HRET HIIN Virtual Event Foundations for Change Fellowship

Wednesday, March 15

11:00- 12:00 p.m. CT

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Welcome and Introductions

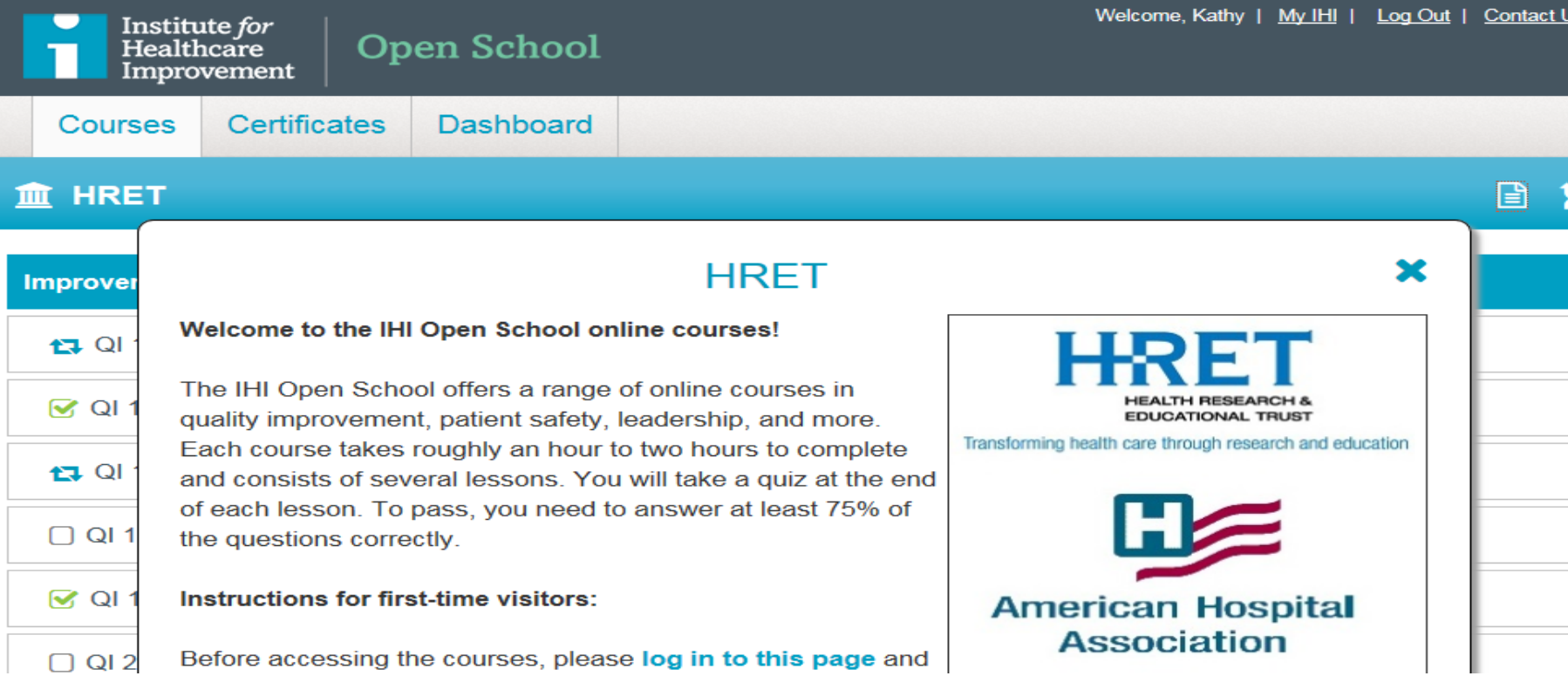
Mallory Bender, Program Manager, HRET

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Agenda

11:00-11:05	**Welcome and Introduction**	Mallory Bender, HRET
11:05-11:20	**Action Period Discussion** • How about those tests? • Develop/adapt a driver diagram • Review the vital processes in the Model for Improvement	Kathy Duncan, IHI Director
11:20-11:35	**How Will We Know That a Change is an Improvement** • Describe why measurement is vital in improvement	Kathy Duncan, IHI Director
11:35-11:50	**Family of Measures** • Video – Bob Lloyd • Identify 3 kinds of measures: process measures, outcome measures, and balancing measures	Kathy Duncan, IHI Director
11:50-11:55	**Action Period Assignment** • QI 105 Lesson 2 – Change Psychology and the Human Side of Quality Improvement • QI 105 Lesson 3 – Working with Interdisciplinary Team Members • Develop effective measures for your own personal improvement project	Kathy Duncan, IHI Director
11:55-12:00	**Bring It Home**	Mallory Bender, HRET



554 Enrollees!

1004 Courses Completed!

1257 Credit Hours Collected!

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Foundations for Change Scheduled Sessions

January 18 – The Case for Improvement	May 10 – Multiple Cycles, Multiple Tests
February 1- Take your Aim – What are We Trying to Accomplish?	June 14 – Manage Time and Attention
February 15- What Changes Can We Make That Will Result in Improvement?	July 12 – Be the Coach
March 1 – Map Your Course	August 9 – Treasure Chest: Shadowing a Patient
March 15 – How Will We Know That a Change is an Improvement?	September 13 – Identify and Spread Improvement
March 29 – Empower Teams to Engage in Improvement	October 11 — Sustaining Improvement
April 12 – Know Yourself, Know Others	November 8 - Celebration

Objectives for Today

- Review the essential processes in the Model for Improvement
- Describe why measurement is vital in improvement
- Identify three kinds of measures:
  - Outcome
  - Process
  - Balancing
- Develop effective measures for your improvement project

Principles for Testing a Change

1. Test on a small scale
2. Collect data over time
3. Build knowledge sequentially with multiple PDSA cycles for each change idea
4. Include a wide range of conditions in the sequence of tests

POLL

- From the list below, choose which of these are tests (*think about which of the below is answering a question the team may have*):
  a. Rapid response team to respond to all patients in ED who screen positive for sepsis this week
  b. Educate all registrars on Buzz words of complaints indicating a possible stroke
  c. Accurately assess patients for fall risk
  d. Attach CL insertion checklist to CL insertion kit

Check the tests…

- Rapid response team to respond to all patients in ED who screen positive for sepsis

- ✓ Test on a small scale
- ✓ Collect data over time
- ✓ Build knowledge sequentially with multiple PDSA cycles for each change idea
- ✓ Include a wide range of conditions in the sequence of tests

- Small: one team, one area, start with one triage nurse –then 2, then day shift, then night shift
- Time to respond, volume of patients screening positive, time from triage to treat for each call
- Response improvement, Time to treat improvement,
- Time of day, day of week, triage nurse, treatment time

