consumer harm from low value care – how bad is it?

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Background: Low value care (LVC) is often perceived as being ‘worth a go’ and ‘better to be safe than sorry.’ Framing LVC in terms of its negative health consequences may incentivise consumers to engage more proactively in efforts to reduce LVC.

Objectives and methods: This study aimed to gauge the magnitude of LVC-related harm by identifying relevant studies through a literature search from 2000 to 2020 using appropriate search terms.

Findings: Six studies reported consumer-relevant outcomes. In 54 case descriptions of 63 overused services, 3.2 negative consequences per case were seen on average, comprising injury (69%), psychological harm (16%), treatment burden (9%), financial loss (3%), and dissatisfaction (2%). Care cascades following an incidental test finding among 363 patients were associated with physical (16% of instances) or psychological harm (68%), financial loss (57%), social disruptions (9%) and dissatisfaction (28%). Among 9330 admissions to Australian hospitals involving seven LVC procedures, 0.2% to 15% of patients developed at least one of 16 hospital-acquired complications (HACs), most commonly (26%) a health care-associated infection. Of 405,695 individuals with a new episode of non-specific low back pain, those receiving early (<6 weeks) lumbar spine magnetic resonance imaging (MRI) incurred more back surgery (1.5% vs 0.1%) and worse pain scores (mean 3.99 vs. 3.87). Among 5,057 individuals with incidentally detected lung nodules on chest X-rays, those receiving intense, guideline-discordant diagnostic investigation incurred more procedure-related adverse events (8.1% absolute increase) with no savings in advanced cancer at 2 years follow-up. Among 19,811 adults admitted to US hospitals for asthma exacerbation, patients receiving low-value antibiotics were a third more likely to develop antibiotic-induced diarrhoea with no difference in treatment failure.

Implications: Consumers need to be aware of the adverse consequences they may incur from receiving LVC and ask their clinicians about the potential for harm associated with care recommendations.



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Encouraging Antimicrobial Stewardship in Residential Aged Care Facilities

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Background: Concerning levels of inappropriate antimicrobial use persist in residential aged care facilities (RACF). Inappropriate antimicrobial use presents risks to residents' safety and increases the potential for the development of antimicrobial resistance.

Objective: To improve antimicrobial stewardship in the RACF by reviewing the availability of antimicrobial medications in the imprest system.

Method: Current antimicrobial prescribing habits across 180 RACFs across South East Queensland were analysed. This data was reviewed against the Therapeutic Guidelines treatment recommendations for common conditions seen at RACFs. The number of times antimicrobials were prescribed for residents which are not considered first or second line therapy for these conditions was alarmingly. In addition, the list of antimicrobials available in the imprest system exceeded those recommended as first or second line therapy. This ready availability resulted in antimicrobial courses being commenced in residents before the pharmacist was able to review the medication order for appropriateness.

Following review of the prescribing data and Therapeutic Guideline recommendations, the only antimicrobials available in the imprest system were those which were either first or second line therapy for common conditions.

Results: Prescribing data and antimicrobial use will be reviewed and analysed 4 weeks after implementation of the new antimicrobial imprest list. The data will then continue to be analysed at 4 week intervals over the next 6 months.



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Leveraging technology to reduce transcription errors

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Background: Within the aged care setting, the supply pharmacy is responsible for maintaining the resident's medication chart. Following an in-depth analysis and review, the pharmacy determined a change in medication management software would improve resident medication safety.

To change software providers, the pharmacy had to transfer approximately 5000 resident's (from 50 residential aged care facilities (RACF)) medication records from one software provider to another without disrupting or compromising medication safety and management at the RACF. In addition to transcribing the data from one system to another in the pharmacy, an onsite chart reconciliation audit was also necessary. It was estimated the initial data entry would take approximately 1250 hours, the onsite chart audit approximately 1200 hours and the entire transition could take up to a year.

Objective: To identify a more efficient, and safer method of transferring resident medication charts from one software system to another without compromising medication safety or disrupting the end user, the resident and the RACF.

Method: Working in collaboration with the new software vendor, an automatic data transfer from the existing to new software was established. In addition to improving efficiencies, this innovation also significantly reduced the risk of transcription errors. Automating transcription also allowed the pharmacy to focus on known areas of increased risk i.e. opioid patches, injections, and reduced the time pharmacy staff were onsite at the RACF, reducing risk of exposing any of the residents to COVID-19 (transition occurred from July to November 2020)

Results: Every resident medication chart was successfully transferred to the new software according to schedule without compromising safety.



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Medicines Line – supporting consumers to ask Wise questions and Choose Wisely about children’s medicines.

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Background: Parents and carers encounter information and promotions about children’s health and medicines from many sources, with widely varying evidence bases. They may also feel concerned or distressed when children are unwell, wishing to give medicines to relieve symptoms. However, specific Choosing Wisely Australia (CWA) recommendations relate to some common children’s ailments, where best evidence discourages certain treatments.

Medicines Line (ML) is a national telephone consumer medicines information service. It can provide parents/carers with up-to-date, evidence-based information regarding children’s medicines, and facilitate discussion of relevant CWA principles. ML sought to understand the types and content of enquiries received about children’s medicines, and how these relate to the CWA paediatric recommendations.

Scope of work: Calls about children’s medicines (ages 0 to 17), received from January 2015 to December 2019, were analysed for child age and trigger medicine. The relationship of this data to CWA paediatric priorities was assessed.

Findings: A total of 2,467 enquiries concerning children’s medicines were received (7% of 37,953 calls).

Children aged 0 to 4 accounted for 53% of these calls, with 23% of calls for children under 1 year.

Medicines enquired about most frequently were paracetamol (10%), ibuprofen (5%), amoxicillin (4%), methylphenidate (3%) and loratadine (2%).

