

EVOLVE and IMSANZ

– Reflections, Progress and Future Prospects

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What is EVOLVE?

Initiative led by the RACP to reduce low benefit care delivered by physicians in Australia and New Zealand.

RACP - founding member of the Choosing Wisely campaigns in Australia and New Zealand.

Through a rigorous peer-review process, EVOLVE identifies a specialty's **Top 5** clinical practices that, in particular circumstances, may:

- be overused;
- provide little or no benefit; or
- cause unnecessary harm.

Do we need **EVOLVE**?

Proportion of investigations that were inappropriate

64% coagulation tests (n=1)

22% thrombophilia screening tests in VTE (n=1)

34% to 62% CTPA in suspected PTE (n=4)

36% to 40% imaging in low back pain (n=2)

54% imaging in abdominal pain (n=1)

63% blood cultures in suspected sepsis (n=1)

23% to 43% troponin assays in chest pain (n=2)

20% echocardiography (n=1)

17% myocardial perfusion scans in stable IHD (n=1)

38% of referrals for telemetry beds in suspected arrhythmia (n=1)

10% liver biopsy (n=1)

Do we need **EVOLVE**?

Proportion of interventions/patients receiving interventions that were inappropriate

14% to 74% blood products (n=3)

15% to 55% older patients receiving at least one inappropriate medication (n=8)

63% to 90% gastric acid suppressants (n=2)

34% direct acting anticoagulants (n=1)

34% of medications in older patients with polypharmacy (n=1)

21% and 24% antimicrobial prescriptions for infections and surgical prophylaxis (n=1)

33% of admissions for undifferentiated chest pain (n=1)

52% inhaled corticosteroids in mild chronic obstructive pulmonary disease (n=1)

10% to 64% end of life care admissions involve futile interventions (n=3)

EVOLVE lists

Development process

- Consider practices within or significantly impacting the domain of practice of a particular specialty;
- Focus on practices:
 - Growing in use or commonly used and/or costly
 - Significant reduction in low value use worthwhile
 - Evidence base exists which defines low value use
- Use a Delphi method as the preferred methodology
- Recruit representative sample of physicians

EVOLVE: Top 5 Lists from IMSANZ



TOP-FIVE
RECOMMENDATIONS on low-value practices

Better care. Better decision-making. Better use of resources.

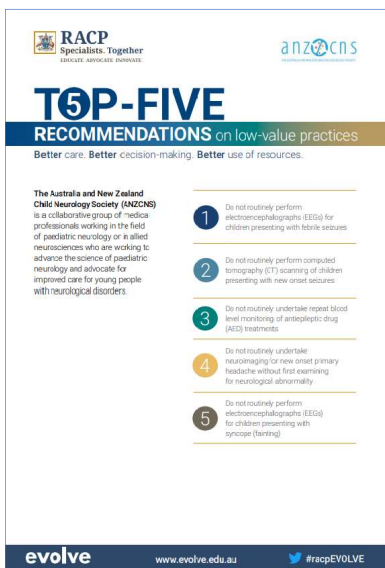
The Australia and New Zealand Child Neurology Society (ANZCNS) is a collaborative group of paediatric neurologists and allied neurosciences who are working to advance the science of paediatric neurology and advocate for improved care for young people with neurological disorders.

- 1 Do not routinely perform electroencephalograms (EEGs) for children presenting with febrile seizures
- 2 Do not routinely perform computed tomography (CT) scanning of children presenting with new onset seizures
- 3 Do not routinely undertake repeat blood level monitoring of antiepileptic drug (AED) treatments
- 4 Do not routinely undertake neuroimaging for new onset primary headache without first screening for neurological abnormality
- 5 Do not routinely perform electroencephalograms (EEGs) for children presenting with syncope (fainting)

evolve www.evolve.edu.au #racpEVOLVE

- 1 **Avoid medication-related harm in older patients (>65 years) receiving five or more regularly used medicines by performing a complete medication review and deprescribing where appropriate**
- 2 **Don't request daily full blood counts, erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP) as measures of response to antibiotic treatment in immunocompetent patients with mild to moderate community-acquired infections who are clinically improving**
- 3 **Once they have become afebrile and tolerant of oral antibiotics, don't continue prescribing intravenous antibiotics to patients with uncomplicated infections and no high-risk features**
- 4 **Don't request Holter monitoring, carotid duplex scans, echocardiography, electroencephalograms (EEGs) or telemetry in patients with first presentation of uncomplicated syncope and no high-risk features**
- 5 **Don't request computerised tomography pulmonary angiography (CTPA) as the first-choice investigation in patients with low risk of venous thromboembolism (VTE) by Well's score. Instead request D-dimer and perform imaging only if levels are elevated, after adjusting for age**

