

# Developing a Deprescribing Evaluation Quality Control Instrument

## A Veteran Affairs Study

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# Disclosure

The views expressed in this presentation are strictly those of the researcher for work done with the Veteran Affairs and the University of Wisconsin.

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# Objectives

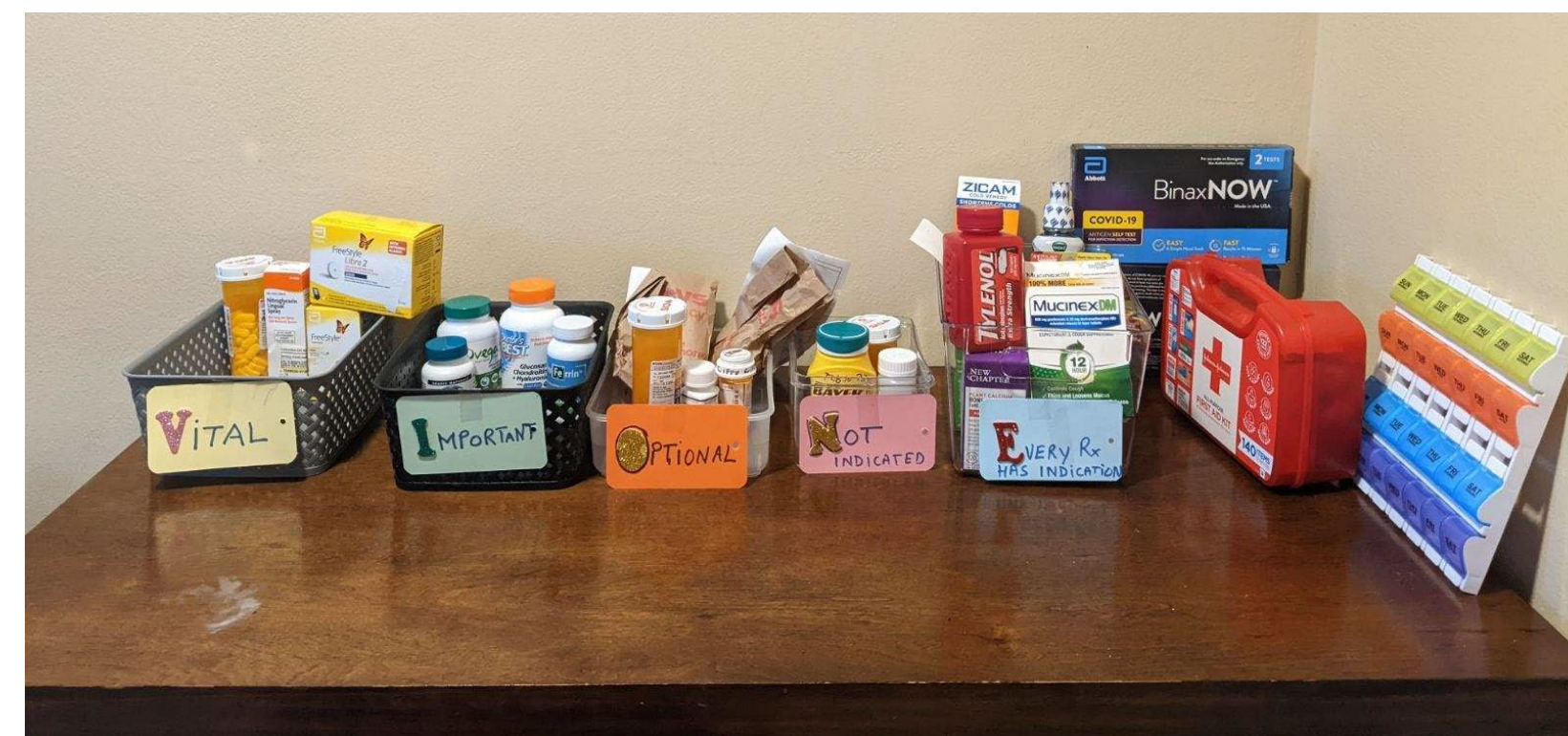
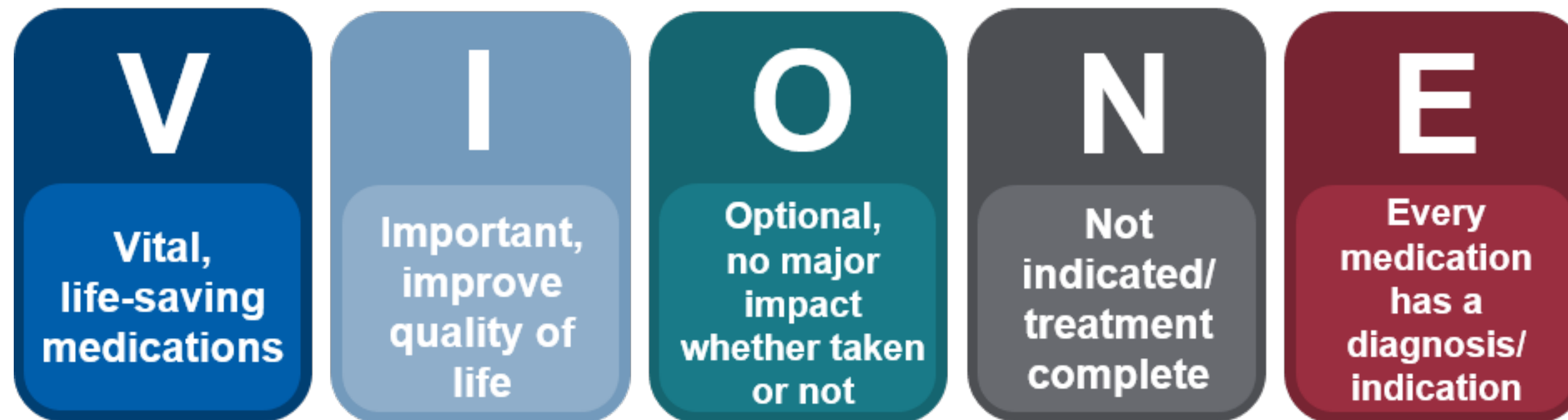
- ❖ Overview of research study on the VA
  - ❖ Background
  - ❖ Study Design
  - ❖ Results
  - ❖ Discussion and conclusion
- ❖ Feedback and suggestions

