

VA Health Services Research & Development Service



State of the Art Conference

Workgroup

VA Virtual Care Outcomes

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Outcomes Workgroup Members – Thank You!

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Out of many, few

- Outcomes workgroup began with a blue-sky approach of what questions we all felt were important
- Initial brainstorm of 18 questions → consolidation into 11
- Members were given 3 votes to select highest priority questions
- Top 5 were selected for discussion in small groups
 - During this process, additional questions were integrated into these

11 Refined Questions

1. What outcomes should we be measuring and how do we measure them?
2. How do we choose the right modality for the right Veteran?
3. What are the research gaps on patient safety with virtual care?
4. How can PGHD be used to add clinical value for providers?
5. How can Veterans use PGHD insights to drive self management?
6. How do we evaluate and modify patient preferences?
7. How can we recreate the team-based model of care virtually?
8. How can VA account for the journey of the patient when evaluating VC?
9. Effect of VC on health equity?
10. How does training impact clinical team experience and delivery of VC?
11. How is the content of virtual vs in-person visits different?

We decided to discuss 5 questions in detail

- 1. What outcomes should we be measuring and how do we measure them?**
- 2. How do we choose the right modality for the right Veteran?**
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A handful were consolidated further; honorable mention

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What outcomes should we be measuring? What DO we know?

- There is value in telehealth
 - Broadly and within VA, patients like it, expect it and demand it
 - Research has demonstrated efficacy of telehealth for specific diseases
 - Non-inferiority
 - Specific cohorts
 - Patient and provider satisfaction
- Single disease/outcome studies have poor translation/applicability to real world conditions

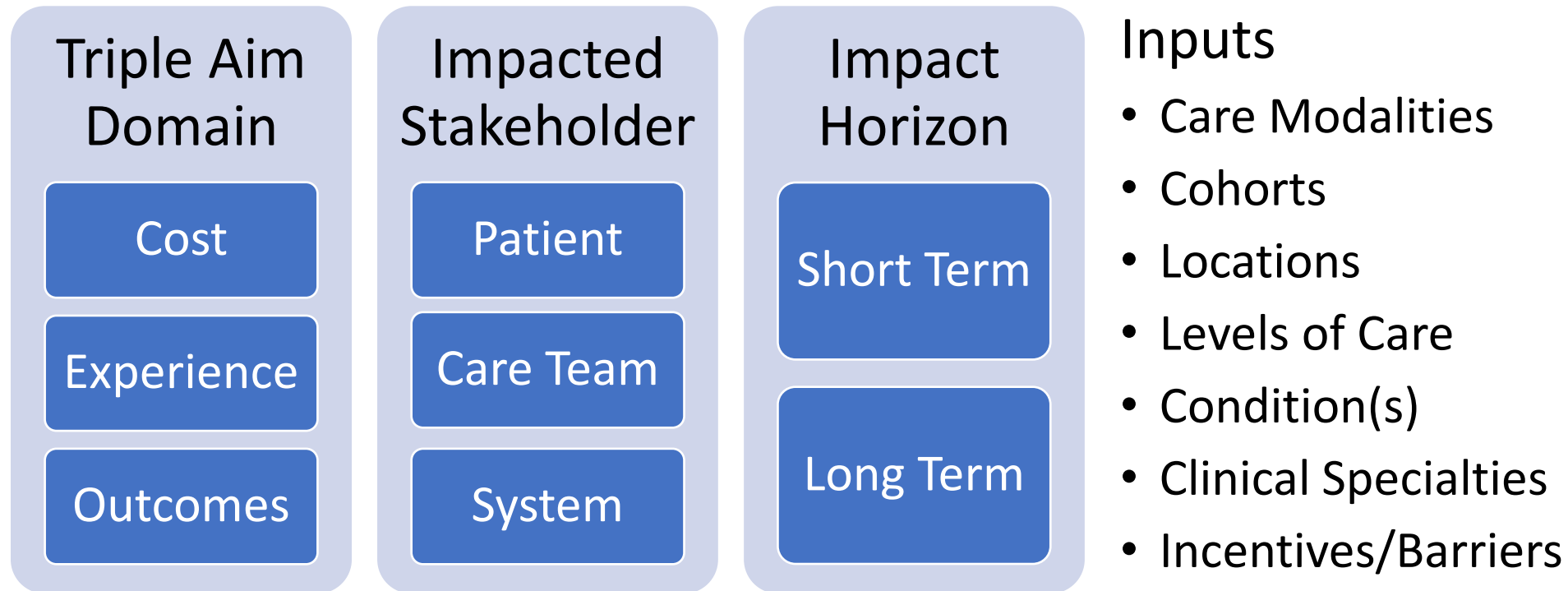
What outcomes should we be measuring and how do we measure them?

Areas with sufficient evidence:

- Single disease studies
 - Evidence exists; exclusion criteria are often unrealistic or not generalizable
- Single outcome studies
 - True “value” of VC should be measured holistically

What outcomes should we be measuring and how do we measure them?

