



The Long and Winding Road: Moving a Good Idea into Routine Practice

***Soon Is Not A Time, Some Is Not A Number,
Hope Is Not A Plan***

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Description

Deprescribing guidelines have the potential to help with the needs of a high performing health care system – including better access, improved quality and greater efficiency. The IHI International Program in Health Policy and Practice Innovations selected deprescribing guidelines as a key innovation to implement in the US. In this presentation, Frank Federico will contextualize deprescribing within the overall patient safety movement and provide an overview of the transferability of the guidelines within the US IHI Innovators Network.



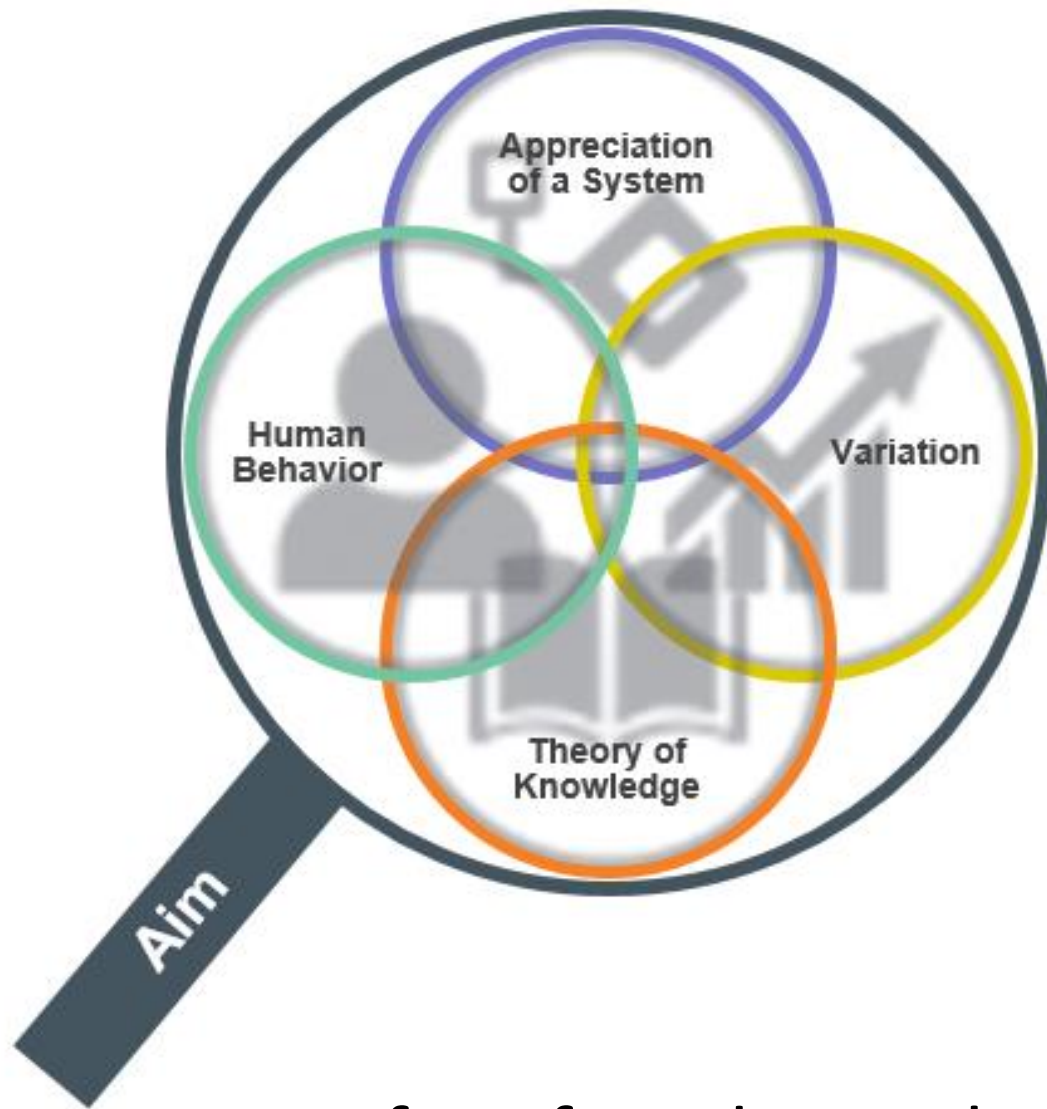
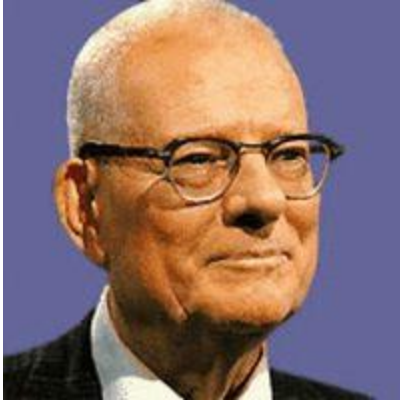
Objectives

- Describe why the implementation of deprescribing guidelines is urgent and important
- Explain how members of the IHI Innovators Network are pilot testing the implementation of deprescribing guidelines

The Science of Improvement

- An applied science that emphasizes:
 - Innovation
 - Rapid-cycle testing in the field, and
 - Spread in order to generate learning about what changes, in which contexts, produce improvements.
- Characterized by the combination of:
 - Expert subject knowledge with
 - Improvement methods and tool
 - Multidisciplinary — drawing on clinical science, systems theory, psychology, statistics, and other fields.