Check the tests…

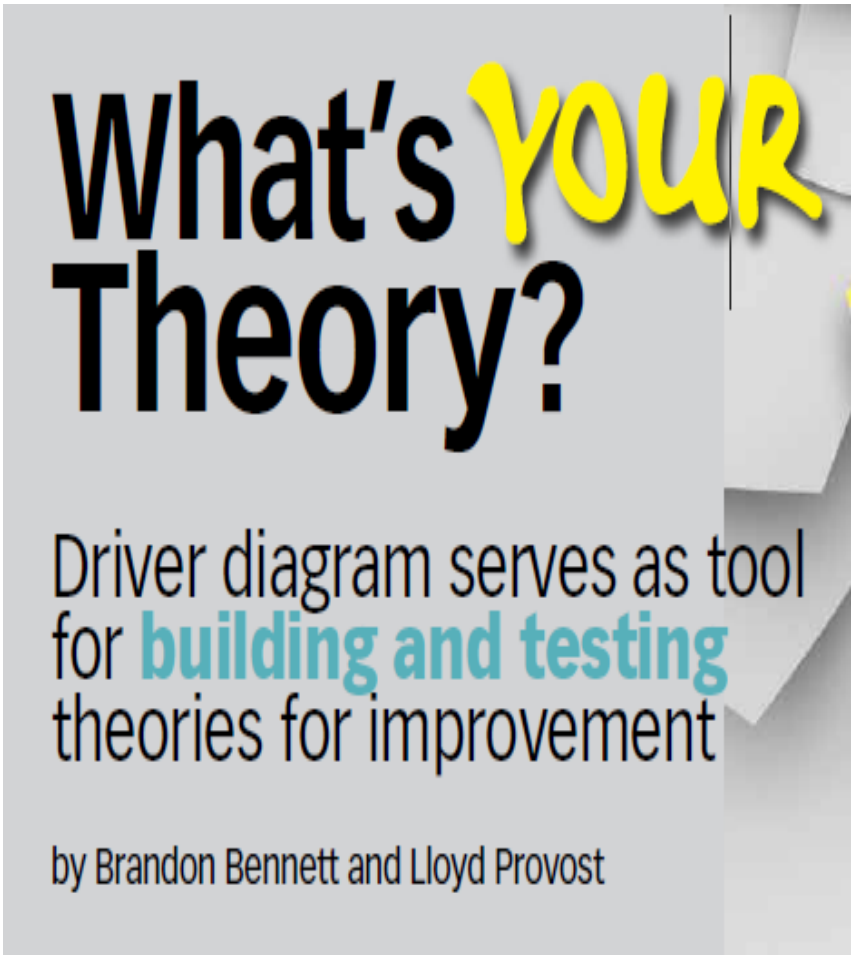
Attach CL insertion checklist to CL insertion kit

- ✓ Test on a small scale
- ✓ Collect data over time
- ✓ Build knowledge sequentially with multiple PDSA cycles for each change idea
- ✓ Include a wide range of conditions in the sequence of tests

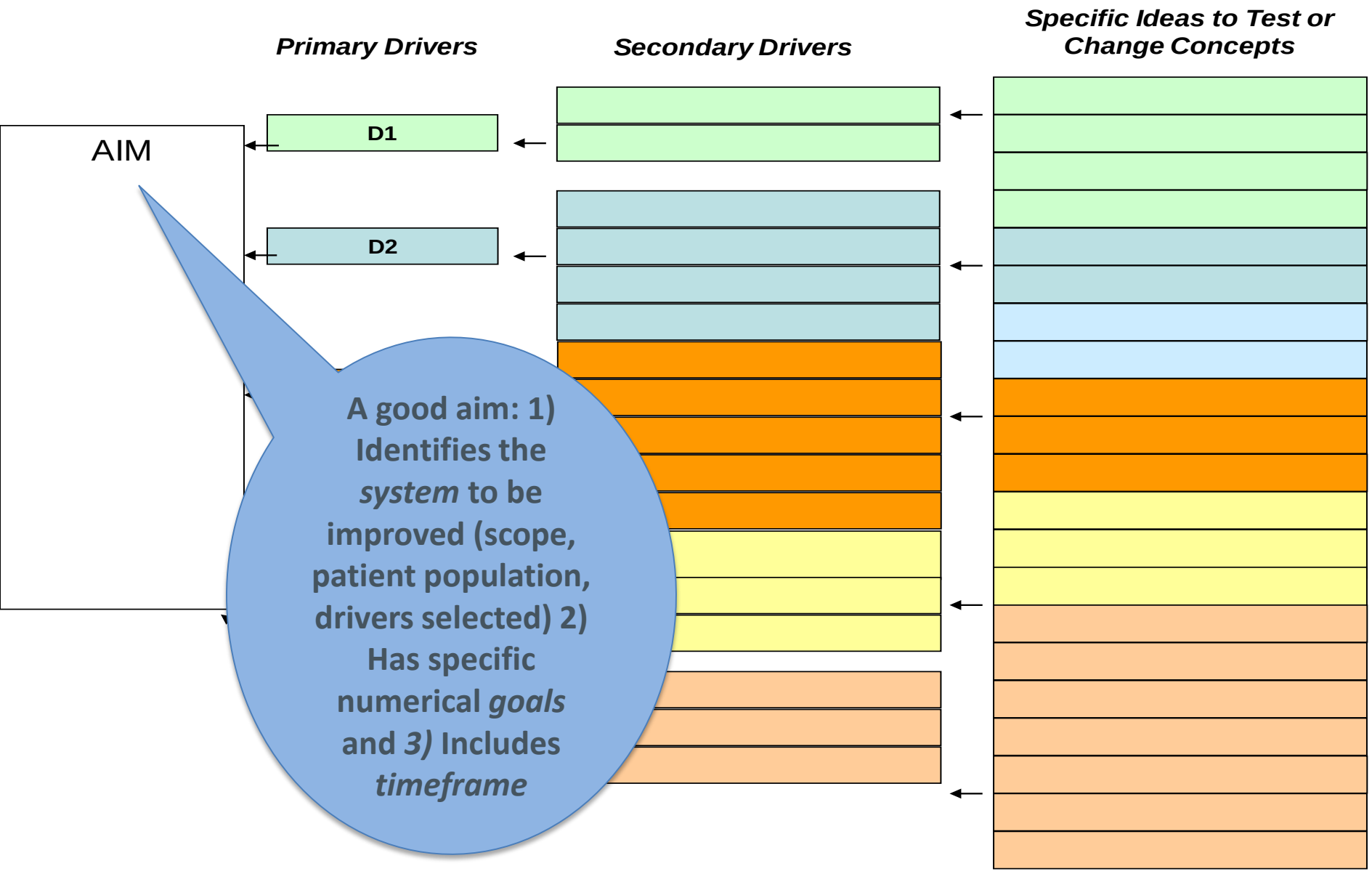
- one high volume unit, two checklists to two kits, then add checklist to 5 insertion kits, then 10, then all
- Completion of checklist, Response from providers, Compliance with all components - all or none,
- How to attach, bold colors, format of checklist, return of checklist
- Time of day, day of week, Provider/inserter, treatment time, sequence high volume units,

