



SAIA

Systems Analysis &
Improvement Approach

Module V: SAIA Series Continuous Quality Improvement (CQI)

Quality Improvement is...

“The combined and unceasing efforts of everyone—healthcare professionals, patients and their families, researchers, payers, planners and educators—to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development (learning).”

Batalden P and Davidoff F “What is ‘Quality Improvement’ and How Can It Transform Healthcare??” BMJ Quality and Safety Vol 16 Issue 1; 2007.

“Every process is perfectly designed to get the result that it gets”



Delivery of blood samples to test for Ebola, on main road from Zwedru, Gran Gedeh to Monrovia, Liberia August 2014

Quality Improvement Strategies

- Late 1990's: Transformation from measuring mistakes to process redesign
- Traditional Research
 - Pre/Pos
 - Intervention & Control
 - Rigorous statistical analysis
- "...rapid evaluation, flexible implementation, simple methods to measure programmatic improvements and improve quality using known tools
- Less academic and more focused on resolving day to day problems.

From Industry: Lean Methodology

- Within healthcare services the core idea is to **maximize patient value while minimizing waste**
 - Per our previous slide deck on Process Mapping
 - Processes are mapped out to identify *value and non-value added steps* through an entire care cascade or system
- A Lean approach changes the focus of management from optimizing separate technologies, assets, and vertical departments to **optimizing the flow of products and services through entire system**
- Robust tool for identifying problems and generating solutions

Lean – Some Key Principles

- Base decisions on long-term philosophy at the expense of short-term financial goals
- Create continuous flow to bring problems to the surface
- Level out the workload
- Standardized tasks and processes are the foundation for continuous improvement and employee empowerment

Ideas

Where do ideas for change come from?

- The literature
- “Best practices”
- Front-line/community suggestions
- Systems engineering tools
 - Process Mapping, Cascade Analysis, PDSA/Model for Improvement



Continuous Quality Improvement

CQI actions include:

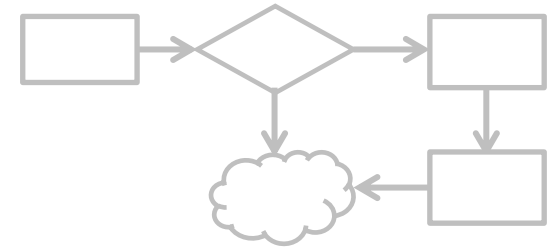
- **PLAN** for change at your clinic
- **DO** a decided upon change
- **STUDY** the effect of the change
- **ACT** to either ***accept*** and continue with the change, ***adapt*** upon the change or ***abandon*** the change and decide upon a new intervention to improve the health outcome of interest



Within SAIA, CQI (along with cascade analysis and process mapping) is conducted at monthly SAIA strategy meetings