Lens of Profound Knowledge



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Where to Start

- Start with WHY
- Need to understand why the change is necessary
- The goal is always to build processes to deliver the care that we believe that a patient should receive
- “We are working to help patients”



Medications

- Most common intervention in health care
- Associated with many adverse events
- Reason for ED visits, admissions and readmissions
- Can be a positive force in improving and maintaining health

Why Deprescribing Matters

- Deprescribing - reducing or stopping medications that may harm or no longer benefit a patient - decreases the likelihood of an adverse event, and reduces the financial burden of paying for a multitude of medications.

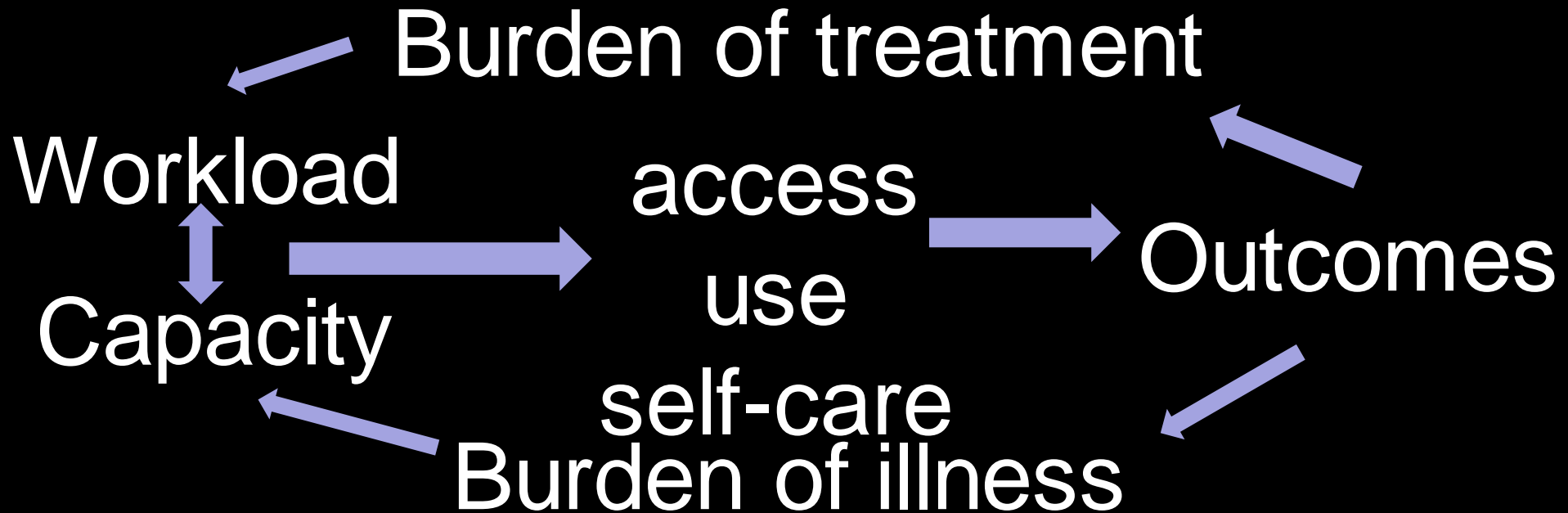


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Cumulative complexity model



Outcomes

**Improve Medication
Safety by Decreasing
Harm and Errors**

Aim:

By When:

Primary Drivers

**Engage all layers of the
organization**

**Patient/Family/Caregiver
Engagement**

Use Systems Approach

**Address
Medication Reconciliation**

Secondary Drivers

Build Will

Collect Ideas

Reporting Culture Cultivated

High Risk Areas identified

Safety Lessons Learned & Shared

Health Literacy

Mechanism to Listen and Learn from
Patients/Families

Patient and Family Engagement & Education

Get Results

Standardized Protocols and Algorithms

Use improvement science

Measurement /Assessment of Processes

Segment the population

Effective Communication and Collaboration
within/ between organizations

Reduce Polypharmacy

Medication Without Harm: WHO's Third Global Patient Safety Challenge

- *Medication Without Harm* aims to reduce severe avoidable medication-related harm by 50%, globally in the next 5 years
 - High Risk Medications
 - Polypharmacy
 - Transitions in Care
- **IHI Focus:** Optimization of medications: patient centered, safe efficient, effective and accessible

