Awareness and self-efficacy of deprescribing and inappropriate polypharmacy in hospital clinicians post-completion of an online HETI module

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Introduction

- Hospitalisation represents an opportunity to reduce inappropriate polypharmacy in older adults with multi-morbidity. This is not routinely addressed during admission, despite the increasing literature around deprescribing.
- Identified barriers and enablers to deprescribing in clinicians are awareness, self-efficacy, clinical inertia and feasibility.
- The effectiveness of online educational modules to improve deprescribing of inappropriate polypharmacy remains unclear.
- This is part of a multi-factorial intervention aiming to reduce inappropriate polypharmacy in older inpatients and an RACP Evolve Trainee demonstration project which promotes:
  - **ANZSGM Evolve Guideline 2:** *Do not prescribe benzodiazepines or other sedative-hypnotics to older adults as first choice for insomnia, agitation or delirium*
  - **ANZSGM Evolve Guideline 4:** *Do not prescribe medication without conducting a drug regimen review*

Objectives

1) Develop an online Health Education and Training Institute (HETI) module to educate multi-disciplinary clinical staff who care for older adults in hospital on inappropriate polypharmacy and deprescribing.
2) Describe hospital clinician and medical students' awareness of inappropriate polypharmacy and self-efficacy for deprescribing after completing the HETI module.

Methods

Online HETI Module

An animated case-based online module on inappropriate polypharmacy and deprescribing through drug regimen review was developed with NSW HETI using a subject matter expert group. (Fig 1)

Module Aims

Promote awareness of inappropriate polypharmacy amongst hospital staff with a focus on management in hospitalised patients

Increase engagement and adoption of deprescribing, highlighting interdisciplinary communication

Reference and direct learners to the available supporting tools and systems

Study design: Cross-sectional Survey

A piloted online questionnaire investigating awareness of polypharmacy and self-efficacy of deprescribing was developed using literature and expert opinion. investigating awareness and self-efficacy. It will be administered to a convenience sample of hospital clinicians and medical students after the HETI module (Fig 2).

Fig 1: Image from case-based online module

Phase 1

HETI Polypharmacy module Developed
Released 06 March 2018

REDCap Questionnaire Development
Ethics submission 12 Feb 2018

PILOT: Ethics Approval 05 April 2018
Discuss results with HETI and re-review by ethics

Recruitment
Setting: Aged Care, General Medicine and Rehabilitation wards in six metropolitan hospitals (NSW); Sydney Medical School Clinical Schools

Phase 2

Demographics
Awareness
Polypharmacy
Clinical Roles
Tools for Deprescribing
Current activity
Self-Efficacy

Multi-Disciplinary Clinicians
(43 questions)
Post-module

Medical Student
(45 questions)
Pre- and post-module

Results
Descriptive statistics, Cronbach's alpha; CHEcklist for Reporting Results for Internet E-Surveys (CHERRIES) standard

Fig 2: Study design flowchart

Results

Online HETI Module

Available on My Health Learning (HETI platform), Course code 185346268, Keyword Polypharmacy

Questionnaire Pilot

- Piloted: 35 participants
  - 6 doctors, 12 pharmacists, 6 allied health, 3 medical students, and 8 nurses
- Face validity, content validity and readability
- Mean Completion time: 07:38 mins
- Mean System Usability Score = 77.73/100
- Questionnaire compatible with Mac/PC and mobile phone
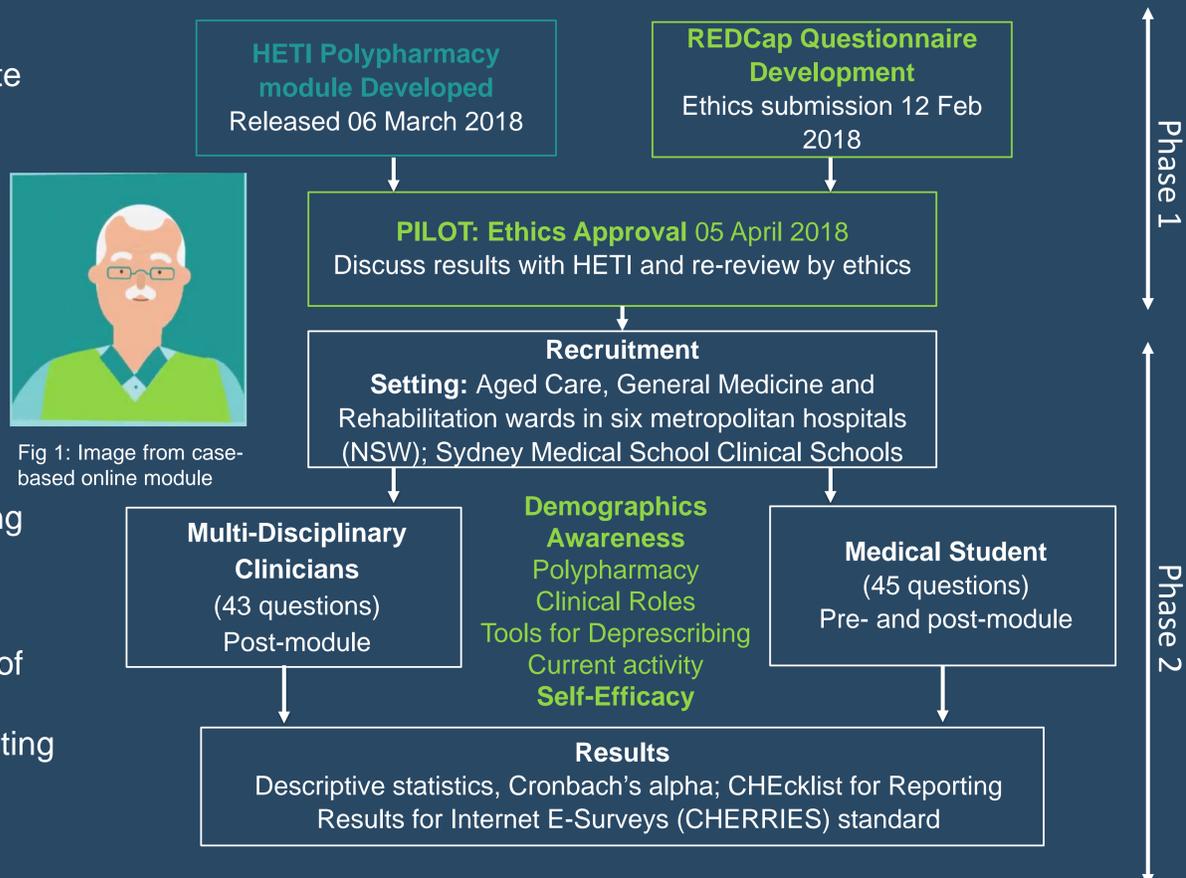
Discussion

Use of online education in deprescribing may promote behavioural change.
Understanding awareness and self-efficacy can be used to facilitate further behavioural interventions.

Strengths

- Broad sample population including medical students
- Theoretical underpinning

Limitations

- Respondent bias and convenience sampling
- 'Mandatory training fatigue'
- Medical student proxies for hospital clinicians

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