Action Item for Action Period

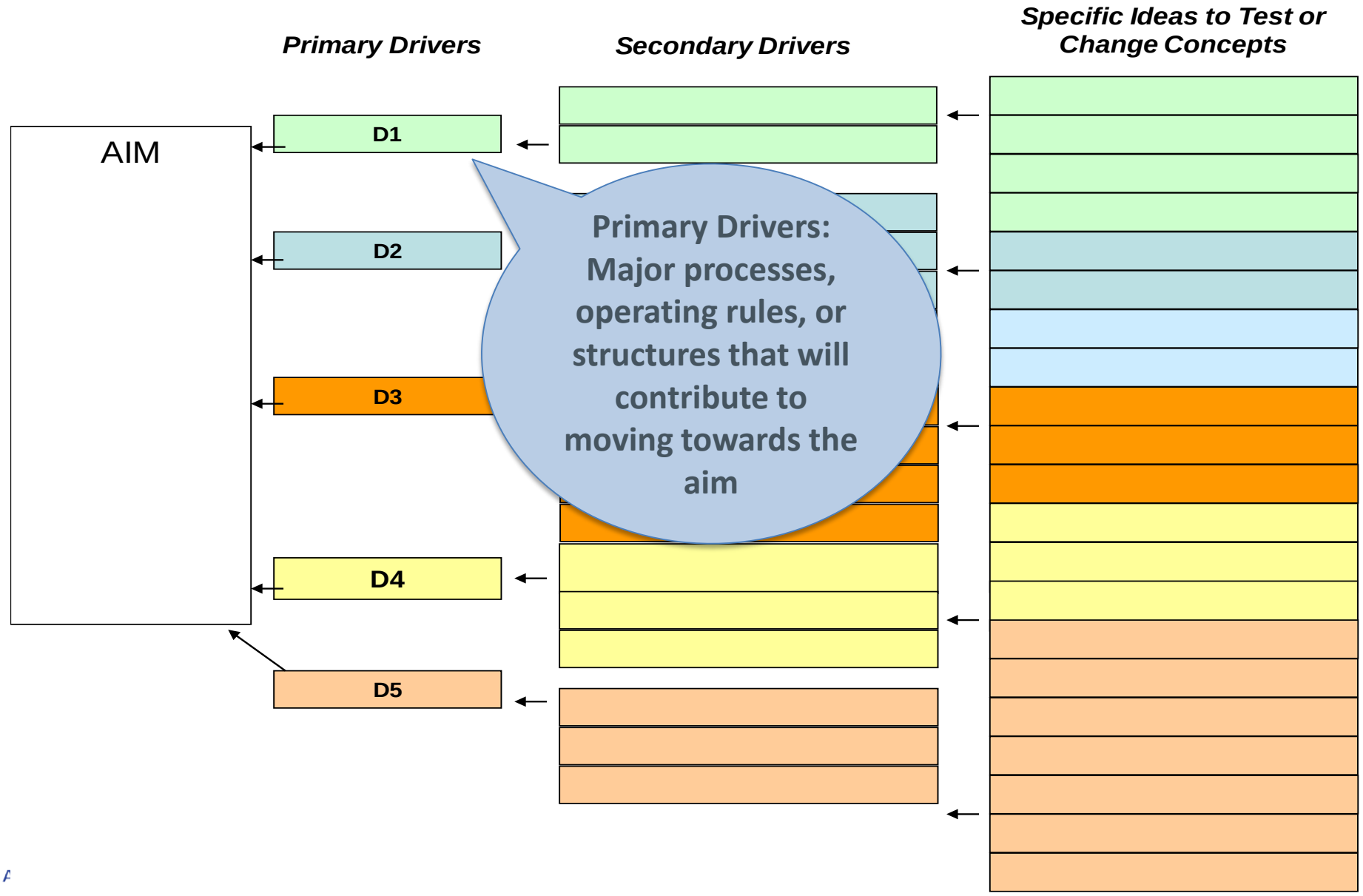
- Develop/adapt a driver diagram
  - Thank you for trusting me with your work and allowing me to specifically respond with guidance