EVOLVE: Progress to date



- Total of 23 lists from more than half of RACP affiliated specialty groups
- Plans to extend a 'refresh' process through all lists published in early years
- Partnerships with Choosing Wisely, NPS MedicineWise, NSW Health/ACI, ACQSHC Atlas of Health Care Variation
- Recognition of EVOLVE in 2016 Interim Report of MBS Review Taskforce to the Minister for Health and Productivity Commission's 2017 Shifting the Dial 5 Year Productivity Review
- Nine EVOLVE-related articles published in peer-reviewed journals
- Online education module based on ANZSGM EVOLVE recommendations in collaboration with HETI in NSW
 - a patient and a Physician
 - a carer and a Physician
 - an Advanced Trainee and a Fellow
- EVOLVE forums at RACP Congress and various specialty ASMs

@TheRACP
#racpEVOLVE
www.evolve.edu.au

EVOLVE: Evaluation of Impact

- More than 3000 hits on the Evolve web link
- High profile in media and social media
- Champion hospitals and health services partnering with Choosing Wisely and Evolve in projects seeking to reduce low value care
 - Gold Coast and Box Hill hospitals – pathology
 - RBWH – several different investigations
 - Monash – various interventions
 - Austin Health – junior doctors handbook
 - Sir Charles Gardiner – IV cannulae
 - Redlands Hospital – various interventions

EVOLVE: Evaluation of Impact

Age and Ageing 2019; **0**: 1–6
doi: 10.1093/ageing/afz086

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Fits, faints, falls and funny turns: cost and capacity savings in Queensland from the accelerated transient attack pathway initiative (ATAP)

ROBIN BLYTHE¹, SANJEEWA KULARATNA¹, NICOLE WHITE¹, NICHOLAS GRAVES¹, KEVIN CLARK²,
HAYLEY MIDDLETON^{2,3}, ROHAN GRIMLEY³

- Clinician-designed pathways based on initial presenting diagnosis to support ambulant care
- In pre/post study pathway implementation associated with
 - reduced admitted LOS for falls patients of 32.5% and admission costs by 19.5%
 - reduced admitted LOS for syncope, seizure, TIA patients by 22%; no change in costs
- No significant increase in 90-day representations; EDLOS unchanged
- Cost savings in freed capacity of \$71 per patient episode
- Pathways included in appendix in SGMCN Mind the Gaps Position Statement available on IMSANZ website

EVOLVE: Evaluation of Impact

Ben Vogler et al Cairns Hospital, Qld

Methods: This was a single centre, retrospective study performed at Cairns Hospital from the 1st of July 2017 to the 30th of June 2018. Data was collected from review of the electronic medical records.

Results: Among patients with unprovoked PE 28% (14/50) were recommended indefinite anticoagulation. In patients with provoked PE without active malignancy 9.6% (5/52) were prescribed anticoagulation for three months. There was no documentation of duration of anticoagulation in the medical records of 25.7% (27/144) of patients. Thrombophilia screening was undertaken in 20.1% (29/144). A CT abdomen for malignancy screening was performed in 8% (4/50) of patients.

Current projects include:

B12/RCF ordering

TFT ordering

Radiological investigation of pyelonephritis

Faecal occult blood testing

EVOLVE: Evaluation of Impact

- SGMCN has been a lead for Clinical Senate and Low Benefit Care Committee Qld
- Two Senate forums 2017/2019 on low benefit care
- Ministerial commitment over next 18 mo
- Implementation and evaluation framework
- Topics targeted:
 - Antihypertensive drug use in older patients
 - Syncope work-up
 - Use of CTPA
 - Use of routine pathology (FBC/ESR/CRP)
 - Timely changeover to oral antibiotics in patients with pneumonia/urosepsis
 - Admissions and investigations for low risk chest pain