# Background

- ❖ **Polypharmacy** is the use of more than five medications daily.
  - ❖ Using too many medications could cause harm.
- ❖ Polypharmacy is correlated with **Potentially inappropriate medication (PIM)**,
  - ❖ Serious global concern.
- ❖ **Deprescribing** is the supervised withdrawal of potentially inappropriate medication through shared decision-making.
- ❖ The **VIONE** (Vital, Important, Optional, Not Indicated, and Every medication has an indication) tool was developed by the Veteran Affairs (VA) for medication optimization and deprescribing.



# VA Approach to Deprescribing



# Background

- ❖ Exploring the Veteran's experience after the VIONE deprescribing intervention will help to identify facilitators and barriers.
- ❖ Information eliciting patient responses can immensely improve patient safety and quality of life measures.

## Study Aims

1. Explore the Veteran's experience of the deprescribing intervention.
2. Use the information to develop a Deprescribing Evaluation Quality Improvement (DEQI) instrument.
3. Pilot test the DEQI instrument and modify it for broader dissemination to other VA sites for quality improvement.

Patient Reported

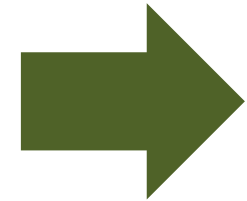
Experience  
Measures

Outcome  
Measures

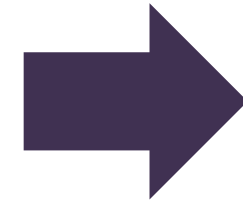


# Study Design

Phase I:  
Qualitative  
content analysis



Phase II:  
Instrument  
Development



Phase III:  
Quantitative  
study

What did the interview explain about the depresscribing experience?

- 17 Veterans
- Data Collection:  
Semi-structured interviews
- Data Analysis:  
Inductive content analysis

Completed

How can the qualitative content analysis be transformed into an instrument?

- Develop  
Instrument
  - Item generation
- Refine  
Instrument
  - 20 Expert review
  - Cognitive testing
  - Pilot testing  
~40 Veterans

Ongoing

Does the factor structure confirm the content analysis?