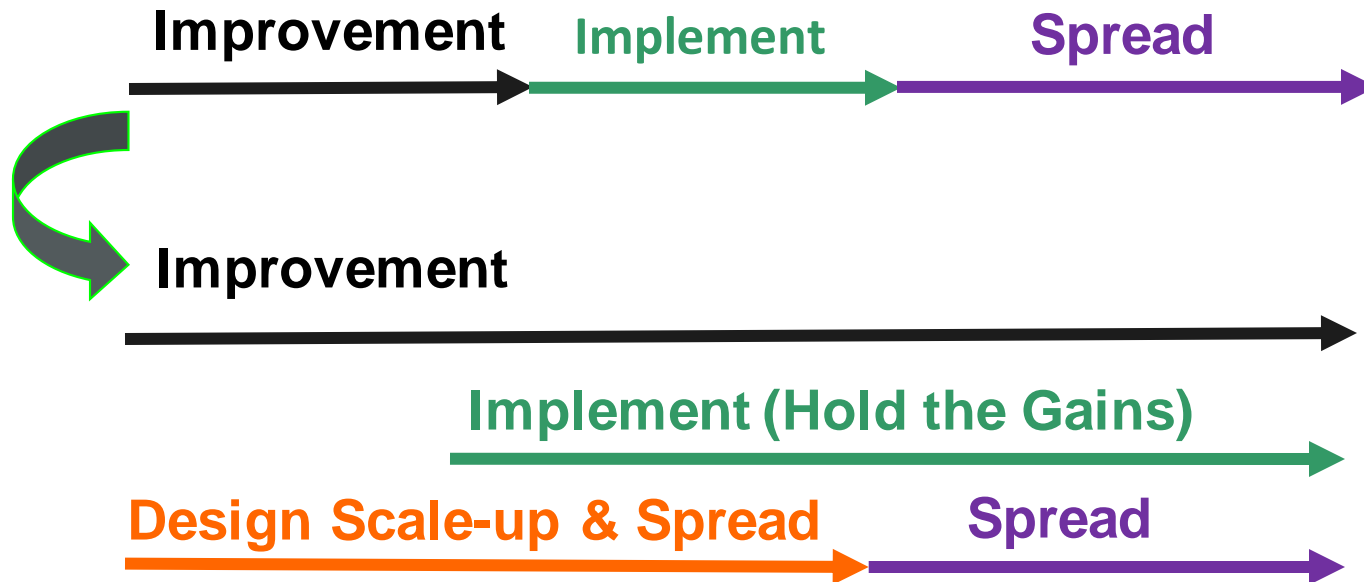


Steps to Succeed

- A clear, measurable aim
- A measurement framework in support of reaching the aim
- A clear description of the
 - Ideas (content) and how these ideas are expected to impact the results (the causal pathway from changes to desired outcomes)
 - Execution strategy (what will be done to ensure reliable adoption of the content?)
- Dedication to rapid testing (PDSA cycles), prediction, and learning from tests
- Understanding, describing, and visualizing systems (e.g., using a process map or value stream map)



Creating a New System



The Old or Typical Approach...

Conference Room

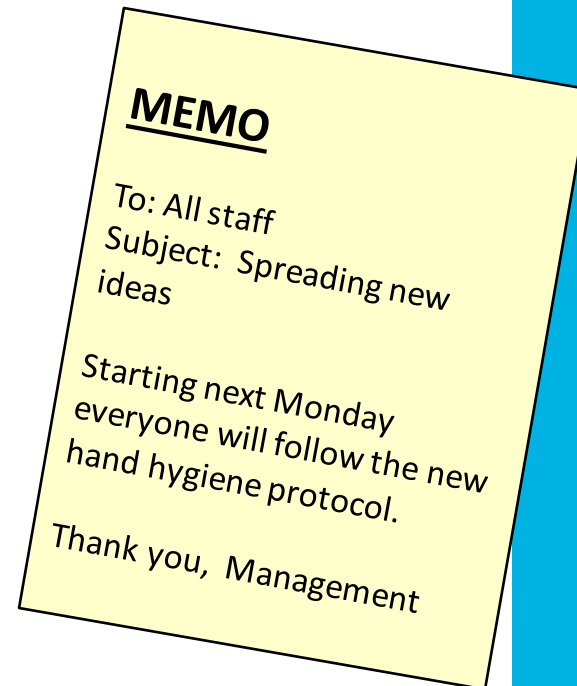
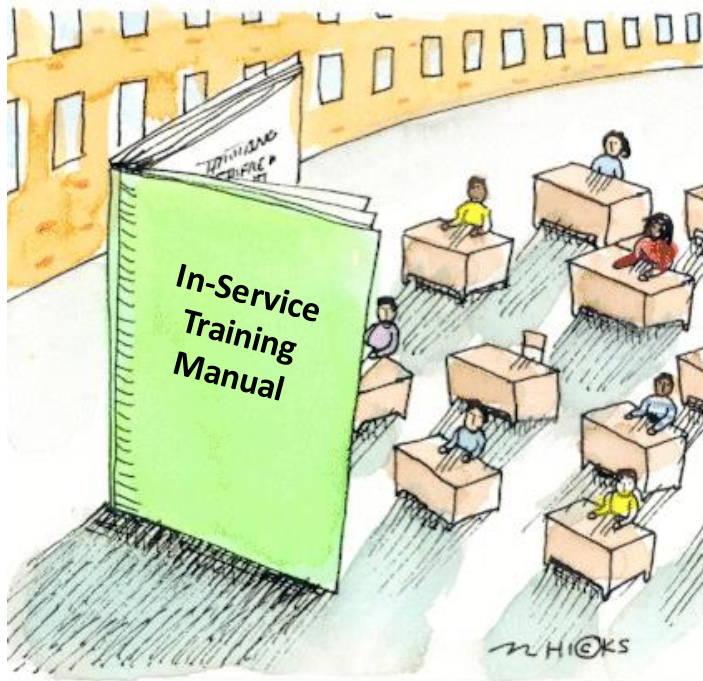


