

# POPULATION HEALTH DIVISION

### SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

## Becoming "the best at getting better" with results-based lean (v2016-06-11)

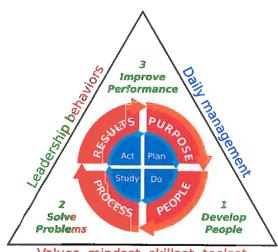
We will be the best at getting better!

... PHD staff

#### LEADERSHIP PHILOSOPHY

Results-based lean (RBL) is the exciting integration of lean management and results-based approaches. They are complementary and synergistic (see resultsbasedlean.com). Our public health leaders have embraced both continuous improvement approaches:

- Lean management supports organizational, process-focused, performance improvements [1-3].
- Results-based approaches [4, 5] support community-based collective impact initiatives [6-9].



Values, mindset, skillset, toolset Figure 1: Results-based lean leadership philosophy

The RBL Leadership Philosophy (Figure 1) has four necessary components [10-12]:

- Value-driven purpose supported by values, mindset, skillset, and toolset (red)
- PDSA problem-solving empowers people to improve processes and results, and achieve goals (blue)
- Daily management supports daily decision making, problem solving, and continuous improvement (blue)
- Leadership behaviors develop people (starting with self) to solve problems and improve performance (green)

We have three types of values: *organizational values* (What's important to us?), *customer value* (What's important to our customers? What are they willing to "pay" for?), and *measurements* (metrics).

Value-driven purpose

Organization values (the two pillars of lean)

#### 1. Continuous improvement

- a) Challenge (problem or opportunity)
- b) Kaizen (continuous improvement)
- c) Genchi genbutsu (Gemba walks to see and understand)

#### 2. Respect for people

- d) Humility (including cultural humility)
- e) Respect
- f) Teamwork

Cultivating humility and leading with humility are essential and critical. "Humility is the noble choice to forgo your status, and to use your influence for the good of others before yourself" [13]. Humility enables one to seek honest, critical feedback, and to improve relationships, trust, team performance, and intellectual growth.

Mindset (core principles that drive behaviors → actions)

- 1. Placing customers at the center (customer value)
- 2. Intellectual honesty and courage
- 3. Relentless mindfulness and reflection (hansei)
- 4. Relentless improvement in decisions, execution, and learning
- 5. Improvement requires change, change requires measurement
- 6. PDSA thinking (scientific thinking  $\rightarrow$  daily experiments)
- 7. Embrace & learn from failures ("fail early, often, & forward")

Skillset (core skills that drive learning, improvement, and innovation)

- 1. Staff as PDSA problem-solvers (see improvement kata)
- 2. Managers as coaches and teachers
- 3. Leading with humility (servant leadership)
- 4. A3 Thinking (PDSA problem solving on A3 paper) [14]
- 5. Decision quality (continuous decision improvement) [15]
- 6. Project management (visual, agile, and adaptive)
- 7. Human-centered design (design thinking) [16]

Toolset (core tools that support improvement and accountability)

- 1. Catchball (dialogue, feedback, shared decision making)
- 2. 5S (workplace organization for visual management) [17]
- 3. Standard work (including leader standard work) [12, 18]
- 4. Status sheets (monitor) and huddle boards (improve) [12]
- 5. Value-stream mapping (eliminate waste; optimize flow) [19]
- 6. Hoshin kanri (strategic deployment, A3 X-matrix) [20]
- 7. 3P ("production preparation process") for new designs

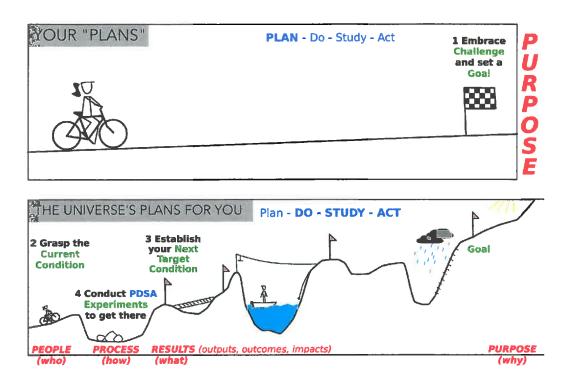


Figure 2: The results-based lean improvement kata (cartoon adapted from http://thedoghousediaries.com/5468)

PDSA problem solving (improvement kata)

We solve problems using the RBL improvement kata [21] (Figure 2) which consist of four steps for action and for coaching:

- 1. Embrace challenge and set a goal. (A challenge is a problem, opportunity, or assignment.)
- 2. Grasp the current condition.
- 3. Establish your next target condition.
- Conduct PDSA experiments to get there.