Continuous Quality Improvement CQI

- Pre-work: Cascade analysis tools and process mapping




- Identify, define and implement workflow modification

 **Plan & Do**

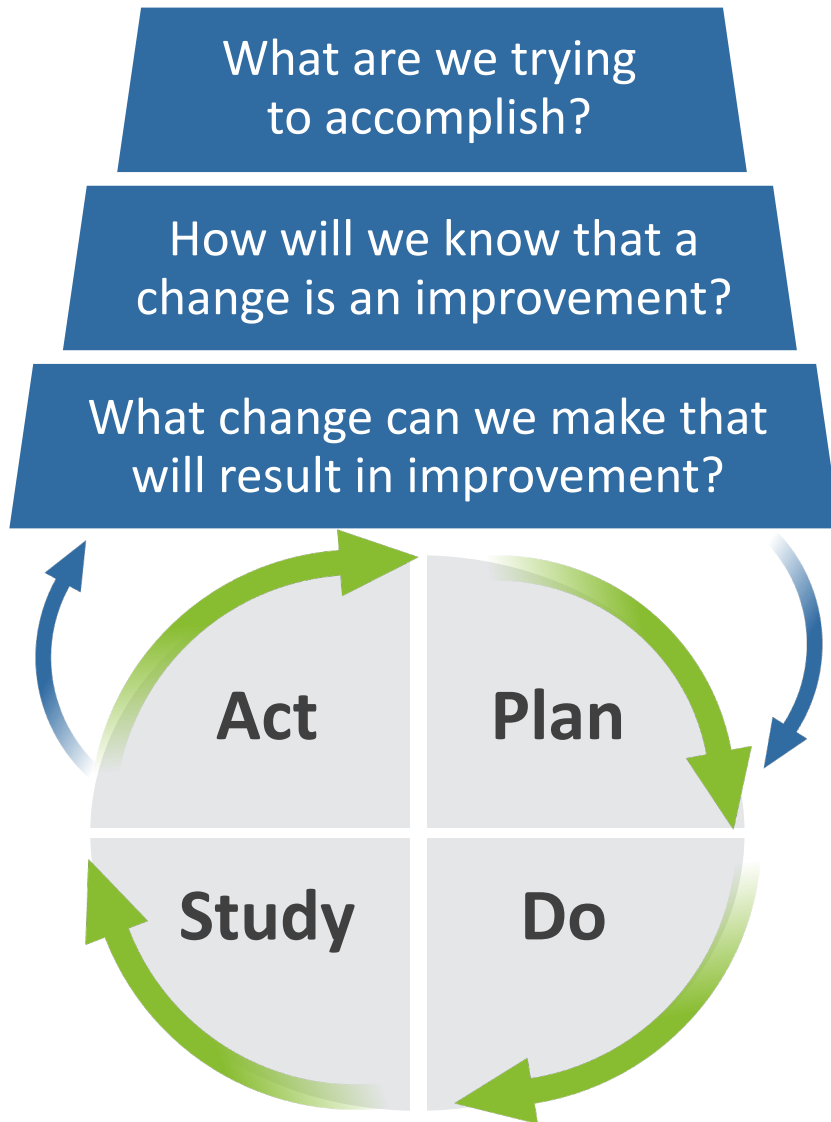
- Assess workflow modification effect on cascade