Sample:

~300 Veterans

Data Collection:

Mail-in / web-based survey

Data Analysis:

Exploratory and  
Confirmatory Factor  
Analysis

Reliability

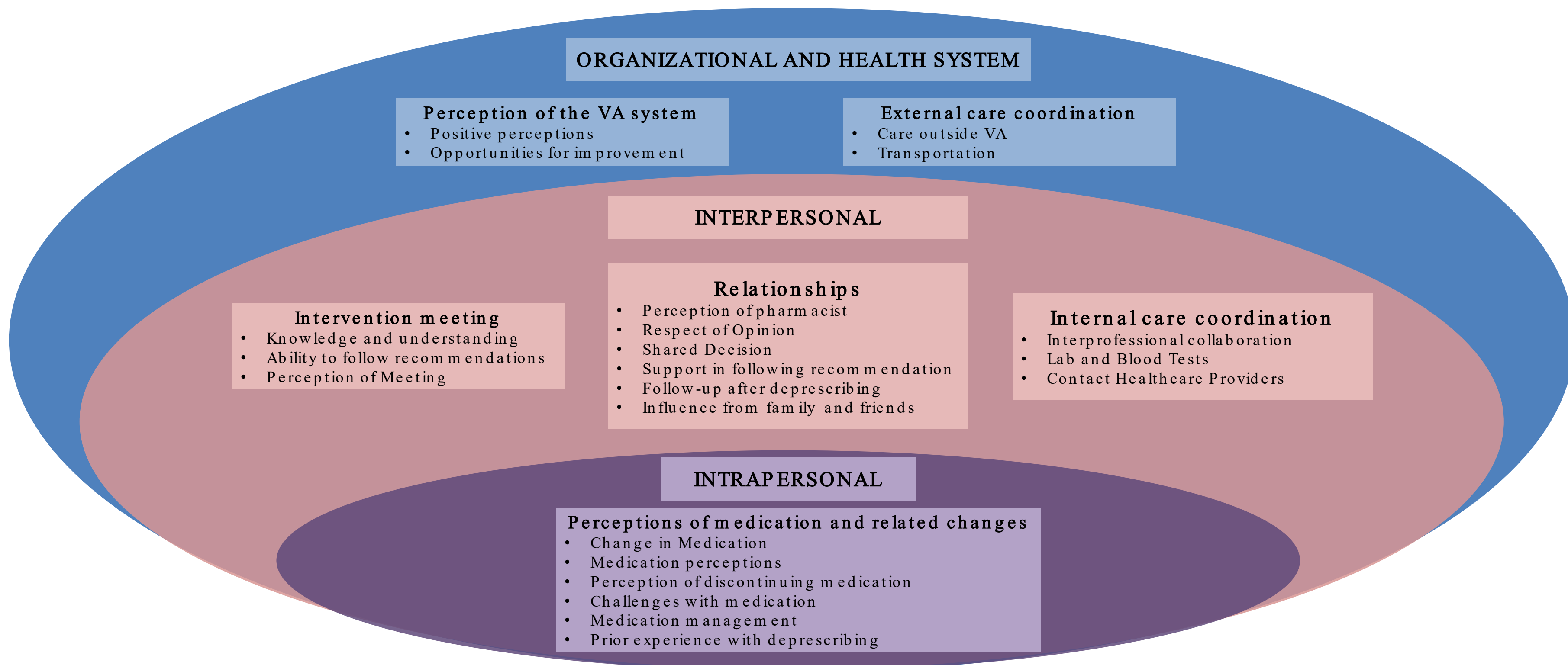
Validity testing

Future

# Results - Phase 1

AIM 1: Explore the Veteran's experience of the deprescribing intervention

Evolved Themes from Veterans on their VIONE deprescribing experience with their pharmacist mapped to the **Deprescribing Ecological Model**





# Results - Phase 1

AIM 1: Explore the Veteran's experience of the deprescribing intervention

## INTRAPERSONAL

Perceptions of medication and related changes:

- Change in Medication
- Medication perceptions
- Perception of discontinuing medication
- Challenges with medication
- Medication management
- Prior experience with deprescribing