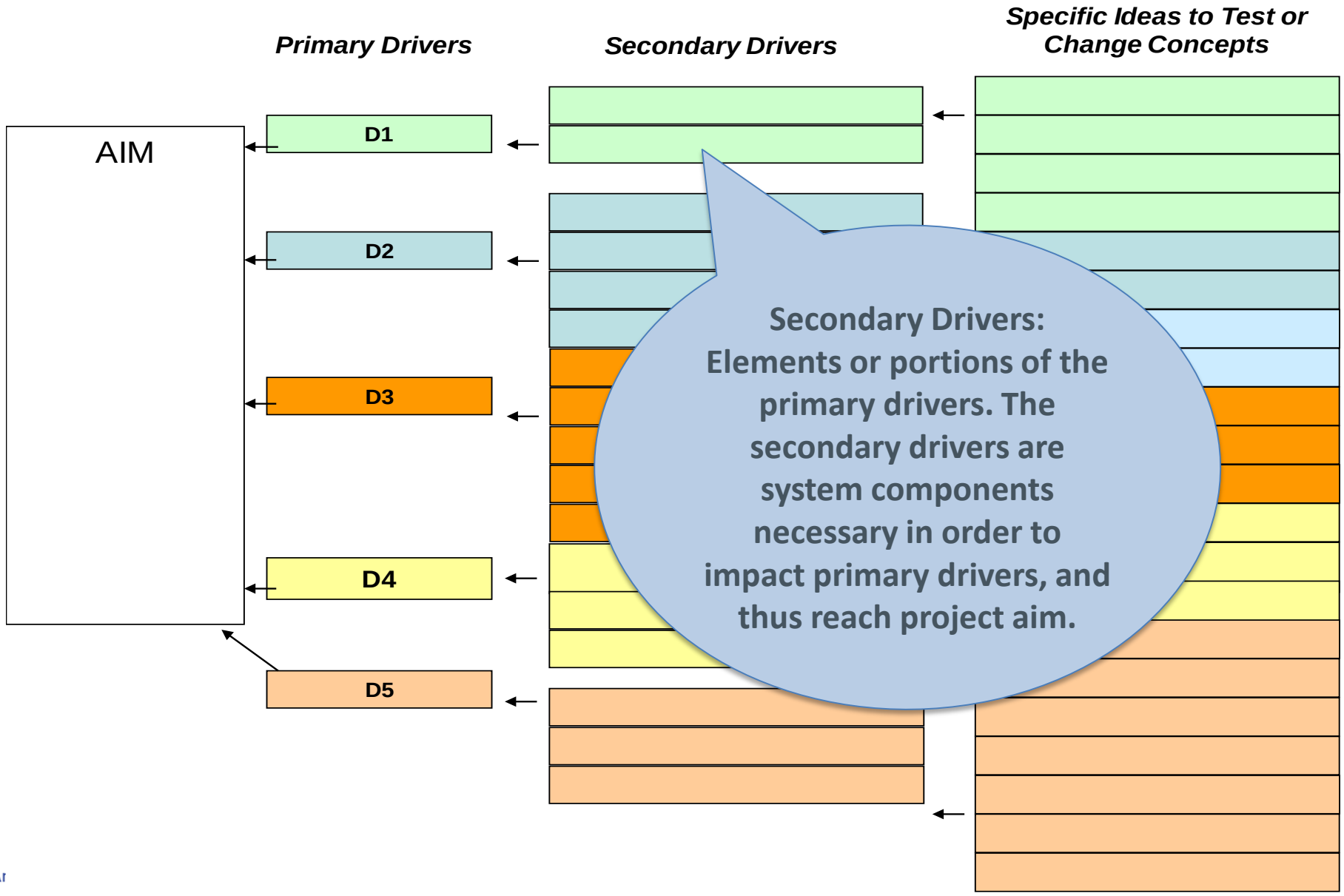
Driver Diagram Components



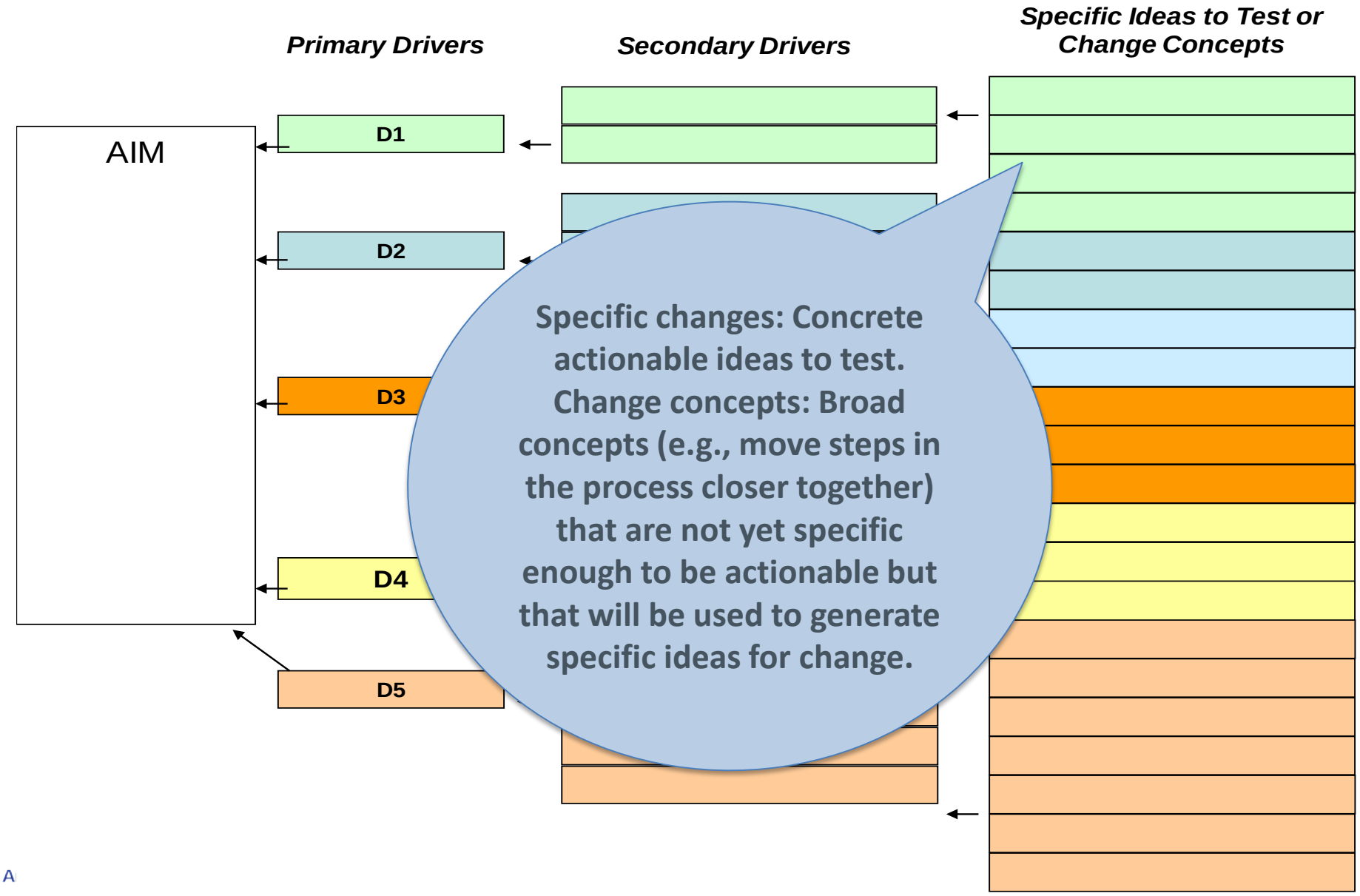
Driver Diagram Components

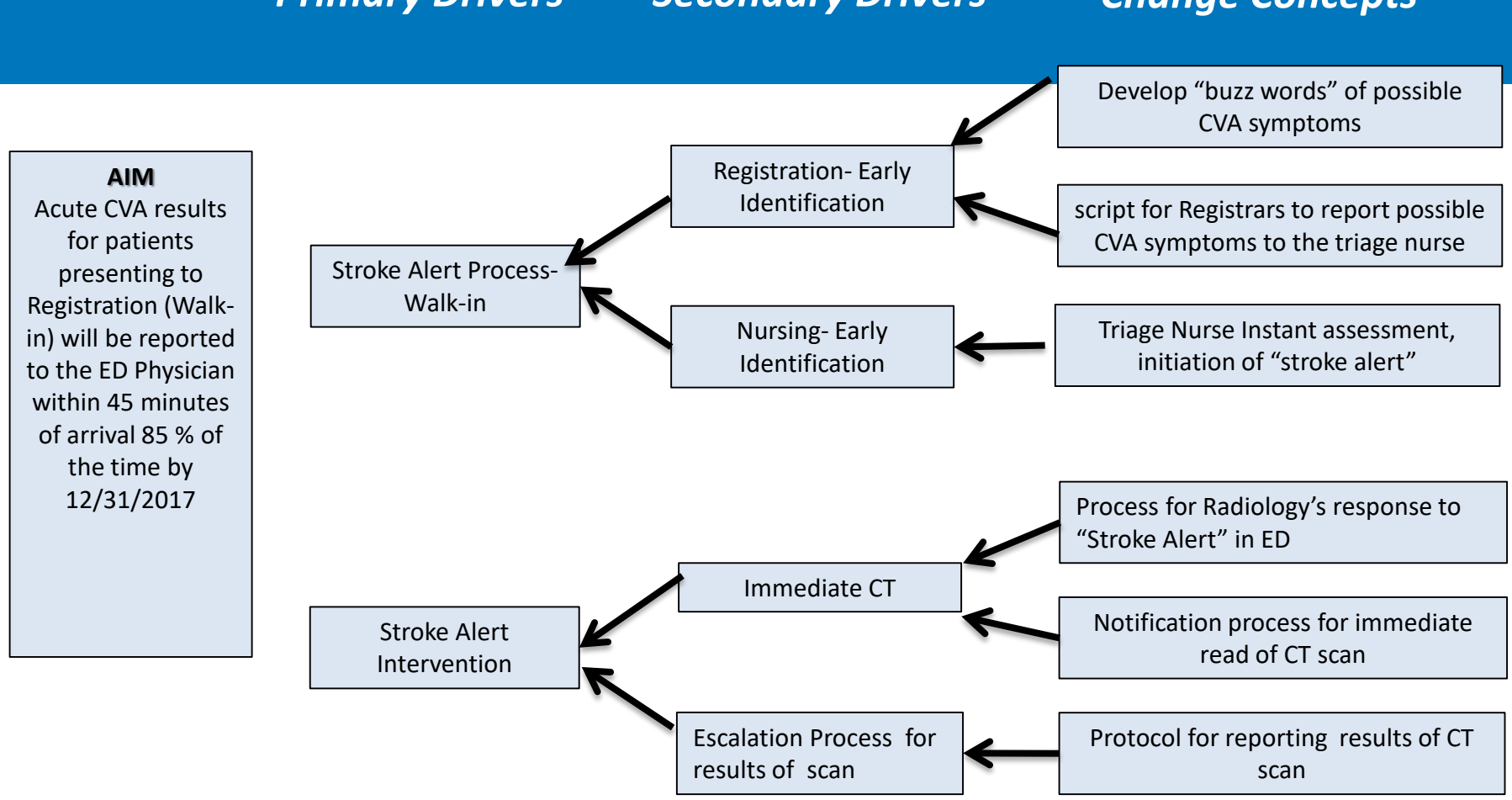


Driver Diagram Components



Driver Diagram Components



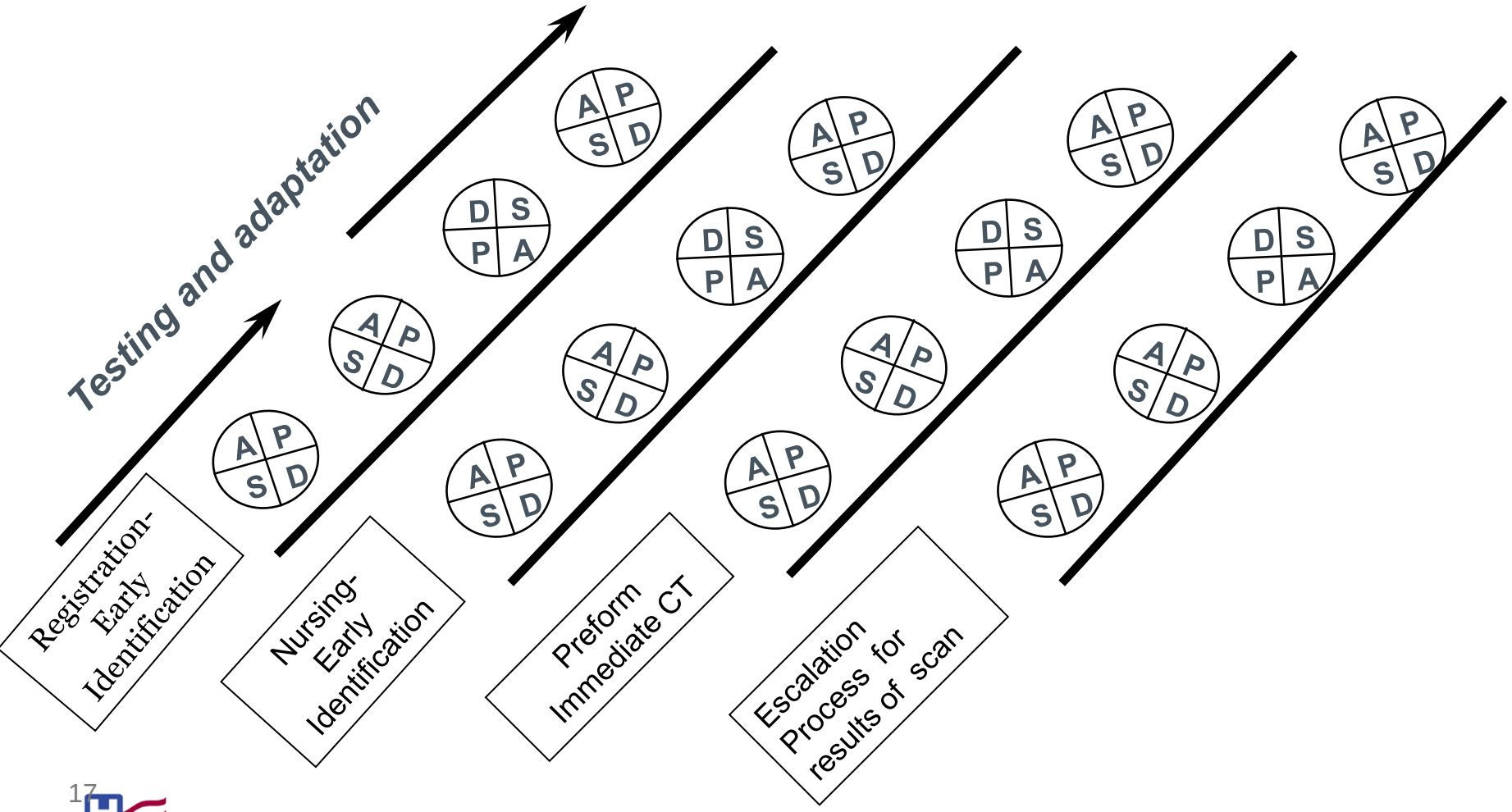


Krista Hollowell, RN
