More people have 2 or more conditions than only have 1

Multimorbidity is common

162% projected rise in over 85s
2006-31

Why did you jump off a cliff?

Because the Guideline told me to.

The Scottish Government
Guthrie et al
A Standard guideline would not differentiate between the two

‘Use clinical judgement’
“not to put people on drugs they don't need” (GP Senior manager)
Urgency:

“not to put people on drugs they don't need” (GP Senior manager)
Convince someone it is cheaper to prescribe well

IMS Report “Advancing responsible use of medicines” & WHO, World Bank Global data set across 186 countries: 4% of total avoidable costs due to polypharmacy. Total of 3% global health expenditure could be saved = $18bn
Guidelines

- EU evaluation: 5 countries with guidance - 3 scored highly
- BEERS, STOP START
- Australian-deprescribing
MULTI-DISCIPLINARY
HOLISTIC PATIENT
REVIEW

USE CHANGE
MANAGEMENT

KOTTER

INSTITUTE
CREATE
BUILD
FORM
SUSTAIN
GENERATE
ENLIST
ENABLE
Creating practice models & Initiatives

Polypharmacy national Programme: guidance : consensus 7 steps

<table>
<thead>
<tr>
<th>Domain</th>
<th>Steps</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aims</td>
<td>1.</td>
<td>What matters to the patient?</td>
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<tr>
<td></td>
<td></td>
<td>Review diagnoses and identify therapeutic objectives with respect to:</td>
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<tr>
<td></td>
<td></td>
<td>- Identify objectives of drug therapy</td>
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<tr>
<td></td>
<td></td>
<td>- Management of existing health problems</td>
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<td></td>
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<td>- Prevention of future health problems</td>
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<tr>
<td>Need</td>
<td>2.</td>
<td>Identify essential medicines (not to be stopped without specialist</td>
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<tr>
<td></td>
<td></td>
<td>advice)</td>
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<td></td>
<td></td>
<td>- Medicines that have essential replacement functions (e.g. thyroxine)</td>
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<td></td>
<td></td>
<td>- Medicines to prevent rapid symptomatic decline (e.g. drugs for</td>
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<td></td>
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<td>Parkinson’s disease, heart failure)</td>
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<td>3.</td>
<td>Does the patient take unnecessary medicines?</td>
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<td>What is medication for? (Consider OTCs and traditional medicines.)</td>
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<td>Review the reason for giving, and the on-going need for, each</td>
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<td></td>
<td></td>
<td>medication:</td>
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<td></td>
<td>- with temporary indications</td>
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<td></td>
<td></td>
<td>- with higher than usual maintenance doses</td>
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<td></td>
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<td>- with limited benefit/ evidence of its use in general</td>
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<td></td>
<td></td>
<td>- with limited benefit in the patient under review</td>
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<tr>
<td>Effectiveness</td>
<td>4.</td>
<td>Are therapeutic objectives being achieved?</td>
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<td>Identify the need for adding/intensifying drug therapy in order to</td>
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<td></td>
<td></td>
<td>achieve therapeutic objectives</td>
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<td></td>
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<td>- to achieve symptom control</td>
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<td></td>
<td></td>
<td>- to achieve biochemical/clinical targets</td>
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<td>- to reduce disease progression/exacerbation</td>
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<td>- Is there a more appropriate medication or strategy that would help</td>
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<td>achieve goals?</td>
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<td>Safety</td>
<td>5.</td>
<td>Is the patient at risk of side effects?</td>
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<td>Identify patient safety risks by checking</td>
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<td></td>
<td></td>
<td>- if the targets set for the individual are appropriate?</td>
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<td></td>
<td></td>
<td>- drug-disease interactions</td>
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<td></td>
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<td>- drug-drug interactions (see ADR table)</td>
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<td></td>
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<td>- monitoring mechanisms for high-risk drugs</td>
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<td>- risk of accidental overdose</td>
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<td>Identify adverse drug effects by checking</td>
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<td>- specific symptoms/laboratory markers (e.g. hypokalaemia)</td>
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<td>- cumulative adverse drug effects (see ADR table)</td>
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<td></td>
<td></td>
<td>- medicines that may be used to treat side effects caused by other</td>
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<tr>
<td></td>
<td></td>
<td>medicines</td>
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<td>If appropriate, discuss and give Sick Day rule card to patient (link)</td>
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<tr>
<td>Cost-effectiveness</td>
<td>6.</td>
<td>Is therapy cost-effective?</td>
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<td>Identify unnecessarily costly therapy by</td>
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<td>- considering more cost-effective alternatives (but balance against</td>
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<tr>
<td></td>
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<td>effectiveness, safety, convenience)</td>
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</tbody>
</table>
what matters to me? / the patient

Aims
Need
Effectiveness
Cost effectiveness
Safety
Patient centeredness
Identifying Patients to target: Risk stratification

- Indicators e.g. Swedish Co-morbidities
- Tools such as BEERS, STOPP START, Frailty
  Palliative
- High Risk drugs
- 10+ meds
- Care homes
What has been successful?