Real World



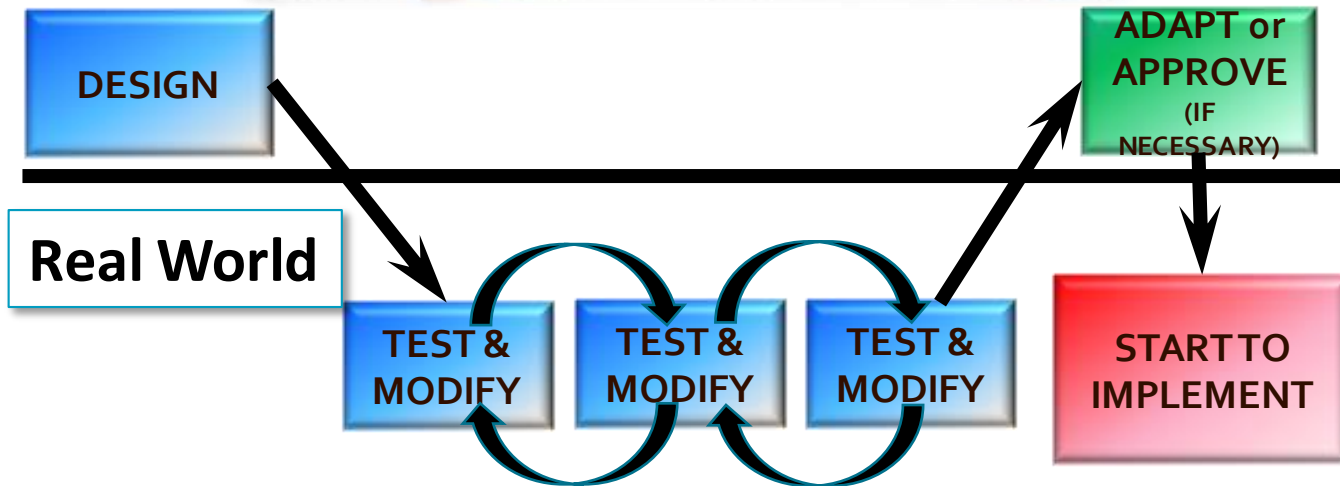
How Can We Foster the Adoption of Successful Spread of New Ideas?

The traditional approaches



The Quality Improvement Approach

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A Driver Diagram Is ...

A pictorial display that helps conceptualize an issue and determine the pathway to achieve your goal