I was more than ready to get rid of some of it [medicines].  
-Vet 02

I would just like to not have all these pills to take.  
- Vet 09

It takes me about 1/2 an hour a week to sort all my medications for a week. Course I'm slow too.  
- Vet 09

# Results - Phase 1

AIM 1: Explore the Veteran's experience of the deprescribing intervention

## INTERPERSONAL

### Relationships

- Perception of **pharmacist**
- Respect of Opinion
- Shared Decision
- Support in following the recommendations
- Follow-up after deprescribing
- Influence from family and friends

They they take a a personal interest. It isn't just like going to Walgreens or CVS where they are so damn busy don't know if they're coming, are going ...No, I get all the time.  
- Vet 17

She [the pharmacist] listens.  
- Vet 02

### Intervention meeting

- Knowledge and understanding
- Ability to follow the recommendation
- Perception of Meeting

Well, I can do whatever they tell me to do as long as I understand what they're talking about.  
- Vet 10

I just do what she she tells me to do and take what she tells me her take.  
- Vet 12

### Internal care coordination

- Interprofessional collaboration
- Lab and Blood Tests
- Contact Healthcare Providers

And then she [pharmacist] went over it with ...the doctor ...And so he [physician] was well aware of what she was doing ...I think they are a wonderful team ...  
- Vet 01

And there is another one ...Iron pill that I'm taking ...I think she's gonna wait until the next blood test and I might come off that too.  
- Vet 13

# Results - Phase 1

AIM 1: Explore the Veteran's experience of the deprescribing intervention

## ORGANIZATIONAL AND HEALTH SYSTEM

### Perception of the VA system

- Positive perceptions
- Opportunities for improvement

At first, they [appointments] were phone conversations, and I think those were a lot harder than the video.

-Vet 02

I have very good results with everybody that I'm ... working with me...I'll say it that way...OK, very good, very good

- Vet 14

### External care coordination

- Care outside VA
- Transportation

"I've got a primary care outside the VA. I've got a primary care inside the VA and there's too much conflict there, because one test me and then the next one tests me.

- Vet 04

You know what I give them [transportation] my appointment time ... and then the driver doesn't show up that day.

- Vet 01

# Discussion – Phase 1

AIM 1: Explore the Veteran's experience of the deprescribing intervention

- ❖ Most Veterans agreed with their pharmacist's recommendations.
- ❖ Most Veterans felt actively involved in medication decision-making.
- ❖ Veterans mostly deferred to their pharmacist's recommendations
  - Some needed reassurance from their primary care providers.
- ❖ Some were reluctant to make changes if they had experienced prior adverse withdrawal effects.
- ❖ Some sought additional information regarding the reasons for suggested medication changes.
- ❖ Difficulties in getting medications that a specialist outside the VA system prescribed.