Proposed framework to help evaluate outcomes: a measure at the intersection of each domain, stakeholder, and horizon; inputs to select populations



Research studies on framework

- Work on an overall framework is not suitable for a research grant; would be better to have in 1 year rather than 3-4 years
- Framework should specify the best set of measures for each intersection
 - New measure development only if one of the areas has no good existing measures
- Research question: How do the measures within specific categories correlate with outcomes across multiple conditions or modalities?
 - Ex.: Look at data from short-term standardized patient measures across multiple diseases to assess experience
- You can not improve what you can not measure (*consistently*)

How do we choose the right modality for the right Veteran?

- Who should we be studying?
 - **Complex patients** (multiple chronic conditions, high risk, high utilizers)
 - **Complex social situations** (e.g. challenges in social supports or health literacy)
- What is the difference in clinical quality between in person, audio, and video care?
 - Differences in content of these visits are not known
 - Do the differences make a difference (e.g. study done in Hep C: VC+UC vs VC; no differences)
 - What are our concerns about this? Too much/too little in person care?
- What is the optimal care portfolio from the patient, provider, and system perspective?
 - Lots of variation in what is “usual care;” how often does a patient need to see a provider face-to-face?
 - Right now, PC provider not required to see patient in-person; yearly in-person OR video OR even phone
 - Blood pressure measurement must be observed in order to be valid; not a lot of evidence for many other examinations that occur in-person but patients still expect them
- What is the longitudinal effect? Observational studies can capture some of this, but not all

PGHD in VA: Overview

- Massive data set coming from fitbits, apple watches, and a number of other Bluetooth devices – 20,000 patients and rapidly going to grow
- Patients can currently see some of it in MHV; in their own apps. How do we present data in a compelling way?
 - Combine with medical history
 - Visualizations → Predictions → Alerts
 - There is a difference between this and remote patient monitoring (RPM), which is used for case management)
- How do we use AI/ML to give predictive insights
 - What is the advantage of this data to give predictions over other data

PGHD essentially reaches VA in three ways



SOLICITED



SUGGESTED



UNSOLICITED

- Solicited and suggested PGHD are used in RPM protocols or clinician initiated plans of care
- Uses of unsolicited data are less defined but offer much potential

Unsolicited PGHD

- Is sending us this data benefiting Veterans in the long run?
 - They will only share it with us if they see the value

Data Collection

- Mostly collected passively
- Validation and storage

Data Analysis

- Visualization
- Integration with EHR
- AI analytics and models

Actionable outcomes

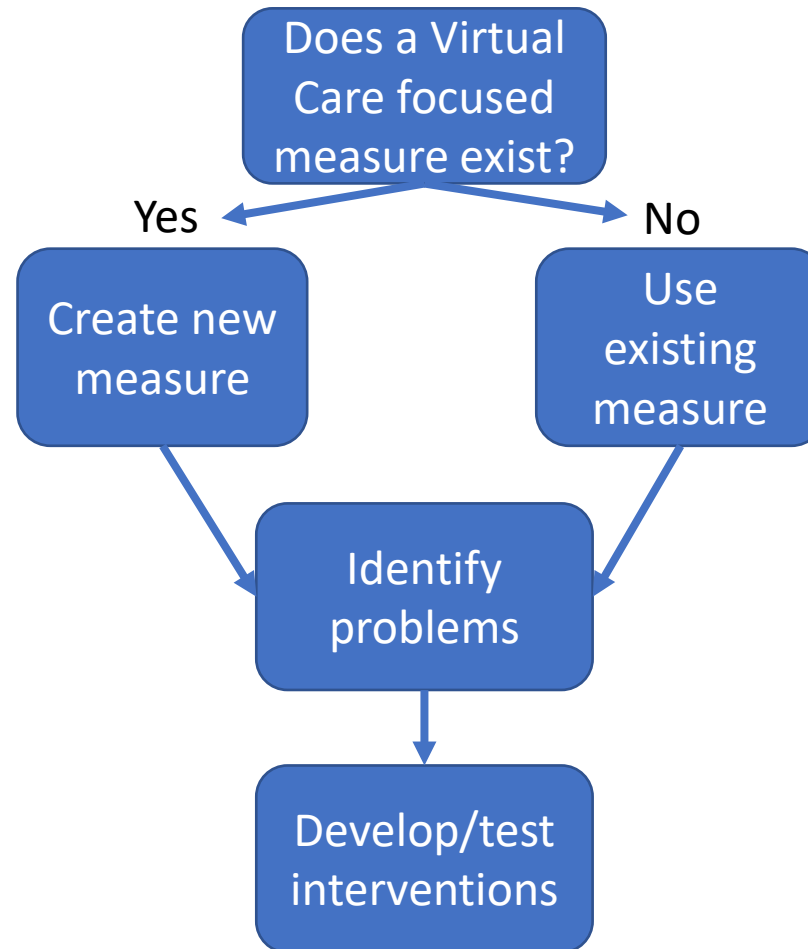
- Engagement
- Behavioral change
- Predictive analytics
- Early detection

Questions about PGHD in VA

- Does PGHD empower patients to change behavior and/or manage their own care?
- Can PGHD create alerts that are clinically valuable (not already obvious) to providers?
- Does PGHD impact population health in the long term?

Patient Safety in VC

- We do not know to what extent VC impacts patient safety – not enough studies in any area
- VA is perfectly suited to do national studies on patient safety in VC



AHRQ's safety domains impacted by Virtual Care

Testing

Referrals

Diagnostic Errors

Medication Management

Care Transitions