Director of Infection Prevention, Risk Management, Patient Safety Officer, HRO Champion
Southern Virginia Regional Medical Center Emporia VA,

American Hospital Association

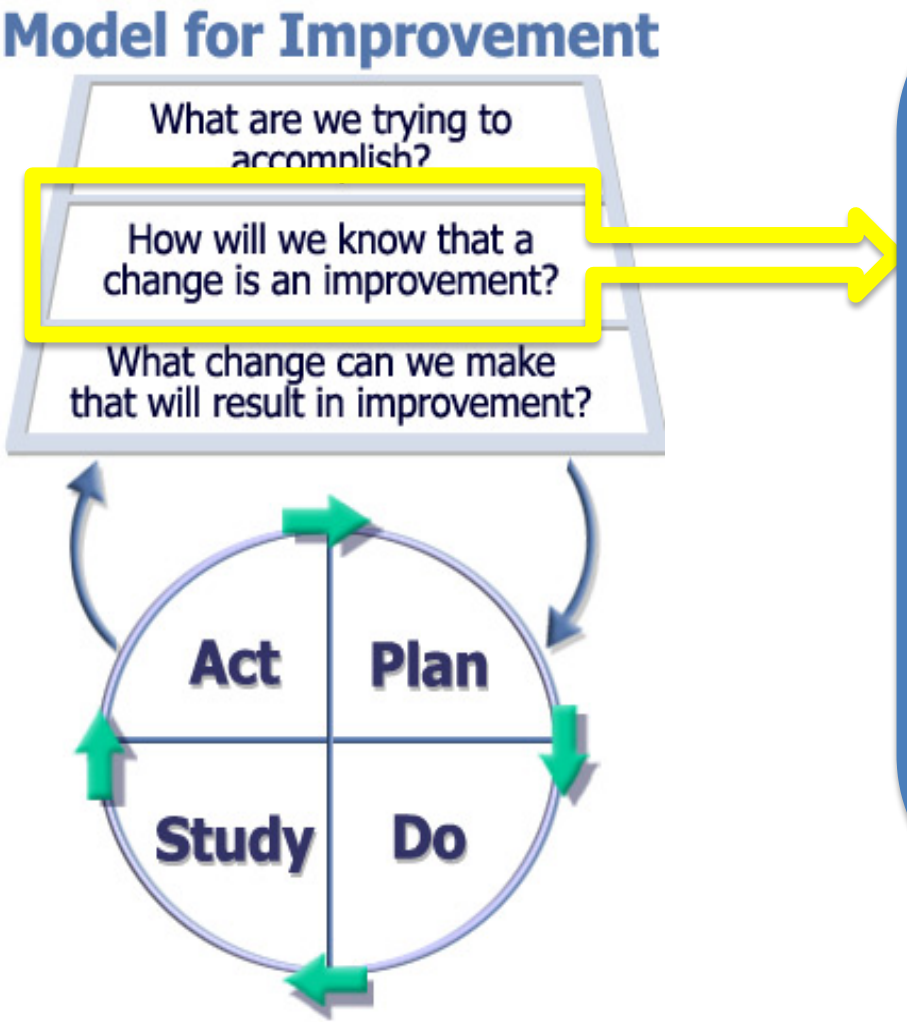
HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Multiple PDSA Cycle Ramps



