

## OPTI-SCRIPT study

# Optimizing Prescribing for Older People in Primary Care: a cluster randomized controlled trial

*Barbara Clyne (on behalf of OPTI-SCRIPT trial team)*

*HRB PhD Scholar in Health Service Research, HRB Centre for Primary Care Research*



# Overview of presentation

- OPTI-SCRIPT – study development
- Methodology
- OPTI-SCRIPT results
- Summary

# OPTI-SCRIPT study development



Clyne *et al.* *BMC Health Services Research* 2013, **13**:307  
<http://www.biomedcentral.com/1472-6963/13/307>



**RESEARCH ARTICLE**

**Open Access**

## Addressing potentially inappropriate prescribing in older patients: development and pilot study of an intervention in primary care (the OPTI-SCRIPT study)

Barbara Clyne<sup>1\*</sup>, Marie C Bradley<sup>2</sup>, Carmel M Hughes<sup>2</sup>, Daniel Clear<sup>1</sup>, Ronan McDonnell<sup>1</sup>, David Williams<sup>3</sup>, Tom Fahey<sup>1</sup>, Susan M Smith<sup>1</sup> and on behalf of the OPTI-SCRIPT study team



HRB CENTRE FOR  
PRIMARY CARE RESEARCH



Division of Population Health Sciences



# Study design & methodology – cluster RCT



- GPs inclusion criteria:
  - Based in greater Dublin area
  - 80+ patients aged over 70
- Patients inclusion criteria:
  - Aged 70+
  - Had PIP as per study list
- Recruited and baseline data collection prior to minimisation