A3 thinking (PDSA problem solving on A3 paper)

For problems that are complex or involve multiple stakeholders, we summarize our PDSA problem solving process on A3 paper. Steps 1-5 are on the left side, and steps 6-8 are on the right side.

Plan (1) Problem statement (re-define as you learn)

- (2) Background (why? who cares? aligns to purpose?)
- (3) Current condition (quantitative and qualitative)
- (4) Goal and next target condition (see Figure 2)
- (5) Analysis (gap, root cause, theory of change)
- (6) Proposed actions (countermeasures, theory of action)

Do (7) Implementation plan (experiments, assignments, schedule) Study/Act (8) Study/Act (Study results and Act on what you learned.)

Study (10 min): https://www.youtube.com/watch?v=rtyia0ci12I

#### RESULTS-BASED APPROACHES

A results-based approach (RBA) is a systematic, disciplined framework for mobilizing partners to tackle community health challenges [4,5]. RBAs start by convening stakeholders who are already contributing to solutions, and then building a shared vision and

goal. Working backwards-using ends-to-means causal-linkingwe design strategies that are informed by gap and root-cause analyses, evidence-based solutions, and community voice. By aligning, coordinating, and improving existing efforts we pursue collective impact. Collective impact fulfills five conditions:

- 1. common agenda,
- shared measurement,
- mutually-reinforcing activities,
- 4. continuous communication, and
- 5. backbone support.

Collective impact is a collaboration, continuous improvement framework applied at a social scale. RBAs are well-suited for collective impact and start with engaging community partners with 7 strategic questions (7SQ) (adapted from Friedman [5]):

- What are we trying to accomplish and why? (goal / purpose)
- 2. How do we measure success?
  - a) Result indicators (population & performance indicators)
  - b) How are we doing? (trend, current state, & forecast)
- 3. What *partners* can help? (collective action  $\rightarrow$  impact)
- 4. What are the drivers? (gap and root cause analysis)
- 5. What strategies work? (science and community evidence)
- 6. What other conditions must exist? (assumptions and risks)
- 7. How do we get there? (7SQ and improvement kata)

A results-based approach can be applied daily (e.g., planning meetings) with 4 strategic questions (4SQ) [22]:

- 1. What are we trying to accomplish and why? (goal / purpose)
- How do we measure success? (results: outputs, outcomes)
- 3. What other conditions must exist? (assumptions and risks)
- How do we get there? (improvement kata)

The RBA we recommend is Results-Based Accountability<sup>TM</sup> [5].

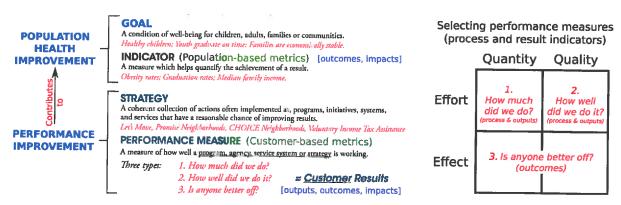


Figure 3: Results-based approach (adapted from [5]): A (left): performance improvement (strategies and performance of a program, agency, or service system) contributes to population health improvement (goal and population-based indicators). B (right): How to select performance measures.