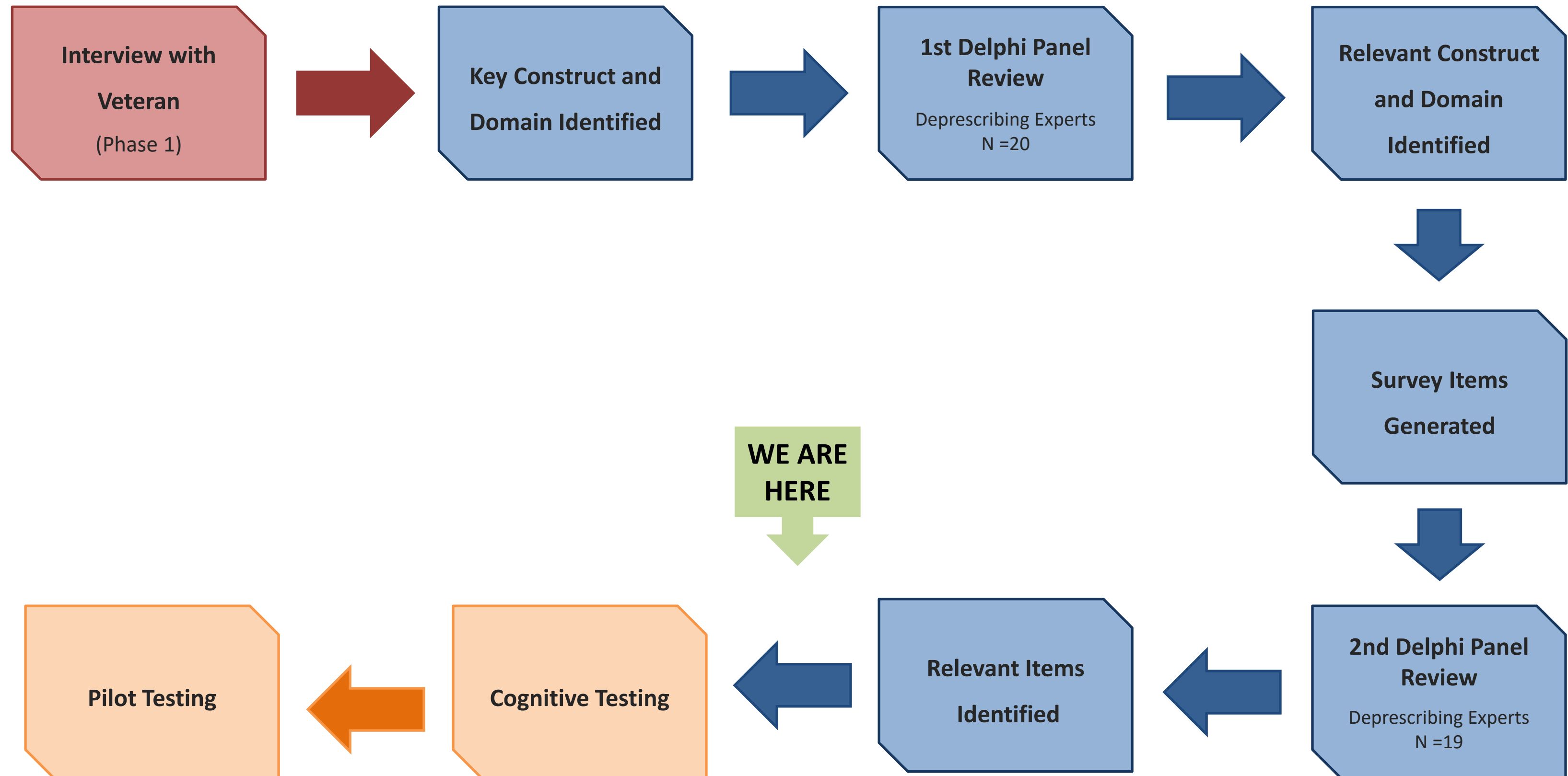
## Recommendations

- ❖ Support autonomy and shared decision-making.
- ❖ Confirm ability and willingness to follow instructions.
- ❖ Establish well-defined follow-up plans.
- ❖ Address medication access to prescriptions from non-VA providers.



# Phase 2 - Process

AIM 2: Design and develop a Deprescribing Evaluation and Quality Improvement (DEQI) instrument.



# Results – Phase 2

AIM 2: Design and develop a Deprescribing Evaluation and Quality Improvement (DEQI) instrument.

## Deprescribing Expert Reviews

- ❖ Response rate was 95% in rounds 1 and 2.
- ❖ **ROUND 1:** Seven constructs and dimensions (19%) were considered not relevant and eliminated.
- ❖ **ROUND 2:** Nineteen items (25%) considered not relevant were eliminated for precision and efficiency
  - ✓ Duplicates identified
  - ✓ Items modified
  - ✓ Items combined
  - ✓ New items added
- ❖ **FINAL:** the 75-item survey was reduced to 53 items; five new items were added, resulting in 58 items.

# Phase 2 – Current stage

AIM 2: Design and develop a Deprescribing Evaluation and Quality Improvement (DEQI) instrument.

