

# Assessment of geriatric pharmacology information design: a survey

<b>Submission date</b> 27/06/2019	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 08/07/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 03/09/2021	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Multiple diseases, medications and age-related changes put older adults at increased risk of harm from drugs. The majority of drug-related hospital visits are due to errors in prescribing and monitoring. Currently available text-based drug information resources can be lengthy for time-pressed clinicians and may not provide sufficient specific information regarding older adults. The researchers have developed concise, evidence-based, geriatric drug information resources (GPIDs) that use graphic design to facilitate learning. The aim of this study is to assess the efficiency and effectiveness of GPIDs. This is achieved by measuring the amount of time it will require prescribing clinicians to answer 5 case-based questions regarding prescribing for complex older adults using either GPIDs or usual drug information resources. Other aims include measuring knowledge retention using a knowledge-retention test, and assessing user-friendliness and overall reading experience of the GPIDs. The researchers will also investigate how various learning styles may impact the effectiveness and efficiency of the GPIDs.

### Who can participate?

Prescribing clinicians (physicians, pharmacists, nurse practitioners) of any age currently practicing in Canada

### What does the study involve?

The study involves randomly allocating prescribing clinicians (physicians, pharmacists and nurse practitioners) to one of two groups and instructing both to solve 5 identical case-based questions: one group is instructed to use only GPIDs and the other group is instructed to use their usual drug information resources. After this intervention, the researchers examine the required time for each group to answer the 5 questions. Next, both groups complete a series of questionnaires and tests in the following order: demographic questions, Health Professionals Inventory of Learning Styles (HPILS), knowledge retention test, open-ended questions about the GPIDs and finally questions about perceived user-friendliness and overall reading experience.

### What are the possible benefits and risks of participating?

There are no risks or direct benefits related to participation in the study.

Where is the study run from?

The study is being run by the principle investigators based out of McMaster University and GeriMedRisk (Waterloo, Ontario) and takes place on the SurveyMonkey platform.

When is the study starting and how long is it expected to run for?

October 2017 to July 2019

Who is funding the study?

Peer-reviewed grant from the Centre for Aging and Brain Health Innovation (CABHI)

Who is the main contact?

1. Dr Joanne Ho

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2. Dr Jennifer Tung

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## Contact information

### Type(s)

Scientific

### Contact name

Dr Joanne Ho

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## Additional identifiers

### EudraCT/CTIS number

Nil known

### IRAS number

### ClinicalTrials.gov number

Nil known

### Secondary identifying numbers

Nil known

## Study information

**Scientific Title**

Assessment of geriatric pharmacology information design: a randomized control trial

**Study objectives**

It is hypothesized that using geriatric pharmacology information design materials (GPIDs) will facilitate learning about prescribing medications to older adults. It is hypothesized that prescribing clinicians will find GPIDs to be a more user-friendly, efficient and effective format of learning about geriatric pharmacology compared to current, text-based formats.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 25/06/2018, Hamilton Integrated Research Ethics Board (HiREB) (293 Wellington Street North, Suite 102, Hamilton ON, L8L 8E7, Canada; Tel: +1 (0)905 521 2100 ext 70014; Email: erebhelpdesk@hhsc.ca), Project #: 4790

**Study design**

Multicentre double-blind randomized control trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Internet/virtual

**Study type(s)**

Other

**Participant information sheet**

Not available in web format, please use contact details to request a participant information sheet

**Health condition(s) or problem(s) studied**

Prescribing practices for older adults

**Interventions**

The study involves randomly assigning prescribing clinicians (physicians, pharmacists and nurse practitioners) to one of two treatment groups and instructing both to solve 5 identical case-based questions: one group will be instructed to use only GPIDs and the other group will be instructed to use their usual drug information resources. After this intervention, the researchers will examine the required time for each group to answer the 5 questions. Next, both groups will complete a series of questionnaires and tests in the following order: demographics questions, Health Professionals Inventory of Learning Styles (HPILS), knowledge retention test, open-ended questions about the GPIDs and finally questions about perceived user-friendliness and overall reading experience.

**Intervention Type**

Other

### **Primary outcome measure**

Time required by prescribing clinicians to complete 5 case-based questions about prescribing to older adults (start defined as time when online survey was accessed, stop defined as time when online survey completion button pressed; as measured by Survey Monkey). Measured at a single timepoint.

### **Secondary outcome measures**

Measured at a single timepoint:

1. Learning styles measured using the Health Professionals' Inventory of Learning Styles (H-PILS)
2. Knowledge retention test scores (defined as the % of correct answers to the case-based short answer questions in part 2 of the survey)
3. User-friendliness of the infographics, assessed using a series of closed-ended questions about their reading experience followed by open-ended feedback questions

### **Overall study start date**

20/10/2017

### **Completion date**

31/07/2019

## **Eligibility**

### **Key inclusion criteria**

Prescribing clinicians

### **Participant type(s)**

Health professional

### **Age group**

Adult

### **Sex**

Both

### **Target number of participants**

100

### **Total final enrolment**

43

### **Key exclusion criteria**

Health professionals involved in the development of the Geriatric Pharmacology Information Design Materials

### **Date of first enrolment**

10/02/2019

### **Date of final enrolment**

31/07/2019

## Locations

### Countries of recruitment

Canada

### Study participating centre

#### McMaster University

3rd Floor, 10B Victoria Street South

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## Sponsor information

### Organisation

McMaster University

### Sponsor details

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### Sponsor type

University/education

### ROR

<https://ror.org/02fa3aq29>

## Funder(s)

### Funder type

Research organisation

### Funder Name

Centre for Aging and Brain Health Innovation

# Results and Publications

## Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal by 31/07/2020. The study protocol can be available upon request to investigators whose use of the data has been approved by an approved review committee for a meta-analysis beginning 9 months and ending 36 months following article publication. Proposals should be directed to joanneho@mcmaster.ca. A data sharing agreement will need to be signed.

## Intention to publish date

31/07/2020

## Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date.

## IPD sharing plan summary

Data sharing statement to be made available at a later date

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		12/06/2021	03/09/2021	Yes	No