Evolve: Ongoing challenges

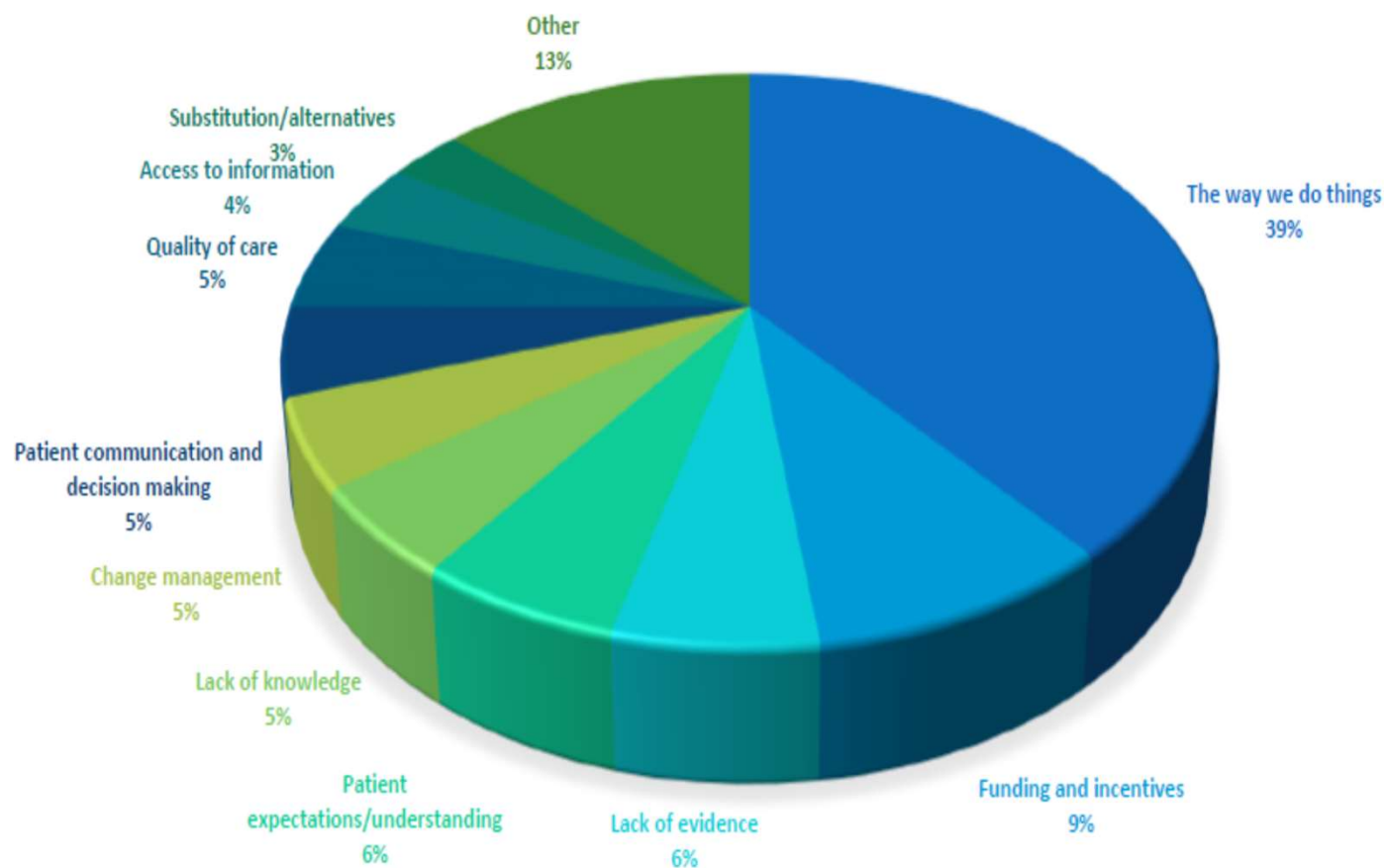
- No systematic evaluation of impact or awareness of initiative to date
- Low take up by some specialty groups – especially NZ
- Underutilisation by College trainee networks
- Evolve projects and advocacy mostly ‘spontaneous’ and opportunistic
- Biased selection of low value items
- Process is specialist-dominated – ?role of consumers
- Questionable impact at changing behaviour at scale
 - Early US experience suggested limited impacts
Rosenberg et al. JAMA Intern Med 2015
 - Subsequent emergence of various QI programs with promising results
Mafi et al BMJ Qual Safe 2018
- Communicating and engaging with clinicians busy with existing clinical practice
- No visibility on IMSANZ website

EVOLVE: Implementation

Why do we do the things we do?