American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST



How will we know a change is an improvement?

Langley, J. et al. The Improvement Guide. Jossey-Bass Publishers, 2009.

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

How do you know a change is an improvement?

The Value of Measuring

"You measure what you value. Conversely, you value what you measure." *Brent James*

"Measurement is the first step that leads to control and eventually to improvement. If you can't measure something, you can't understand it. If you can't understand it, you can't control it. If you can't control it, you can't improve it." H. James Harrington

"Without data, you are just another person with an opinion."
W. Edwards Deming

All measures have limitations, but the limitations do not negate their value for learning.

Why You Are Measuring?

Improvement

- Purpose- to bring new knowledge into daily practice
- Tests- Many sequential, observable tests
- Biases- Gather 'just enough'

Research

- Purpose- to discover new knowledge
- Tests – One large 'blind test'
- Biases- Control for as many biases as possible
- Data- Gather as much as possible

Measurement for Improvement is "for learning, not for judgment"

Measures should operationalize the aim

- Numerical aims provide a reference point to evaluate performance
- Used to guide improvement and test changes

Data should be plotted over time

- Data tells a story
- Annotated is best

Improvement Measures

- Focus on the vital few
- Is for learning not for judgment
- Integrate into team's daily routine

Measures should operationalize the aim

- Numerical aims provide a reference point to evaluate performance
- Used to guide improvement and test changes

- Aim: Reduce sepsis mortality rate 20% by January 31, 2018
  - For ED patients, screen and initiate, when positive, sepsis bundle 95% of the time within 1 hour of triage by December 31, 2017
- Measures:
  - Sepsis mortality rate
  - Door to identification of positive sepsis screen time
  - Door to initiation time of sepsis protocol

Poll

- Which of these measures align with the aim: Reduce CAUTIs for all acute care patients by 50% by December 31, 2017 (check all that apply)

a. # of urinary catheter days per month

b. # of patients admitted with urinary catheters

c. Removal of all urinary catheters in all surgical patients within 24 hours

d. Daily review of urinary catheter necessity

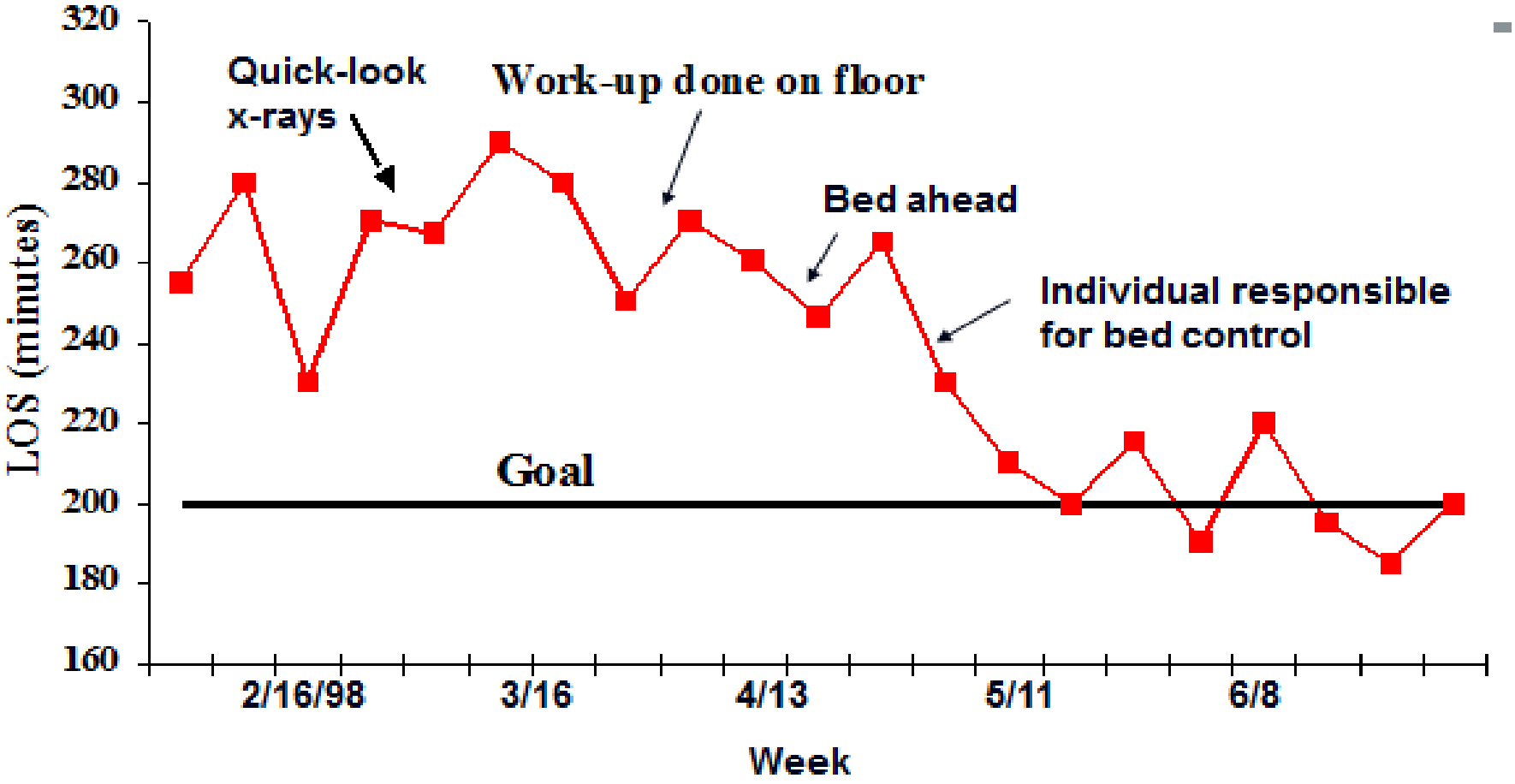
e. Number of PCP with urinary catheters

Data should be plotted over time

- Data tells a story
- Annotated is best

- Aim: For ED patients, identify and initiate sepsis bundle 95% of the time within 1 hour of triage by December 31, 2017
- Measure:
  - Door to identification of positive sepsis screen time
  - Door to initiation time of sepsis protocol

