National Workshop in Deprescribing

Setting the scene

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Aims

- To profile the burden of inappropriate polypharmacy in older populations

- To understand the drivers for polypharmacy in the modern era

- To understand the reasons why prescribers, patients and the healthcare system find it difficult to deprescribe

- To develop strategies for promoting deprescribing in routine clinical practice
Objectives

• Compile Australian data to use in raising awareness quantitative/qualitative

• Identify risk prediction tools

• Define manifestations of drug harm in older populations

• Define burden of commonly administered drugs most prevalent toxicity/interactions/inconvenience/burden of administration

• Develop and validate deprescribing framework feasible approach to deciding which drugs to stop based on individual circumstances
  – indications, absolute net benefit, reconciliation with life expectancy, time to benefit and patient preferences

• Articulate practical clinical protocols for discontinuing specific medications safely and effectively

• Define practical strategies that incentivise deprescribing
## Type of intervention

<table>
<thead>
<tr>
<th>Information/guidance</th>
<th>Rules, protocols and regulations</th>
<th>Financial incentives</th>
<th>Audit/feedback/benchmarking</th>
<th>Cultural/rhetorical</th>
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<tbody>
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<td>Patient</td>
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<td>Clinician</td>
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<td>State/Cwealth (HDL/PBS)</td>
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Some innovative interventions

• Direct to consumer education by community pharmacists
  – EMPOWER trial  JAMA Intern Med 2014

• Doctor-patient compacts
  – Meeker et al JAMA Intern Med 2014

• Choosing Wisely campaign
  – Cassell et al JAMA 2012

• Social media campaigns
Why the need for deprescribing

"It is an art of no little importance to administer medicines properly; but it is an art of much greater and more difficult acquisition to know when to suspend or altogether omit them"

Philippe Pinel  1745-1826
Why the need for deprescribing

- In Australia, 1 in 4 older persons living in community hospitalised for medication-related problems over a 5 year period

- 15% of older patients who attend their GP report ADE over the previous 6 months
  - rising to 25% of high risk patients over the previous 3 months
  - at least a quarter and up to two thirds of these ADEs are potentially preventable
    » Kalisch et al Int J Qual Health Care 2012; 24: 239-249

- Up to 30% of admissions for patients over 75 years of age are medication-related
  - up to three-quarters potentially preventable
    » Sorensen et al Age Ageing 2005; 34: 626-32

- 30% to 35% of unplanned readmissions involving older patients are drug-related

- PIMS prescribed in 35% to 50% of RACF residents, 25% to 40% of community residents
  » Somers et al Aust Fam Physician. 2010; 39: 413-6

- In primary care, approximately 1 in 5 prescriptions issued for older adults is inappropriate
Why the need for deprescribing

- decreased physical functioning
  - Magaziner et al J Aging Health 1989; 1: 470-84

- inability to carry out IADL
  - Magaziner et al J Aging Health 1989; 1: 470-84

- increased risk of falls, delirium and other geriatric syndromes

- increased risk of hospitalisation

- increased mortality
  - Jyrkkä et al Drugs Aging 2009; 26: 1039-48

- reduced patient adherence to essential medicines

- ADEs account for more than 10% of all direct costs for prescribed drugs and healthcare use among affected individuals
Why the need for deprescribing

- Single most important predictor of inappropriate prescribing and risk of ADEs is the number of medications a person is taking
  - 13% for 2 drugs, 38% for 4 drugs, 82% for ≥7 drugs
    » Atkin et al Drugs Aging 1999; 14: 141-52
  - ≥5 medications represents cut-off identifying patients at increased ADE risk
    » Gnjidic et al J Clin Epidemiol 2012; 65:989-95

- >50% older Australians - ≥5 prescription or OTC meds; 20% >10
  » Parkes & Coper Aust NZ J Public Health 1997; 21: 469-76

- Residents of Australian RACFs: average of 7 drugs
  Elliott & Thomson Aust J Hosp Pharm 1998

- Hospitalised patients: average of 8 drugs
  Elliott et al J Pharm Pract Res 2003

- When patients hospitalised on average 2-3 drugs ceased, but 3-4 added
  » Crotty et al Am J Geriatr Pharmacother 2004; 2: 257-64

- Prevalence of polypharmacy is increasing over time