 **Study** → *Review impact on care delivery*

- Conduct iterations of the analysis and improvement cycle

 **Act** → *Accept*
→ *Adapt*
→ *Abandon*

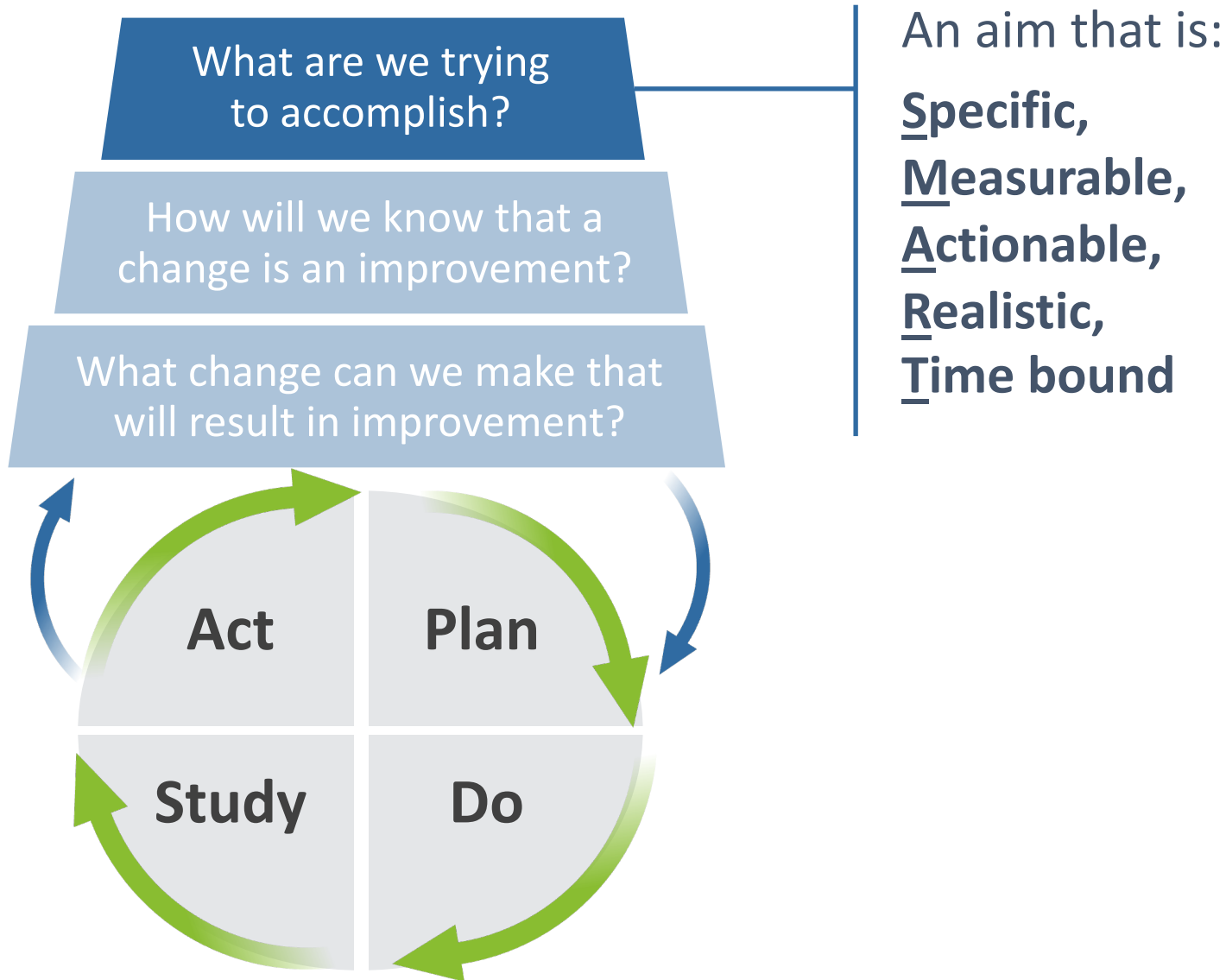
Model for Improvement



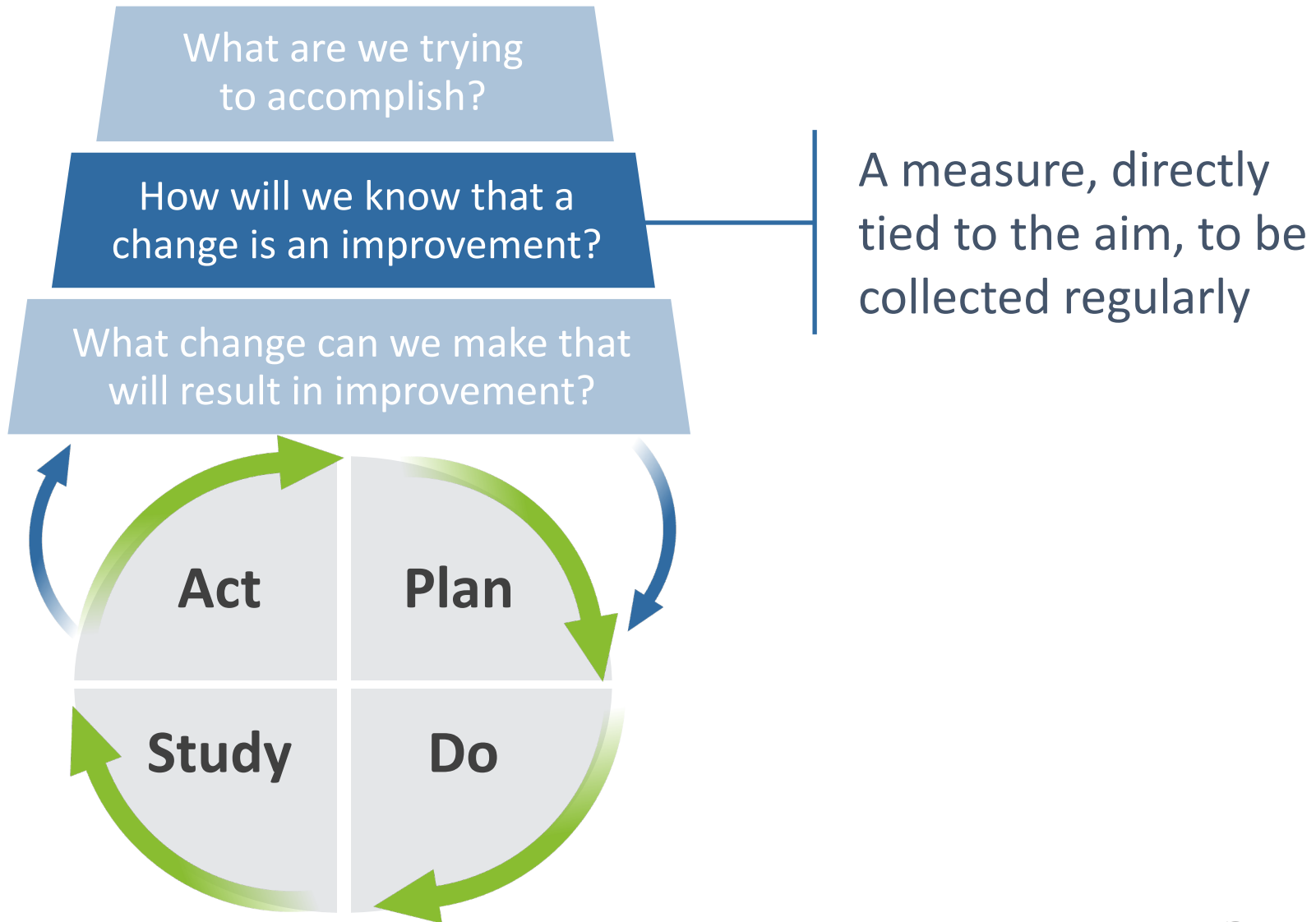
Source:

Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.

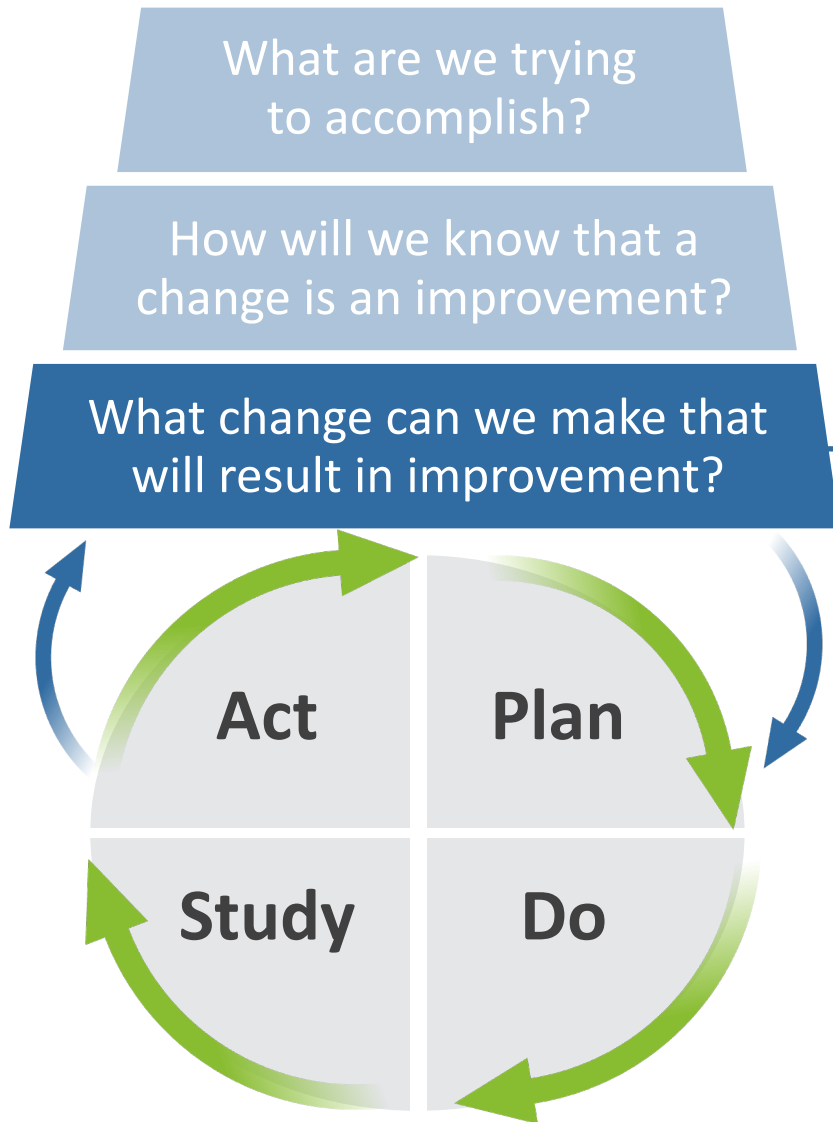
Model for Improvement



Model for Improvement

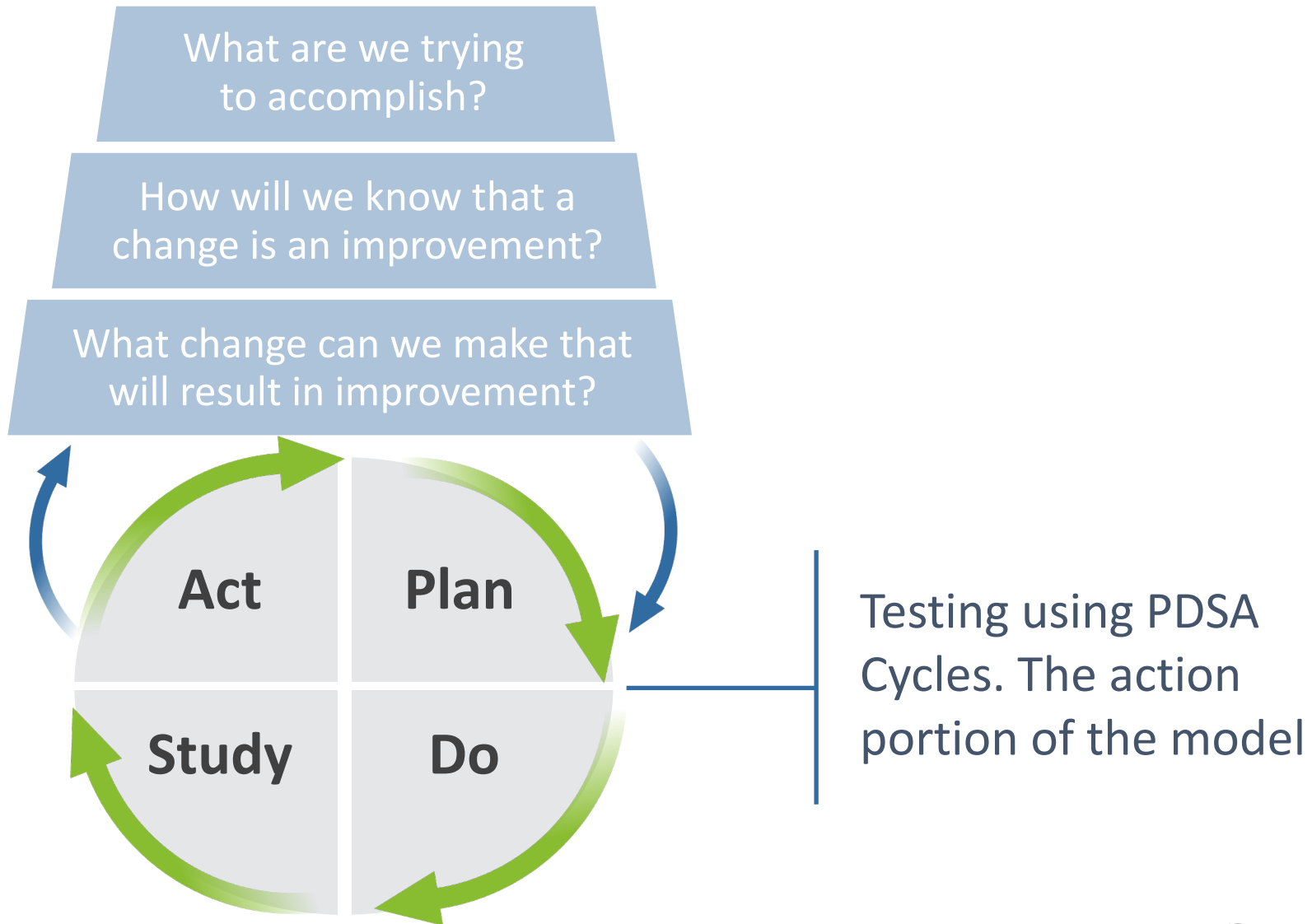


Model for Improvement



- Team and patient expertise
- What has been done elsewhere?
- Process mapping
- Creative thinking

Model for Improvement



Ok, Let's Operationalize CQI



ACT

- What changes are to be made?
- Next cycle?

PLAN

- What will you do?
- Who will do it?
- Where? When?
- What do you predict will happen?