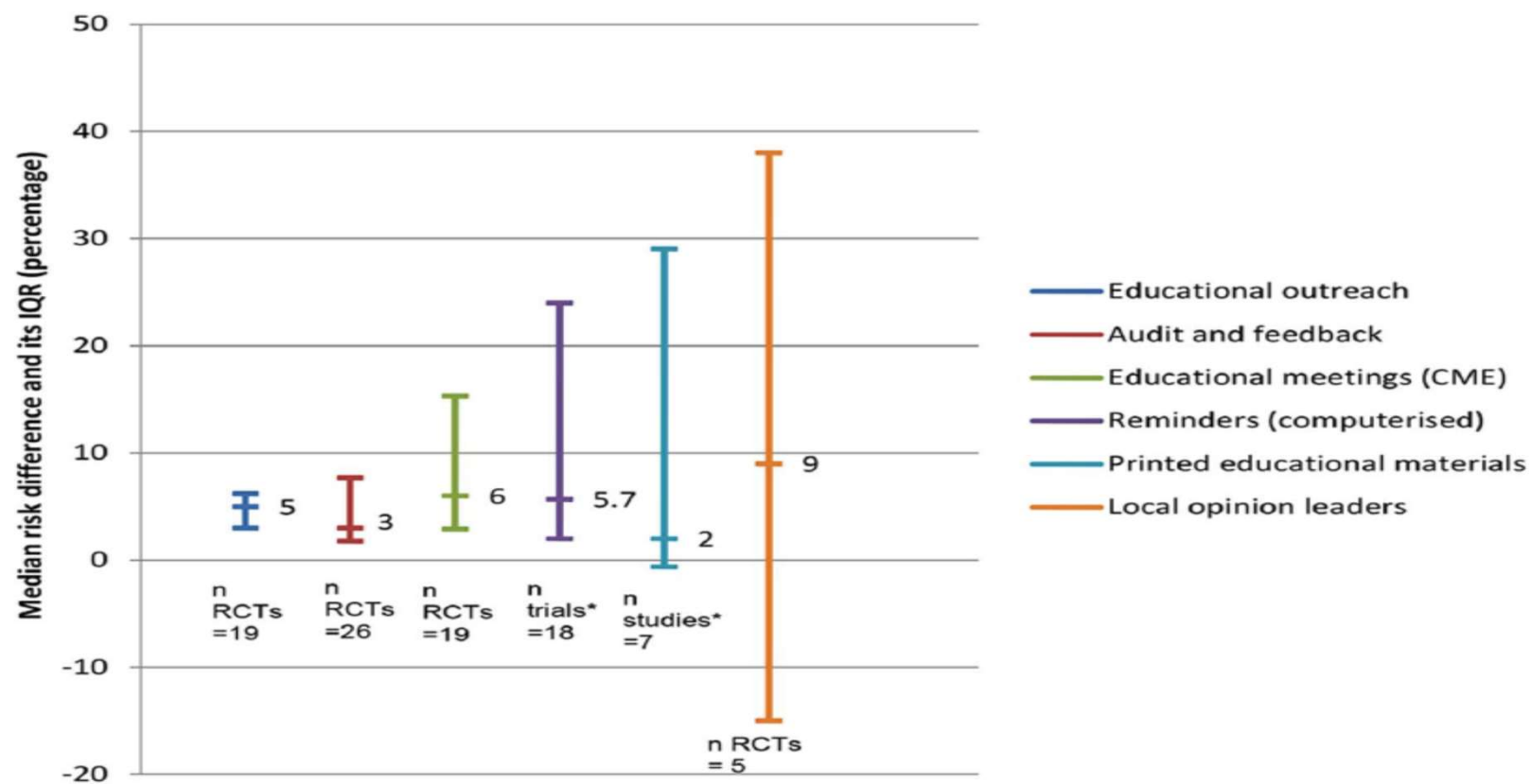
No participants=50

No responses=79



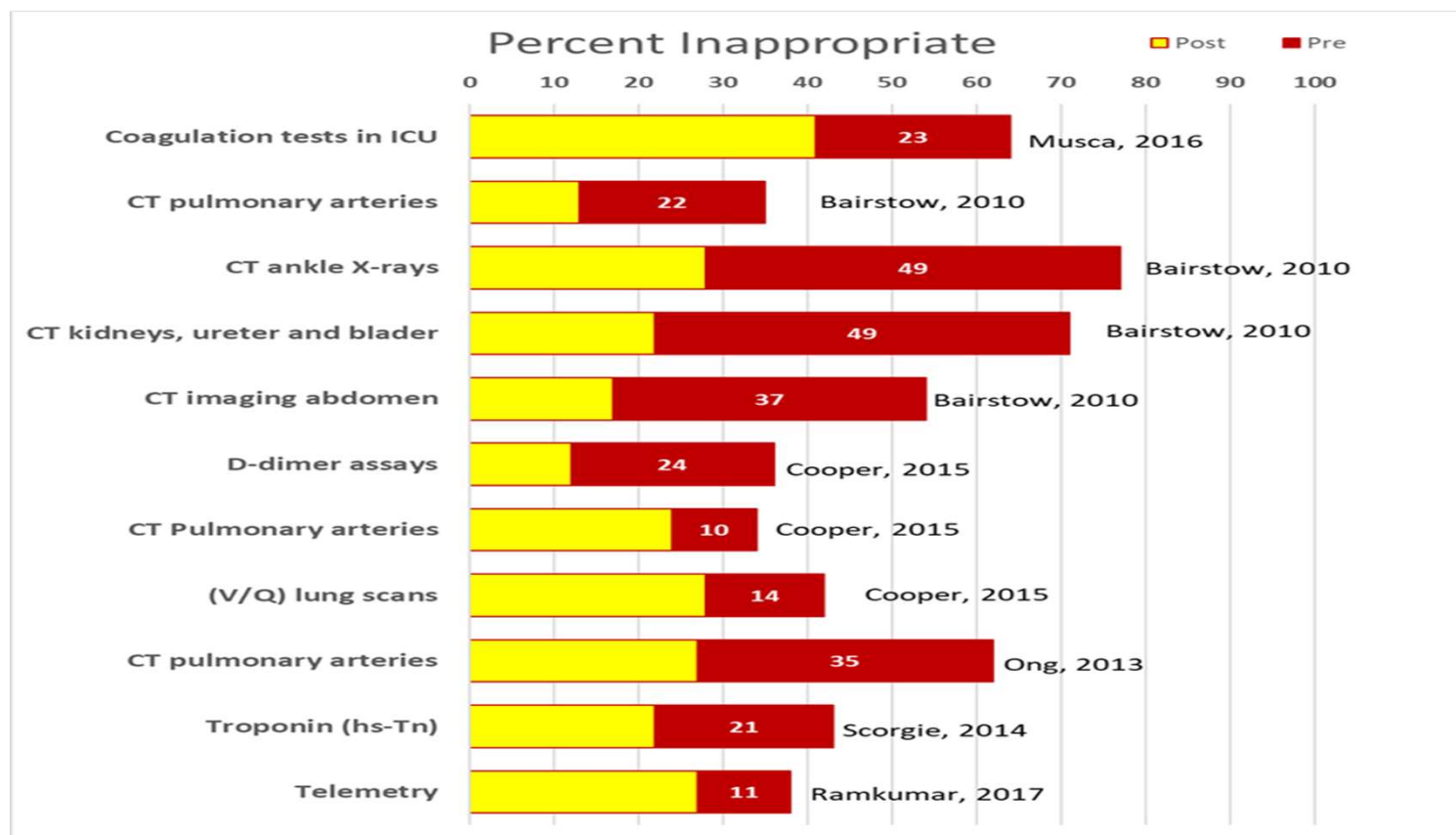
EVOLVE: Implementation

Traditional knowledge translation strategies



EVOLVE: Implementation

Traditional knowledge translation strategies



EVOLVE: Implementation

Sociocognitive approach

Decisions normally adaptive but become maladaptive because of cognitive bias

1 Four most common drivers of unnecessary care*

Reasons	GPs	Specialists
Patient expectations	62%	42%
Potential for medical litigation	54%	34%
Uncertainty regarding the diagnosis	49%	48%
Difficulties in accessing information from doctors in other settings, including results	52%	64%

GPs = general practitioners. * Online surveys were conducted in December 2016. There were responses from 264 randomly selected GPs, giving a 7% response rate, and from 160 randomly selected medical specialists, with a response rate of 7%. ♦

Lindner Med J Aust 2018

Bias	Definition
Commission bias 'Omission regret'	Tendency to do something (or seen to be doing something) even if intended actions are not supported by robust evidence and may in fact do harm
Uncertainty bias	Tendency to want to attain a higher level of certainty than is clinically feasible or warranted
Impact bias	Tendency to over-estimate benefits and under-estimate harms of interventions
Extrapolation bias 'Indication creep'	Tendency to extrapolate intervention benefit seen in a circumscribed sample of patients to similar effects among a wider spectrum of patients who share similar disease traits
Pro-innovation bias 'Novelty bias'	Tendency to view newer (and more costly) tests and treatments as necessarily better in improving patient outcomes than existing ones.