Pt #	Door Time	Time to Positive Screen	Time to Protocol
324535	12:50p	1:25p	3:02p
329534	8:15	8:20	8:55
328548	3:10	3:50	5:12
325647	5:55	6:00	6:34

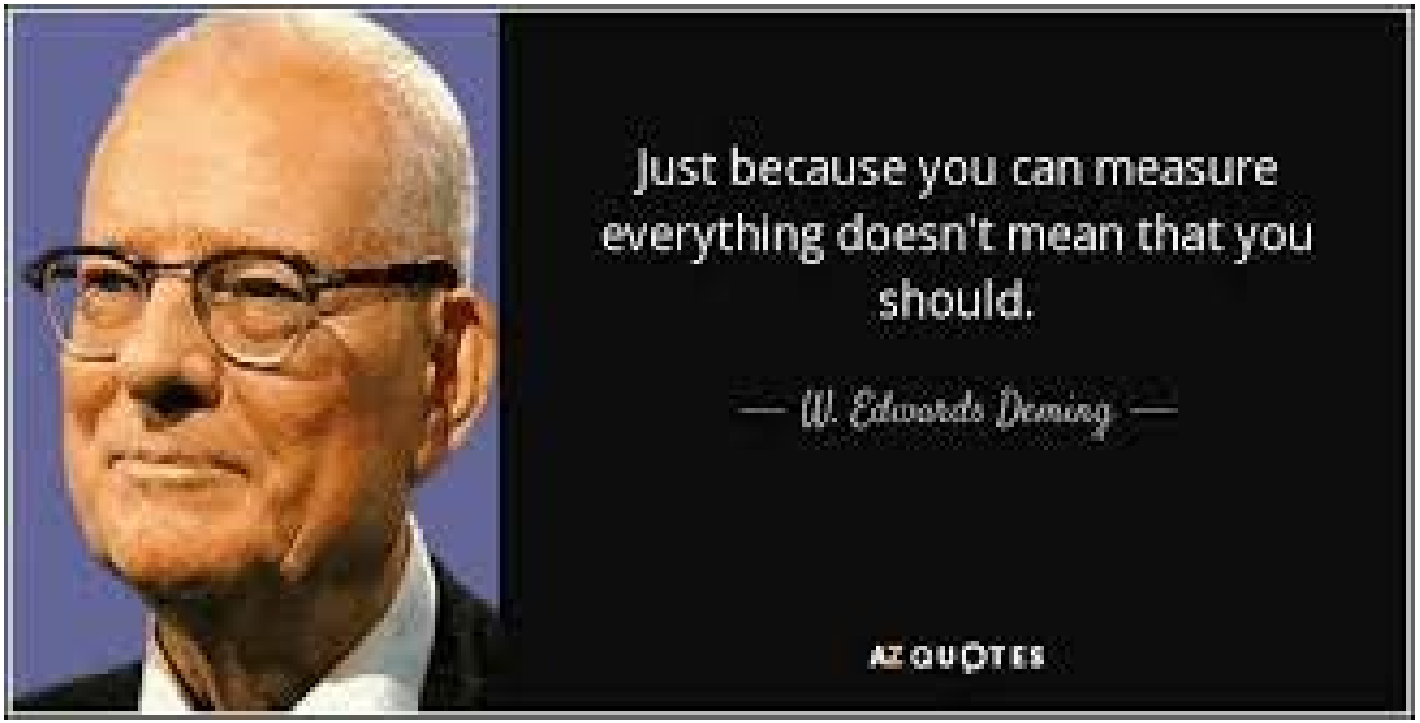


Improving LOS for Patients Admitted from the ED

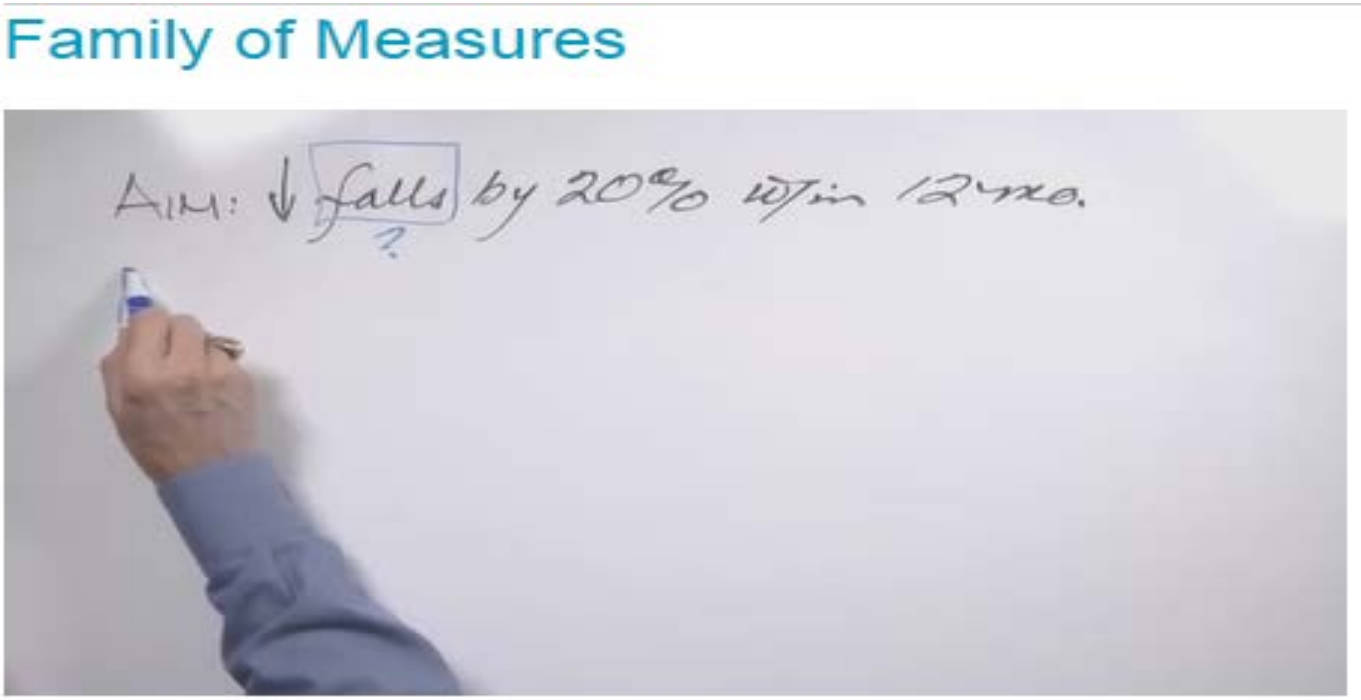
Improvement Measures

- Focus on the vital few
- Is for learning not for judgment
- Integrate into teams daily routine

- Aim: For ED patients, identify and initiate sepsis bundle 95% of the time within 1 hour of triage by December 31, 2017
- Measure:
  - Door to identification of positive sepsis screen time
  - Door to initiation time of sepsis protocol


Just because you can measure everything doesn't mean that you should.
— W. Edwards Deming —
AZ QUOTES

Video: "Family of Measures"



- http://www.ihi.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Whiteboard15.aspx

Types of Measures to Evaluate Impact and Progress

Outcome

- Measures directly relate to the aim of an initiative.
- How is the system performing? What are the results?