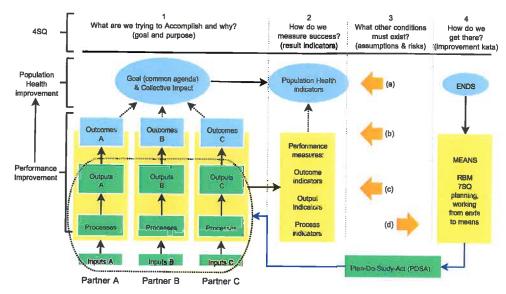


Figure 4: Results-based management for collective impact (e.g., Partners A, B, and C) and continuous performance improvement.

Figure 3 displays a RBA for a program, agency, or service system, and selecting performance measures (see Table 1 for details). Figure 4 depicts an RBA/7SQ applied to collective impact. For measuring customer satisfaction start with a minimum set [5]:

- 1. Did we treat you well? (Likert scale)
- 2. Did we help you with your problem (Likert scale)
- 3. Why did you rate us this way? (open ended)
- 4. How can we do better? (open ended)

Table 1: Developing process and result (output, outcome) indicators.

	Program, agency, or service system indicators			
	-		Population-based indicators	
	Efforts (lead indicators)		Effects (lag indicators)	
	Processes	Outputs	Outcomes (Is anyone better off?)	
Quantity (How much did we do?)	Cycle and lead times Waste elimination ↓ variability	average wait # on schedule # products # clients served # standards met	Circumstances (social & physical environments) Knowledge, attitudes, beliefs, and skills Risk and protective factors Health and wellness measures Disease, injury, or death measures	
Quality (How well did we do it?)	Cycle and lead times Standard work Mistake-proofing	average wait % on schedule % products met standard % clients satisfied % standards met	Circumstances (social & physical environments) Knowledge, attitudes, beliefs, and skills Risk and protective factors Health and wellness measures Disease, injury, or death measures	

Special thanks and gratitude to Rona Consulting (https://www.ronaconsulting.com/) for teaching us lean (Toyota Management System) and Deitre Epps (http://clearimpact.com/) for teaching us Results-Based Accountability. TM For both we are early in our organizational transformation journey.

#### GLOSSARY

- 3P is the production preparation process. Creative process for designing new products, processes, and plants.
- 55 is for organizing a workplace for visual management: sort, set in order, shine, standardize (standard work), and sustain.
- COLLECTIVE IMPACT at https://collectiveimpactforum.org/
- CULTURAL HUMILITY is committing to self-reflection; realizing our power, privilege, and prejudices; and cultivating humility for respectful partnerships. Full def. at http://bit.ly/1UK2BH7.
- GOAL is a specific end result desired or expected to occur as a consequence, at least in part, of an intervention or activity.
- HUMAN-CENTERED DESIGN , also called design thinking, is the creative design of products, services, or environments to delight, fulfill needs, and exceed the expectations of end-users.
- LEADER STANDARD WORK is standard work (including a schedule) for a manager's regular activities to develop people (starting with self) to solve problems and improve performance.
- LIKERT SCALE is the most widely used approach to scaling responses in survey research. Download great cheat sheet from here: https://www.clemson.edu/centers-institutes/ tourism/documents/sample-scales.pdf
- IMPACT is an estimate of effectiveness. What outcomes can be attributed to a program, agency, service system, or collective impact? For example, "number of deaths averted."
- MINDFULNESS is being fully presence without judgment or expectation; it enables self-awareness and emotional intelligence.
- **OUTCOMES** represent changes in the institutional and behavioral capacities that occur between the completion of outputs and the achievement of goals.
- **OUTPUTS** are changes in skills or abilities and capacities of individuals or institutions, or the availability of new products and services that result from the completion of activities within the control of the organization.
- RESULTS are changes in a state or condition that derive from a cause-and-effect relationship. There are three types of such changes: outputs, outcomes and impact. The changes can be intended or unintended, positive and/or negative.
- PRESULTS-BASED ACCOUNTABILITY<sup>TM</sup> is a highly developed approach used worldwide for collective impact. It is based on Mark Friedman's book [5] and many resources and materials are freely available at http://clearimpact.com/.
- STANDARD WORK is the best-known way to perform an activity. SW defines the desired sequence of steps and the time required to perform each step. Leader SW: develop people (starting with self), solve problems, improve performance.

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