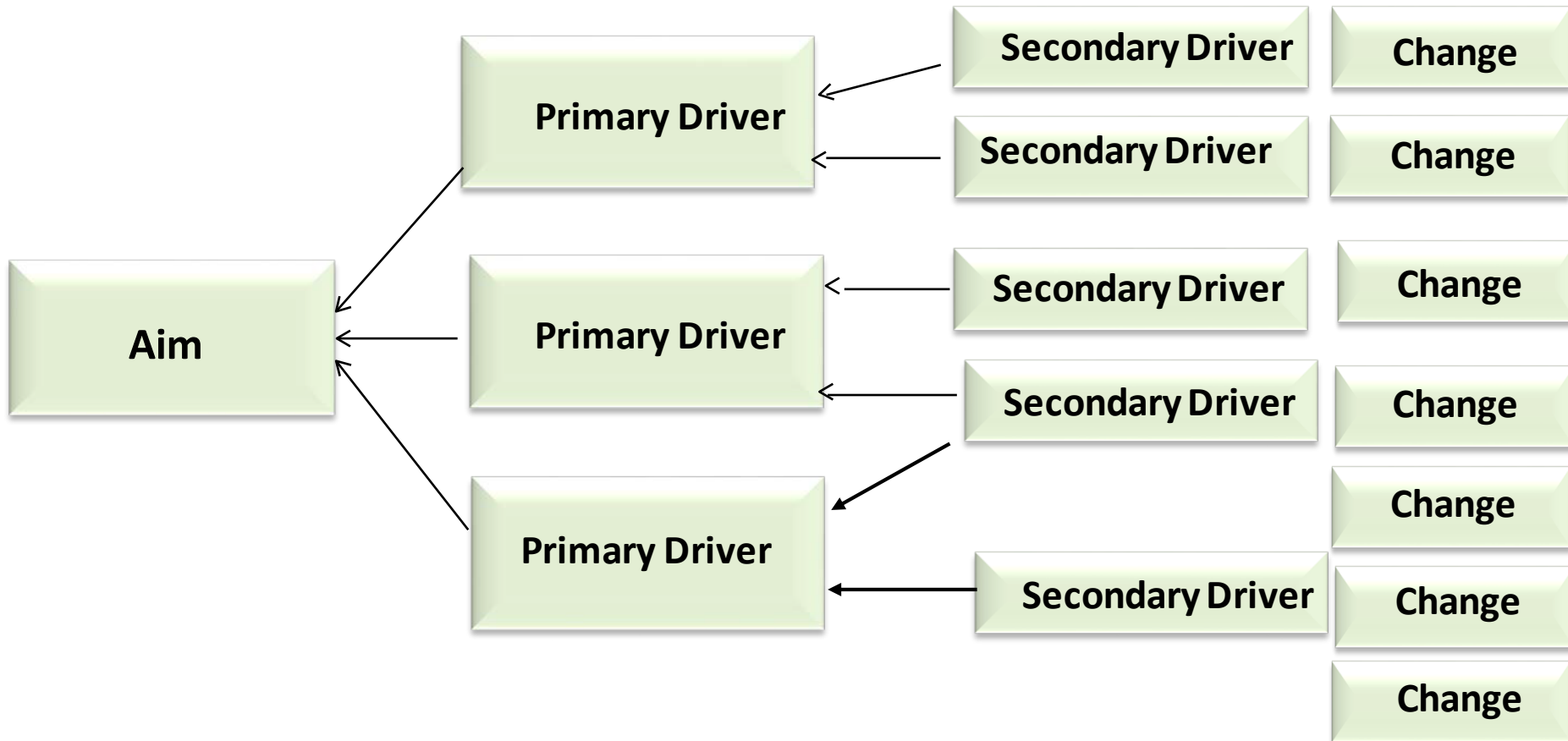
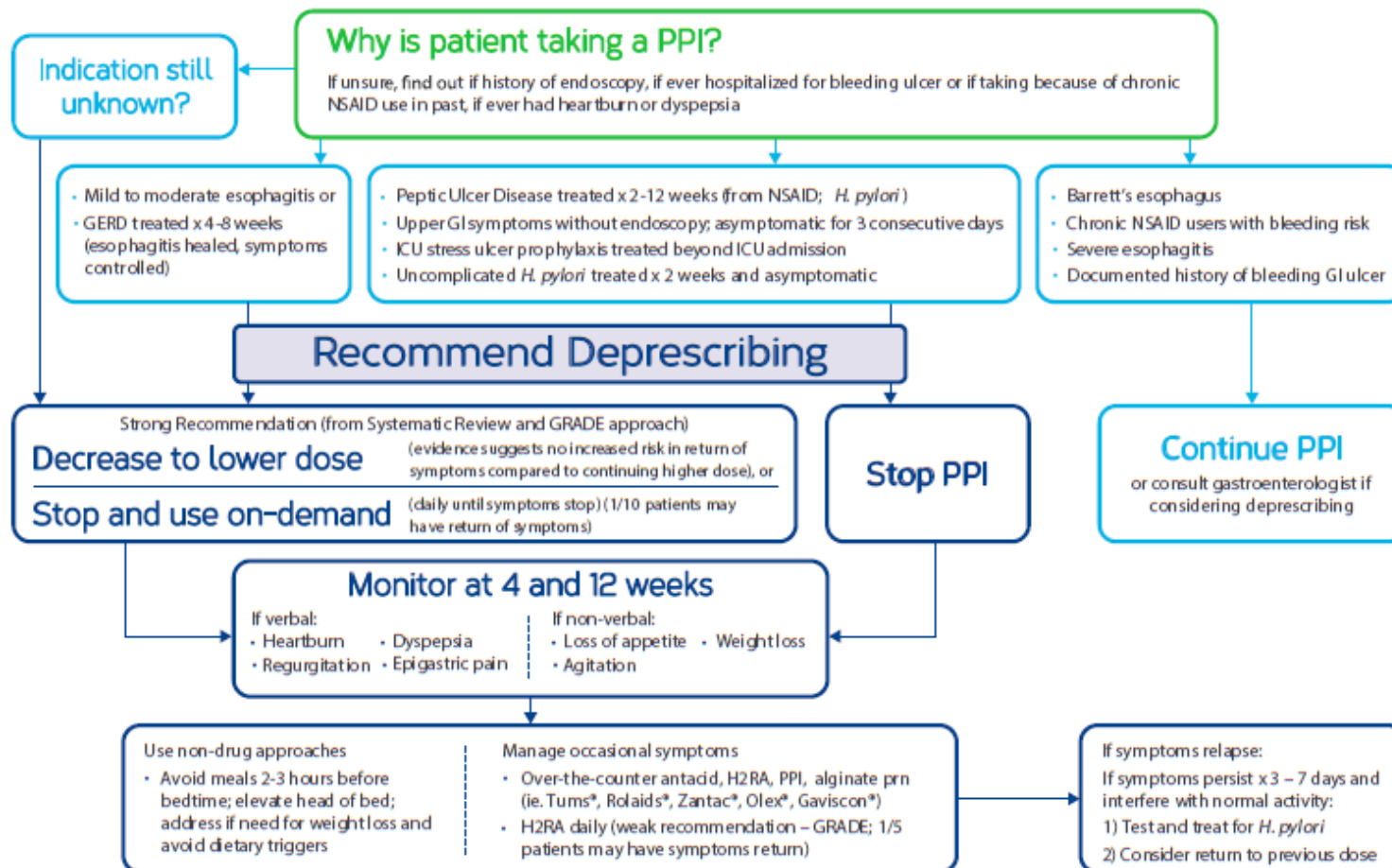


Figure 1 | Proton Pump Inhibitor (PPI) Deprescribing Algorithm



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Farnell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid FJ, et al. Deprescribing proton pump inhibitors. Evidence-based clinical practice guideline. *Can Fam Physician* 2017;63:354-64 (Eng), e253-65 (Fr).



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What are we trying to accomplish?

Aim:

- ***How much by when***

Example

- Decrease use of PPIs beyond the recommended course of treatment in 50% of eligible patients in the next six months.



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What are we trying to accomplish?

Aim:

- ***Increase use of PPI deprescribing algorithm by 75% in eligible patients by Dec 2018.***

Process measure in service of the desired outcome.