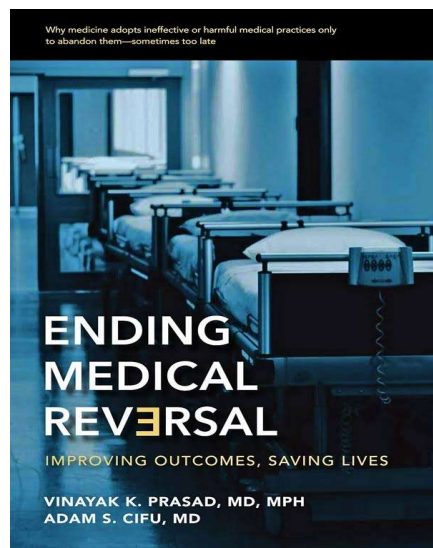
Scott BMJ 2008; Scott et al Med J Aust 2017

EVOLVE: Implementation

Sociocognitive approach

Practices at one time thought appropriate but now outmoded or shown to be ineffective or harmful, but retained out of belief, habit or ritual

Clinical inertia, group norms



META-RESEARCH

A comprehensive review of randomized clinical trials in three medical journals reveals 396 medical reversals

Herrera-Perez et al. eLife 2019;8:e45183.

EVOLVE: Implementation

Sociocognitive approach

Scott, McPhail 2019

Immersion

Clinical microsystem

Defining the low value care problem

Engaging key stakeholders at unit level

Eliciting rationales for low value care



Redefining the problem

Validating the problem as previously defined using data and experience

Converging to mutual understanding of low value care

Giving ownership to clinical teams



Unlearning

Developing motivation for change

Patient narratives and outcome data - harm, waste

Peer comparisons and benchmarking – evaluative feedback

Peer to peer support (seeing how others have unlearned)

Substitution

Providing alternatives

EVOLVE: Implementation

Sociocognitive approach

Scott, McPhail 2019



Facilitating and sustaining the change

Making it easier to do right thing; harder to do wrong thing

- nudge strategies (public compacts, patient prompts, SDM)

Ongoing feedback loops looking at outcomes, adverse events

Peer group discussions ('clinical conundrums')

Intrinsic rewards (professional)

Extrinsic rewards (recognition, budget)

Permissions


Forcing functions on EMR

- Elimination of options, compulsory indication fields, pop-up messaging


Funding, service agreements, unit guidelines, performance standards

EVOLVE: Future prospects

- Additions to IMSANZ Choosing Wisely recommendations
- Inventories
 - Projects/initiatives
 - Toolkits and resources
- Empowering consumers
- Hospital/clinic compacts
- Collaborations with Wiser Health Care



Choosing Wisely Australia
An initiative of NPS MedicineWise



5 QUESTIONS

TO ASK YOUR DOCTOR BEFORE YOU GET ANY TEST, TREATMENT OR PROCEDURE

Some medical tests, treatments, and procedures provide little benefit. And in some cases, they may even cause harm. Use the 5 questions to your doctor to make sure you end up with the right amount of care — not too much and not too little.

- DO I REALLY NEED THIS TEST OR PROCEDURE?**

Medical tests help you and your doctor or other health care provider decide how to treat a problem. And medical procedures help to actually treat it.
- WHAT ARE THE RISKS?**

Will there be side effects? What are the chances of getting results that aren't accurate? Could that lead to more testing or another procedure?
- ARE THERE SIMPLER, SAFER OPTIONS?**

Sometimes all you need to do is make lifestyle changes, such as eating healthier foods or exercising more.
- WHAT HAPPENS IF I DON'T DO ANYTHING?**

Ask if your condition might get worse — or better — if you don't have the test or procedure right away.
- WHAT ARE THE COSTS?**

Costs can be financial, emotional or a cost of your time. Where there is a cost to the community, is it reasonable, is there a cheaper alternative?

For further information visit choosingwisely.org.au

Adapted from/acknowledgments to ConsumerReportHealth. Choosing Wisely Australia® is an initiative enabling clinicians, consumers and healthcare stakeholders to start important conversations about unnecessary tests, treatments and procedures. With a focus on high quality care, Choosing Wisely Australia is being led by Australia's medical colleges and societies and facilitated by NPS MedicineWise.