Process

- Measures reflect how well processes in the work get done.
- Are the steps of the process performing as planned?

Balancing

- What happened to the system as we improved the outcome and processes? (unanticipated consequences)

Process measures matter

1900-1993

"If you can't describe what you are doing as a process, you don't know what you're doing."

- W. Edwards Deming

Poll

- Check all of the Process Measures
  a. CLABSI rate
  b. Compliance with ventilator bundles
  c. % of time all preventative measures were documented on all high risk patients
  d. Door to balloon time
  e. Mortality rate
  f. Denial rate

Outcome Measure vs. Process Measure

Outcome Measures

a. CLABSI rate – *How many of our patients had a CLABSI?*

b. Mortality rate-*How many of our patients died?*

c. Denial rate –H*ow many of our claims were denied?*

Process Measures

- Compliance with ventilator bundles- *Were all the bundle elements met?*
- % of time all preventative measures were documented on all high risk patients- *How often did we document all the measures on the high risk patients?*
- Door to balloon time *How long did it take to facilitate a patient from door of ED to the insertion of a stent in the cath lab?*

An Operational Definition…

…is a description, in quantifiable terms, of what to measure and the steps to follow to measure it consistently.

Operational Definition

- State the measurement process to be used
- Define numerator and denominator
- Category of measure:
  - Outcome
  - Process
  - Balancing
- Is clear and unambiguous
- Identifies criteria

Provost. L. & Murray. (2008, November) The Data Guide: Learning from Data to Improve Health Care. Austin, TX: API.

Measurement Strategy Worksheet

Measure Name	Operational Definition	Data Source	Data Collection • Schedule • Method	Baseline • Period • Value	Aim • Short term • Long term

Measurement Strategy Worksheet

Measure Name	Operational Definition
Be specific	*Statement of the measurement process used*
Use verbiage that is recognizable	*State numerator and denominator*
	What's included? What's excluded?

Measurement Strategy Worksheet

Data Source	**Data Collection** • **Schedule** • **Method**
Where do you get the data	*How often to be collected, reported*
Note department, name of report and when available	*How is it analyzed? Percentage, rate, # of events, days between,*

Measurement Strategy Worksheet

Baseline • **Period** • **Value**	**Aim** • **Short term** • **Long term**
Date collected	*What is your numerical aim*
Actual value	*By when*
Assure the values align with operational definition	*Include a short/long term goal if helpful*

Measurement Strategy Worksheet

Measure Name (be specific)	**Operational Definition** numerator, denominator, inclusions and any exclusions	**Data Source**	**Data Collection** • Schedule • Method	**Baseline** • Period • Value	**Aim** • Short term • Long term

American Hospital Association

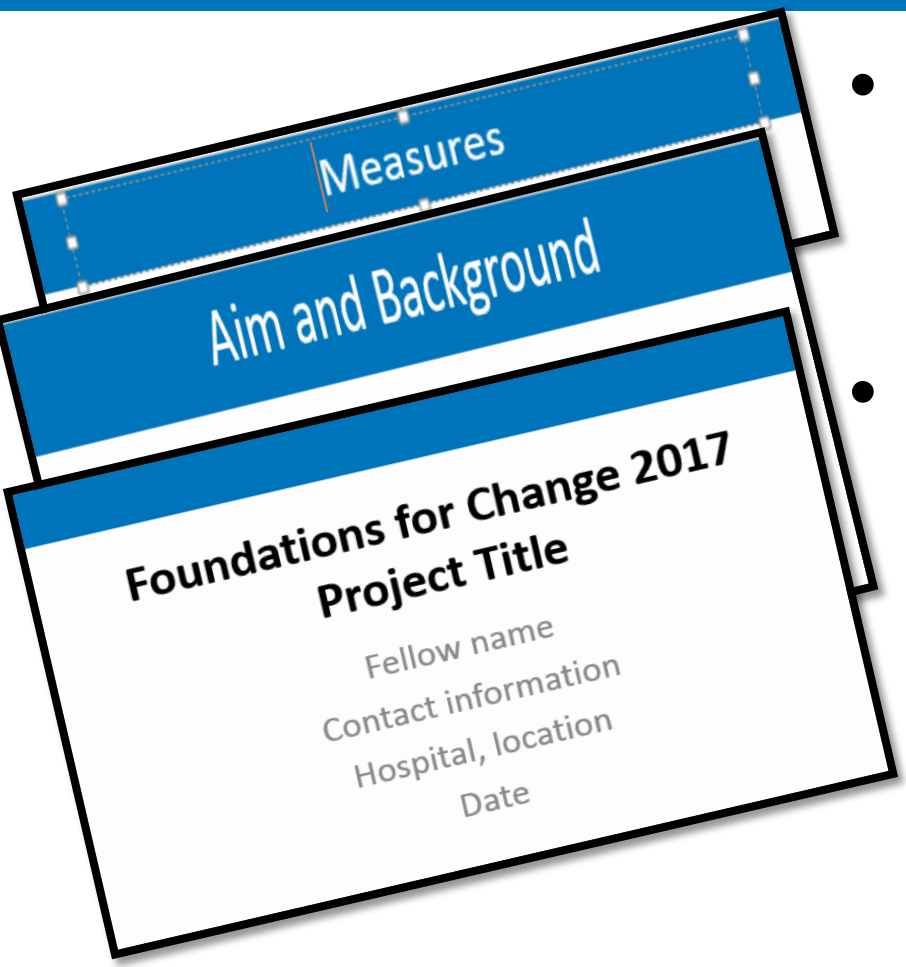
HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Action Items for Action Period

- **IHI Open School:**
  - QI 102 Lesson 3 Choosing Measures
  - QI 103 Lesson 1 How to Define Measures and Collect Data
- **Video:**
  - Driver Diagrams
- **QI Project**:
  - Define measures for your project

- If you would like feedback send to kduncan@ihi.org

Project Summary Template



- Project: Utilize learning from the Fellowship to improve your current work.
- Template: Designed to assist you in presenting your work to leadership and will be utilized to document learnings throughout the Fellowship.
- Project Summary due date: October 15th

Bring It Home

Mallory Bender, Program Manager, HRET

THANK YOU!

Next Call March 29, 11 a.m. CT

Empower Teams to Engage in Improvement