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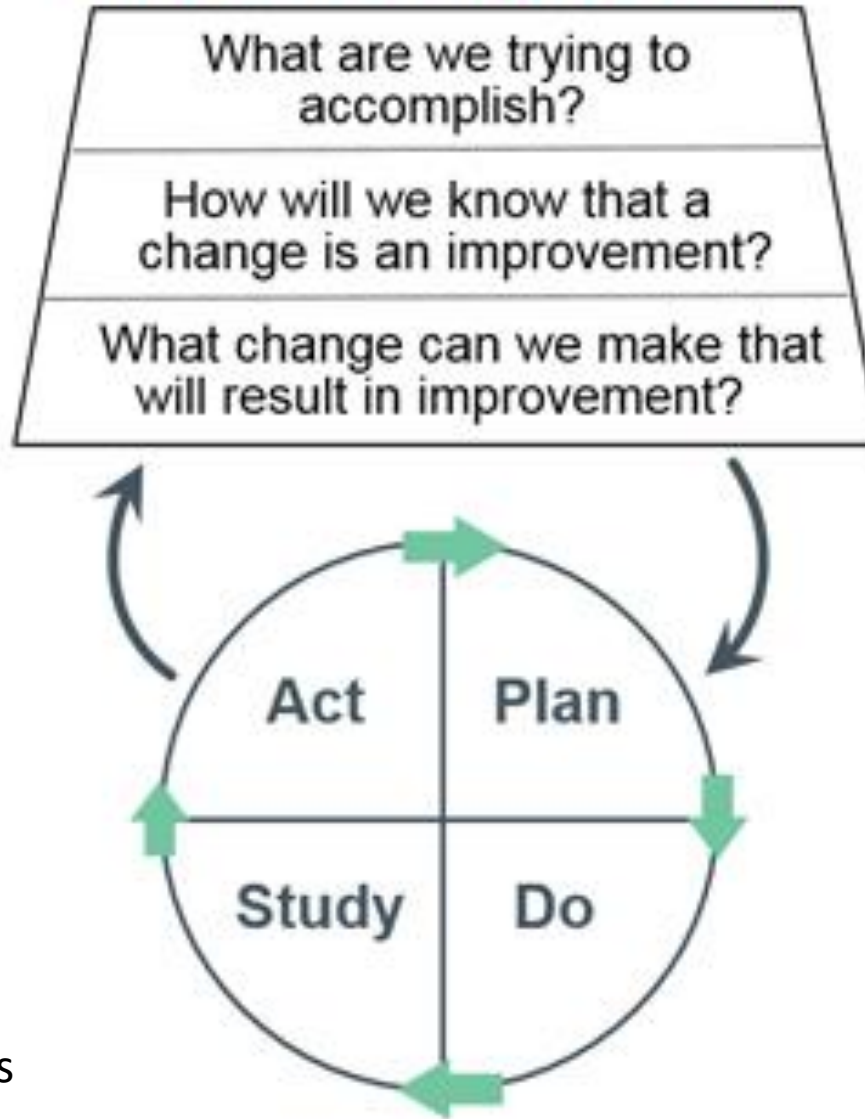
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Balancing Measure

- Number of patients who will have to PPI re-prescribed after deprescribing intervention.