- DQUIP study
- PINCER study
- USA
- Spanish
- Chinese: National Essential Medicines Scheme
- Australia: deprescribing
Communicating: Across the care interfaces

- System works in silos
- Prescriptions not cross-checked
Can this be implemented @ Scale?

10 Organisations

ROBERT GORDON UNIVERSITY
SCOTTISH GOVERNMENT
NORTHERN HEALTH AND SOCIAL CARE TRUST
HANNOVER MEDICAL SCHOOL
MEDICAL UNIVERSITY OF LODZ
UNIVERSITY OF COIMBRA
CLINIC FOUNDATION FOR BIOMEDICAL RESEARCH (HOSPITAL CLINIC OF BARCELONA)
FEDERICO II UNIVERSITY HOSPITAL
UNIVERSITY OF PELOPONNESE

www.simpathy.eu

Inappropriate Polypharmacy
A Major Health Issue

50% of the people taking 4 or more medicines don't take them as prescribed.

Changing the approach to multiple prescriptions requires a "collective" and joint effort involving different stakeholders.

WILL
Clinicians, policy makers across EU share learning on implementation with case studies and benchmarking

Ideas
Co-production tools for implementing polypharmacy with multidisciplinary team

Execution
Tools shared across EU

This leaflet is part of the SIMPATHY project (663082), which has received funding from the European Union's Health Programme (2014-2020).
Global Challenge: Health Professionals

Co-production

- Cultural issues: human factors
- Joint education
- Guidance-
- mobile app developed by team + patient for use across interface
- Multi-disciplinary working
- Health professionals engage “what matters to you”
Global Challenge: Systems & Practices

SIX PILLARS:

- Patient held medical records
- Pharmacovigilance systems
- Scientific regulation
- Monitoring for improvement
- Governance
- Patient and community engagement
Medicine Sick Day Rules

When you are unwell with any of the following:

- Vomiting or diarrhoea (unless only minor)
- Fevers, sweats and shaking

Then STOP taking the medicines listed overleaf

Restart when you are well (after 24-48 hours of eating and drinking normally)

If you are in any doubt, contact your pharmacist, GP or nurse

Medicines to stop on sick days

- ACE inhibitors: medicine names ending in “pril”
  - eg, lisinopril, perindopril, ramipril
- ARBs: medicine names ending in “sartan”
  - eg, losartan, candesartan, valsartan
- NSAIDs: anti-inflammatory pain killers
  - eg, ibuprofen, diclofenac, naproxen
- Diuretics: sometimes called “water pills”
  - eg, furosemide, spironolactone, indapamide, bendroflumethiazide
- Metformin: a medicine for diabetes

Produced April 2013. Authorised by: NHS Highland SPSP Primary Care working group
Global Challenge: Medicines & Monitoring & Evaluation

Medicines

• Key messages for patients
• Bar coding
• Packaging

Monitoring & Evaluation

• Indicators:
  - GI bleeds
  - AKI
  - Antibiotics- HAI
  - Heart failure
  - Falls
  - Resp- corticosteroids/ excess SABA
  - Anticholinergic burden
  - Vascular events
  - Dependency
  - Constipation

• Data across interface
• Patient passport data

The Scottish Government
You don't have to see the whole staircase, just take the first step.
Global Challenge

Initial steps

• Prescribing pharmacists: Clinical Pharmacist independent prescribers
  • Education and Training
    • NES & schools of pharmacy funding for training in partnership with schools
• Polypharmacy
  • Care homes and patients supported at home
  • Teach and learn
• Patient safety
  • Funding for pilot sites for health boards
• Robotics and workforce:
  • Scoping work to evaluate impact in addition to workforce survey
  • Review of role in health boards
• Pharmaceutical care planning
• eHealth & HEPMA & telehealth
  • E Health lead this with NHS 24
• Dispensing Doctors
  • Pilot sites