Trends in calls reflected CWA paediatric recommendations, including:

1. Antipyretics for simple fever (paracetamol or ibuprofen; 15% of calls)
2. Antibiotics for Otitis Media or Upper Respiratory Tract Infections (10% of calls)
3. Proton Pump Inhibitors for infant GORD (6% of calls age 0-1, 2nd most common infant medication)

Medicines Line has a unique role in promoting CWA recommendations alongside evidence-based health care for children, and empowering parents/carers to ask if their child really needs this treatment, what are the risks, what happens if we do nothing, and are there simpler, safer options.



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Perceptions and experiences of health professionals and orthopaedic patients on pain management and opioid use in orthopaedic inpatients

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Background: Opioids are high risk medicines most commonly prescribed for analgesia. These medicines may cause adverse effects including respiratory depression, sedation, constipation, and have the potential to produce tolerance and dependence, even at prescribed doses. Inappropriate prescribing of opioids on hospital discharge has been identified as a significant contributor to opioid misuse.

Aim: The aim of the research was to explore perceptions and experiences of health professionals and orthopaedic patients around pain management and opioid use, with the goal to identify recurring themes and areas for improvement. This information is intended to stimulate further research into developing and implementing strategies to improve hospital practices, thereby improving patient outcomes and reducing patient harm associated with these medicines.

Methods: Over a 3 month period, 20 health professionals and 20 patients were interviewed to evaluate their perceptions and experiences prior to, and during hospital admission. Open ended questions were used to explore their understanding of the role of opioids in pain management, barriers and enablers to appropriate prescribing, and drivers for opioid prescribing. Additionally, participants were asked to describe their experiences and expectations with pain management and suggestions to improve this.

Results: Upon analysis of the interview data, recurring themes identified as potential areas for improvement include:

- Delayed and inconsistent medication education between elective and emergency admissions
- Minimal patient participation and discussion in pain management plan (e.g. analgesic options, non-pharmacological strategies, weaning of opioid use prior to discharge, long-term risks of opioids)
- Goals and expectations surrounding duration of opioid therapy and timeline for post-operative pain improvement
- Assumption that community healthcare providers have training in post-operative pain management

Conclusion: The project identified key areas for improvement with the use of opioids in this setting. The results provided a pathway for translational research to develop targeted interventions to improve inter-professional pain management in this population.



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The impact of changing MBS criteria for vitamin D testing

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Background: Vitamin D testing in Australia increased substantially in the 2000s, particularly in women. Concerns about the potential of over-testing led to: a) educational activities by NPS MedicineWise and b) new MBS criteria in November 2014 to limit testing to those at high risk of deficiency.

Objectives and Methods: This study aimed to describe trends in vitamin D testing between 1996 and 2019 in Australian women using Medicare data.

We used survey data from 7,771 women (born 1946-1951) in the Australian Longitudinal Study on Women's Health (ALSWH) linked with MBS data to investigate sociodemographic and health factors associated with testing under the new criteria.

Findings: Between 1996 and 2013, vitamin D testing rates increased in all age groups of women. Rates began to decline in 2013, but began increasing again after 2016. The majority of women (56%) in the ALSWH 1946-1951 cohort had at least one vitamin D test after the introduction of the new criteria. Women who had a bone density test and those living in lower latitudes with less sun exposure were more likely to get tested. Other predictors of vitamin D testing under the new criteria were having had a vitamin D test before the introduction of the new criteria and visiting a general practitioner more than twice a year (the strongest associations were in women who visited more than 8 times a year).

Implications: The introduction of the new criteria for vitamin D testing has not led to sustained declines in testing. Testing of women living at lower latitudes and of those who had bone density tests suggests some targeted testing is occurring. However, high testing rates and repeated testing suggest that at least some level of over-testing for vitamin D deficiency in Australian women is still occurring.



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Development of a patient decision aid on the benefits and harms of shoulder surgery and non-surgical options for shoulder pain

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Background: Subacromial decompression surgery and rotator cuff repair surgery are frequently performed for people with shoulder pain, despite evidence that they provide little-to-no benefit over non-surgical options.

Objective: To develop a patient decision aid that presents evidence-based information on the benefits and harms of subacromial decompression surgery and rotator cuff repair surgery, compared to non-surgical options.

Methods: We developed the decision aid with guidance from the International Patient Decision Aids Standards. We assembled a multidisciplinary steering group, used existing decision aids and decision science to draft the decision aid, interviewed people with shoulder pain and health professionals who manage people with shoulder pain to gather feedback on the decision aid, assessed useability (using qualitative and quantitative methods), and re-drafted and re-interviewed participants as necessary. Interview data were analysed using thematic analysis. Quantitative data were summarised descriptively.

Results: We interviewed 26 health professionals (11 physiotherapists, 7 orthopaedic surgeons, 4 general practitioners, 3 chiropractors and 1 osteopath) and 14 people with shoulder pain. Most health professionals and people with shoulder pain rated all aspects of decision aid usability as adequate-to-excellent (e.g., length, amount of information, presentation, comprehensibility). Interviews highlighted agreement among health professionals and people with shoulder pain on most aspects of the decision aid (e.g. treatment options, summary of benefits, harms and practical issues, questions to ask a health professional, graphics, formatting). However, some aspects of the decision aid elicited divergent views among health professionals (e.g. causes and symptoms of shoulder pain, evidence on benefits and harms).

Conclusion: This decision aid could be an acceptable and valuable tool for helping people with shoulder pain make informed treatment choices. A randomised controlled trial evaluating whether this decision aid reduces people's intentions to undergo shoulder surgery and facilitates informed treatment choices is underway.