Model for Improvement



Associates in Process
Improvement

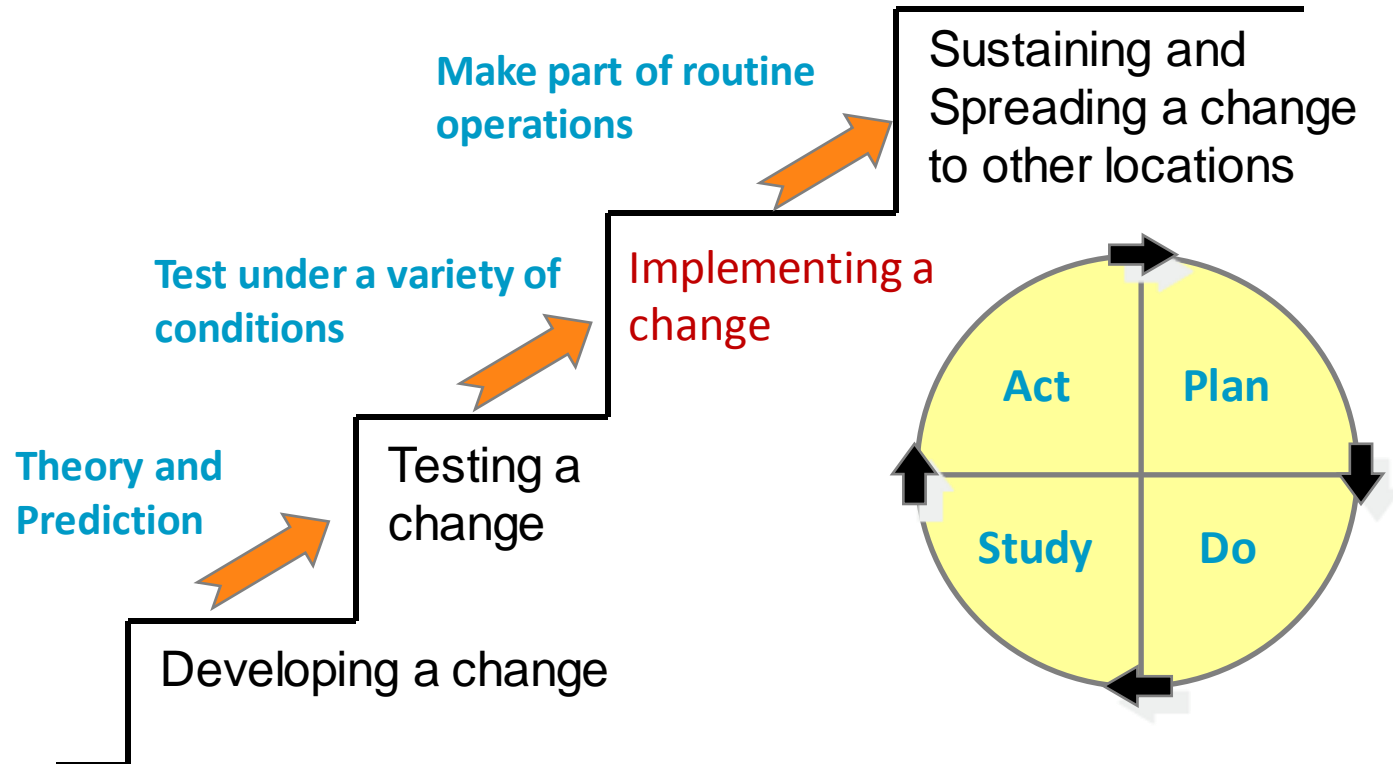


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The Sequence for Improvement

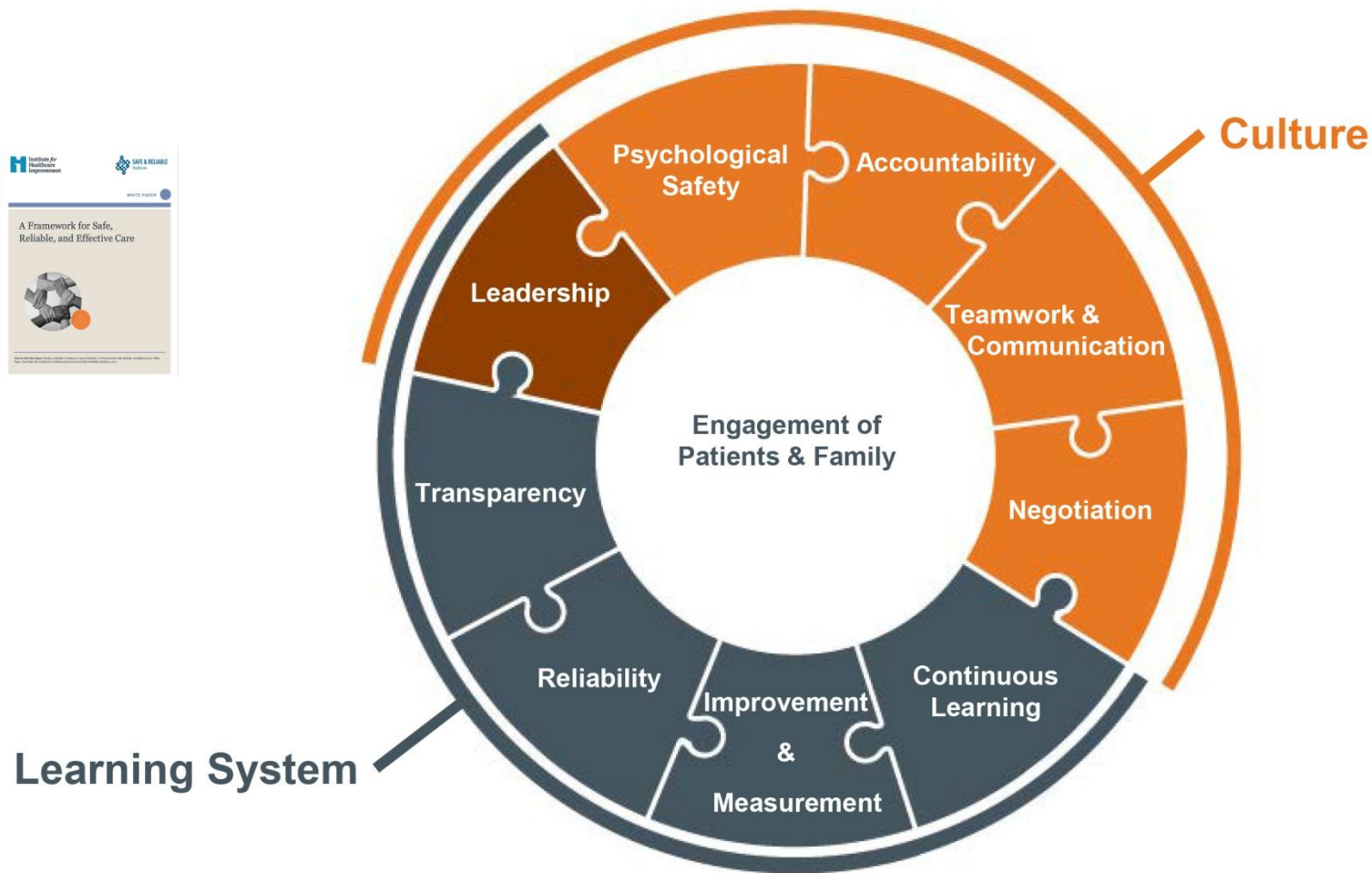


The Three Faces of Performance Measurement

Aspect	Improvement	Accountability	Research
<u>Aim</u>	Improvement of care (efficiency & effectiveness)	Comparison, choice, reassurance, motivation for change	New knowledge (efficacy)
<u>Methods:</u>			
• Test Observability	Test observable	No test, evaluate current performance	Test blinded or controlled
• Bias	Accept consistent bias	Measure and adjust to reduce bias	Design to eliminate bias
• Sample Size	“Just enough” data, small sequential samples	Obtain 100% of available, relevant data	“Just in case” data
• Flexibility of Hypothesis	Flexible hypotheses, changes as learning takes place	No hypothesis	Fixed hypothesis (null hypothesis)
• Testing Strategy	Sequential tests	No tests	One large test
• Determining if a change is an improvement	Run charts or Shewhart control charts (statistical process control)	No change focus (maybe compute a percent change or rank order the results)	Hypothesis, statistical tests (t-test, F-test, chi square), p-values
• Confidentiality of the data	Data used only by those involved with improvement	Data available for public consumption and review	Research subjects' identities protected