STUDY

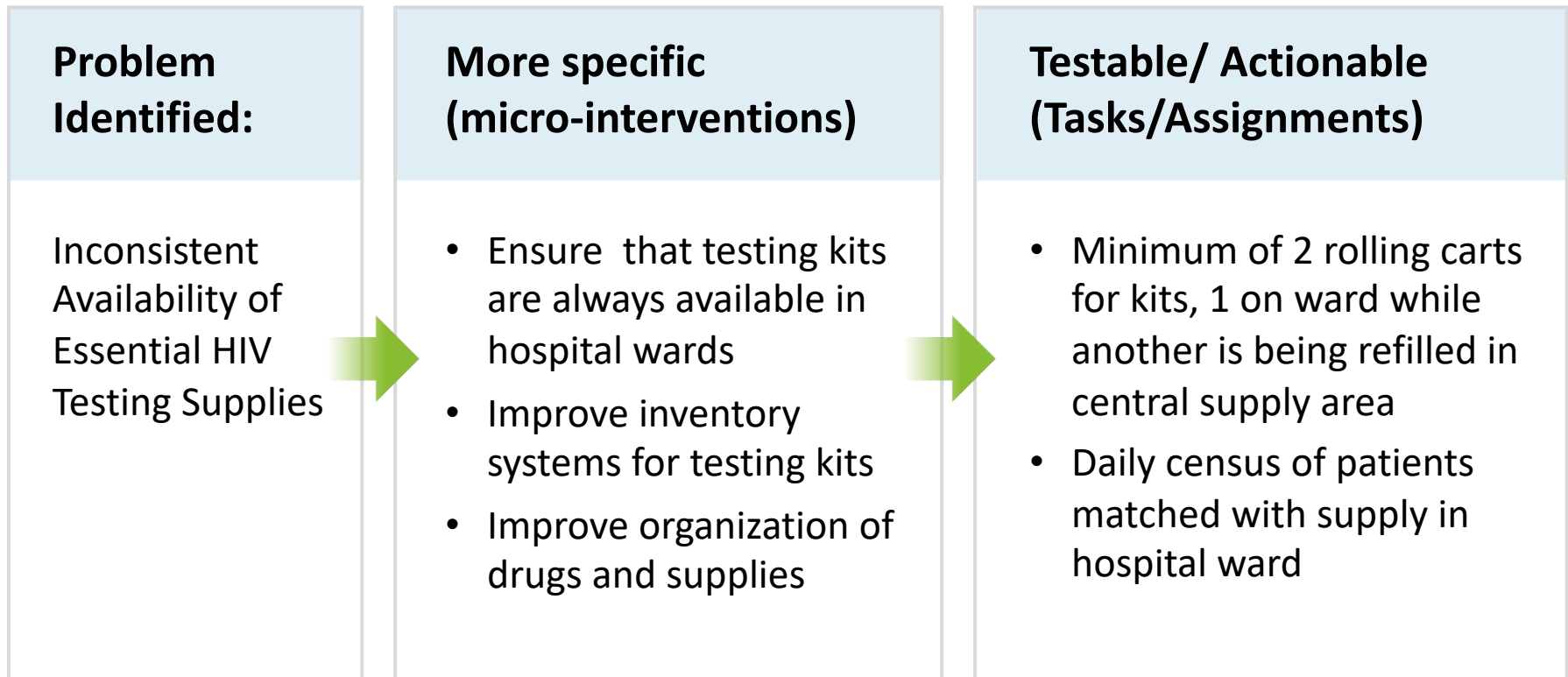
- Complete data analysis
- Compare data to predictions
- Summarize what was learned

DO

- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data

Example: Breaking Down Concepts into Testable Ideas

AIM: Hospital “B” will increase HIV testing for admitted patients from 34% to 75% of patients.



SAIA CQI Tool

Fill in while planning the micro-intervention										Fill in one month later			
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Date	Round	Targeted CAT step	Baseline value (#/% of CAT step)	Problems identified	Service point	Solution (micro-intervention)	Tasks and Assignments	Team/ individuals delegated	Anticipated change	Was the micro-intervention implemented (yes, partly, no)?	Value (#/% of CAT step at 1 month)	Which assignments and tasks were completed?	Do you plan to adopt, adapt or abandon the micro-intervention?



Synthesis: Continuous Quality Improvement

- CQI is a powerful tool which allows teams to jointly discuss their services and brainstorm solutions
- Within SAIA, additional systems analysis tools - cascade analysis and process mapping – are used prior to the PDSA cycle to help teams better understand their systems as a team and prioritize where CQI will be most impactful



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