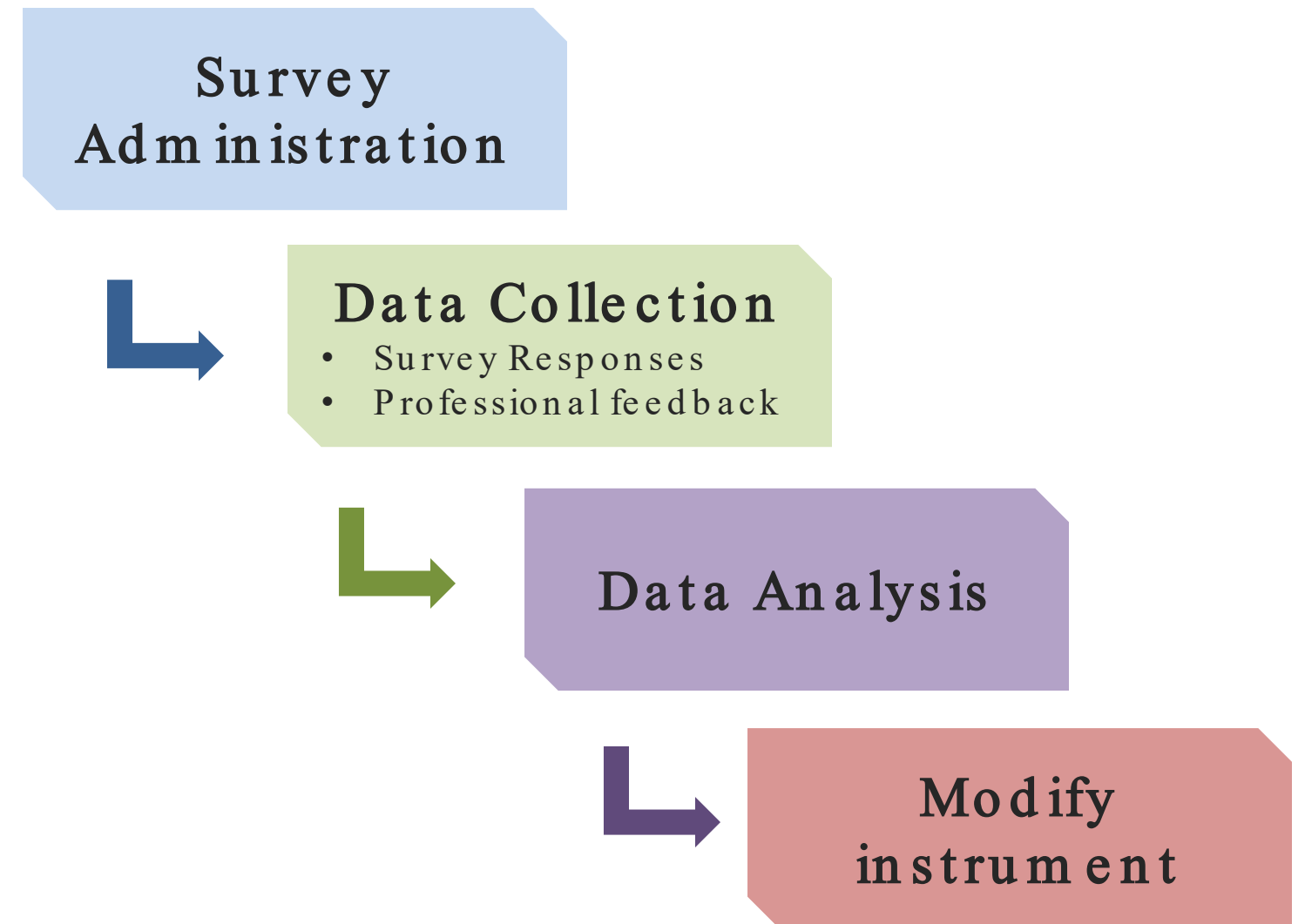
- ❖ Cognitive Testing
- ❖ With a sample of 10-16 Veterans
  - Clarity of instructions
  - Items
  - Response scales
  - Ease of completion



# Phase 2

AIM 3: Pilot test the DEQI instrument and modify it for broader dissemination to other VA sites.

- ❖ 30 – 40 Veterans.
- ❖ Procedures in the survey administration.
- ❖ Integration into the system.





# Future Step – Phase 3

## ❖ Instrument Validation

- Sample:
  - ~300 Veterans
- Data Collection:
  - Mail-in / web-based survey
- Data Analysis:
  - Exploratory and Confirmatory Factor Analysis
  - Reliability
  - Validity testing

## Special Thanks To:

- ❖ You all
- ❖ PhRMA Foundation
- ❖ Partners at the VA
- ❖ My Advisor – Dr. Betty Chewning

# Thank You :)

## Questions?