Lief Solberg, Gordon Mosser and Sharon McDonald. *The Three Faces of Performance Measurement: Improvement, Accountability and Research*. *Journal on Quality Improvement* vol. 23, no. 3, (March 1997), 135-147.





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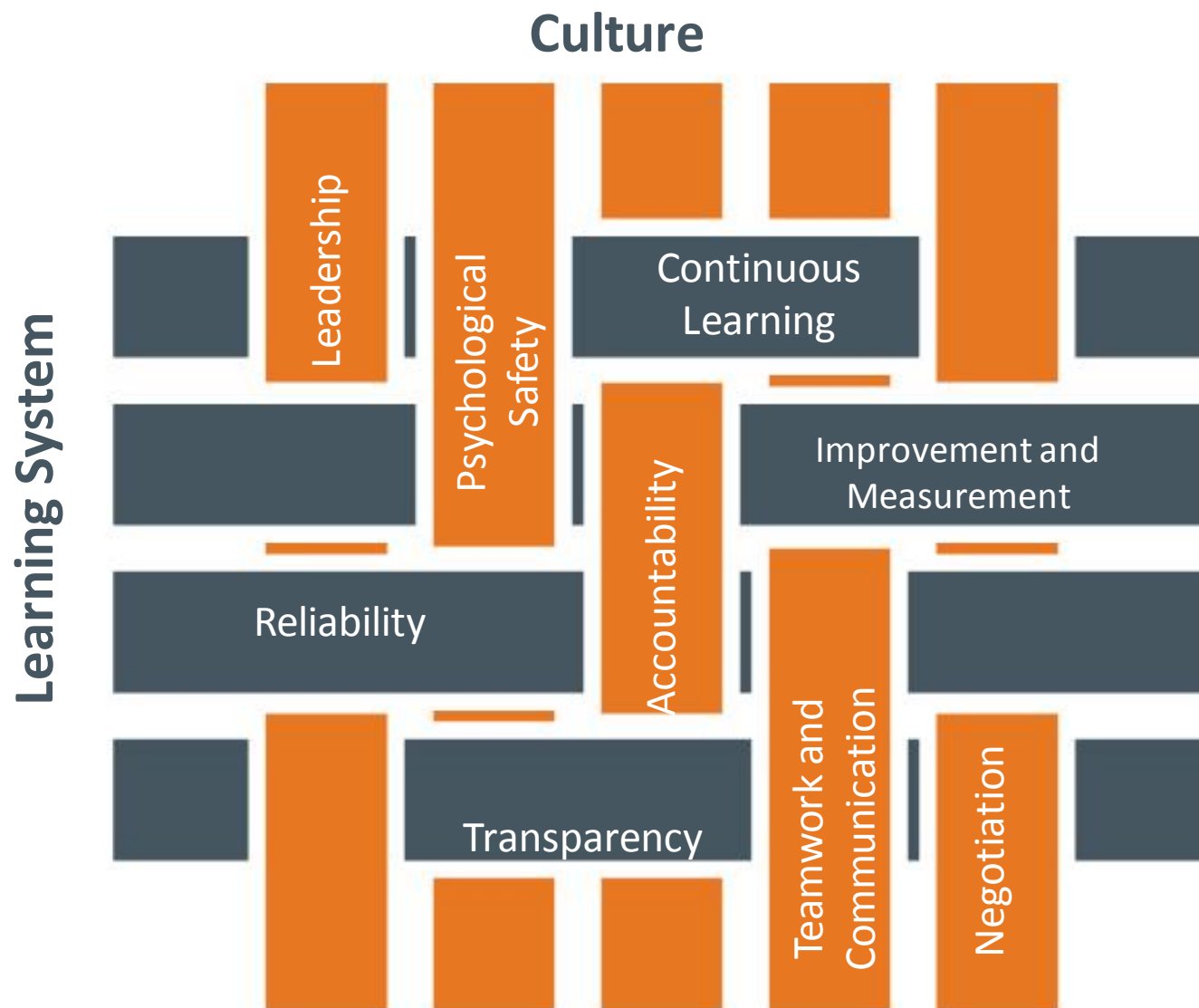
Source: Frankel A, Haraden C, Federico F, Lenoci-Edwards J. *A Framework for Safe, Reliable, and Effective Care*. White Paper. Cambridge, MA: Institute for Healthcare Improvement and Safe & Reliable Healthcare; 2017. (Available at [ihim.org](https://www.ihim.org))



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Framework for Safe and Reliable Care



- *How would you apply what you have learned to your work?*
- *What are the concepts that made you think differently than before and why?*
- *What's your greatest “take away” learning from this session? Why?*
- *Any questions?*



Adapted University of Illinois College of Medicine



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