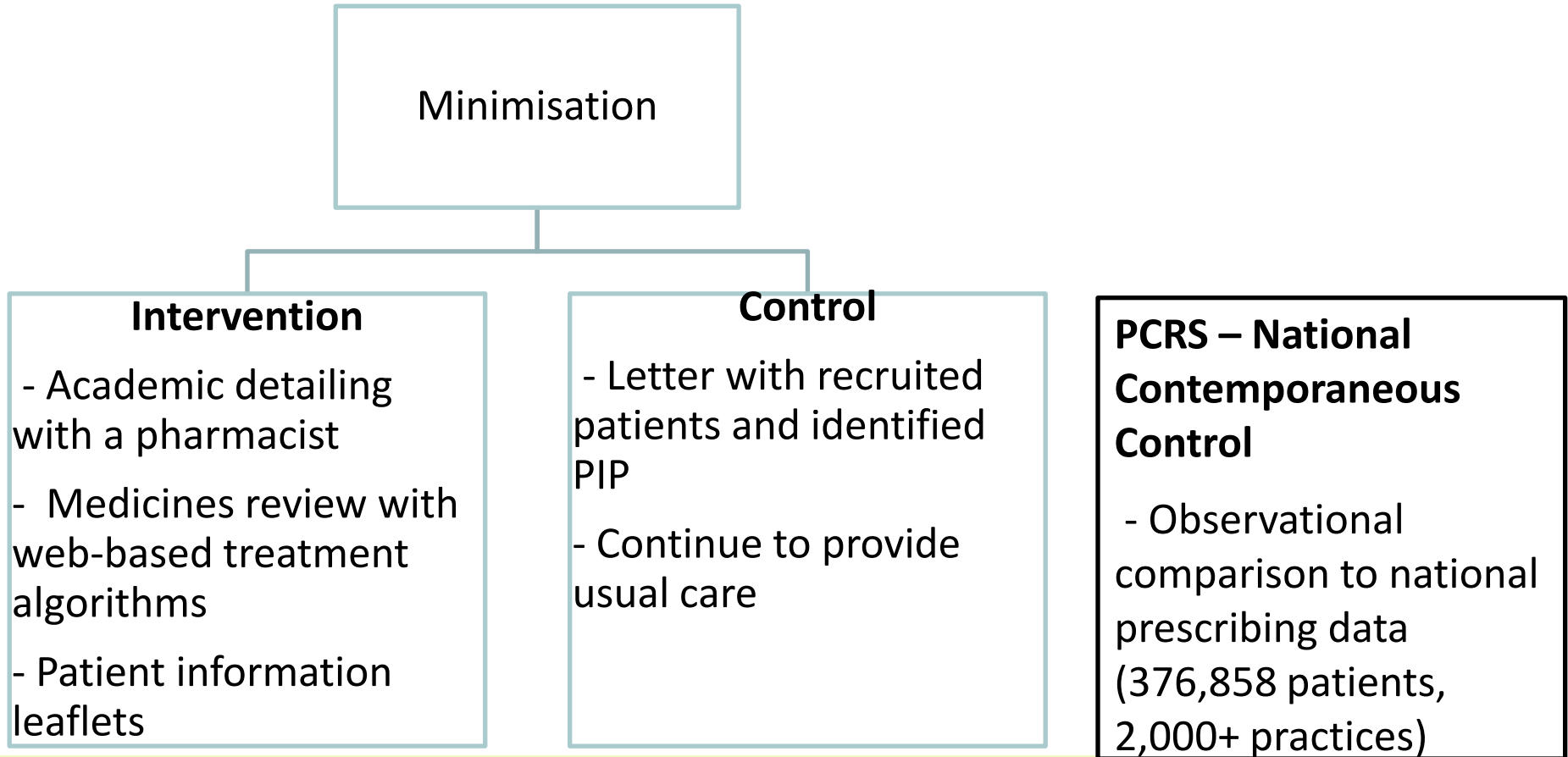
HRB CENTRE FOR  
PRIMARY CARE RESEARCH



Division of Population Health Sciences



# Study overview



# OPTI-SCRIPT website



## OPTISCRIP

Online Resource



<b>Patient ID: 15</b> <b>Proton Pump Inhibitors (PPIs)</b> <span style="background-color: red; color: white; padding: 2px;">To Do</span> Full Therapeutic Dose > 8 weeks	<b>Patient ID: 18</b> <b>Long Acting Benzodiazepines</b> <span style="background-color: green; color: white; padding: 2px;">Done</span> long acting, long term (>1 month)	<b>Patient ID: 23</b> <b>Long Acting Benzodiazepines</b> <span style="background-color: green; color: white; padding: 2px;">Done</span> long acting, long term (>1 month)
<b>PIP Outcome Form</b> <span style="background-color: red; color: white; padding: 2px;">To Do</span> Please fill this in for each PIP!	<b>PIP Outcome Form</b> <span style="background-color: green; color: white; padding: 2px;">Done</span> Please fill this in for each PIP!	<b>PIP Outcome Form</b> <span style="background-color: green; color: white; padding: 2px;">Done</span> Please fill this in for each PIP!
<b>Non-steroidal anti-inflammatory drugs (NSAIDs)</b> <span style="background-color: red; color: white; padding: 2px;">To Do</span> Warfarin, SSRI, ACE inhibitor, Diuretic, Congestive Heart Failure, Peptic Ulcer Disease, Long-term use for mild osteoarthritis		<b>Non-steroidal anti-inflammatory drugs (NSAIDs)</b> <span style="background-color: red; color: white; padding: 2px;">To Do</span> Warfarin, SSRI, ACE inhibitor, Diuretic, Congestive Heart Failure, Peptic Ulcer Disease, Long-term use for mild osteoarthritis
<b>PIP Outcome Form</b> <span style="background-color: red; color: white; padding: 2px;">To Do</span> Please fill this in for each PIP!		<b>PIP Outcome Form</b> <span style="background-color: red; color: white; padding: 2px;">To Do</span> Please fill this in for each PIP!





## Long Acting Benzodiazepines

Back to  
Patients

Complete  
Outcome  
Form

### Long-acting Benzodiazepines

#### Section A Potentially Inappropriate Prescription:

Any long-term (>1 month), long-acting benzodiazepine, i.e. chlordiazepoxide, flurazepam, nitrazepam or chlorazepate

OR

Any benzodiazepine with long-acting metabolites, i.e. Diazepam (except for use in benzodiazepine detoxification)

Due to an increased Risk of prolonged sedation, confusion, impaired balance and falls

#### Section B Alternatives:

Consider the following condition specific alternatives for:

1. [Insomnia](#)
2. [Generalised Anxiety Disorder \(GAD\)](#)
3. [Panic Disorder](#)



# OPTI-SCRIPT RCT results

- Participants
  - 21 GP practices (32% cluster response rate)
  - 196 patients (37% response rate)
- Minimisation

## Intervention

11 practices  
99 patients

## Control

10 practices  
97 patients



# Study design & methodology – cluster RCT



- Primary outcome measure:
  - Proportion of patients with no PIP
  - Mean PIP per group
- Data collection baseline & immediate post intervention
- Between group differences:
  - Random effects logistic regression
  - Cluster mean
  - Random effects poisson regression
- Process evaluation



# Summary



- Developed web-based intervention to target PIP in primary care
- Effective – odds of having no PIP in intervention higher than control
- National comparison showed odds of no PIP higher in intervention group also
- Process evaluation gave insight into intervention delivery and barriers



HRB CENTRE FOR  
PRIMARY CARE RESEARCH



Division of Population Health Sciences



# Acknowledgements



**This research is funded by the HRB Centre for Primary Care Research and the HRB PhD Scholars programme in Health Service Research**

## **The OPTI-SCRIPT trial team**

Barbara Clyne, Professor Susan Smith, Professor Tom Fahey, Dr. Marie Bradley, Professor Carmel Hughes, Dr. Janine Cooper, Dr. Fiona Boland, Dr. Ronan McDonnell, Professor David Williams, Mary-Claire Kennedy, Dr. Daniel Clear,

## **PCRS data analysis**

Frank Moriarty, Dr. Caitriona Cahir

