

Setting the context: Creating a common language for CQI

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Setting the Context

- CQI is a systematic process of identifying, describing, and analyzing strengths and problems, and then testing, implementing, learning from, and revising solutions*
- This process is developed and applied within systems to promote that system's specific goals.
- CQI processes are often housed in the QA function of a system

Some terms....

- So what is a system?
- What are its functions, structures, and processes?
- How does this relate to CQI?

People in the System

- Atul Gawande and *Better: A Surgeon's Notes on Performance* (2007]
- The “science of performance”
- How do you organize yourself – if not your system – to be better

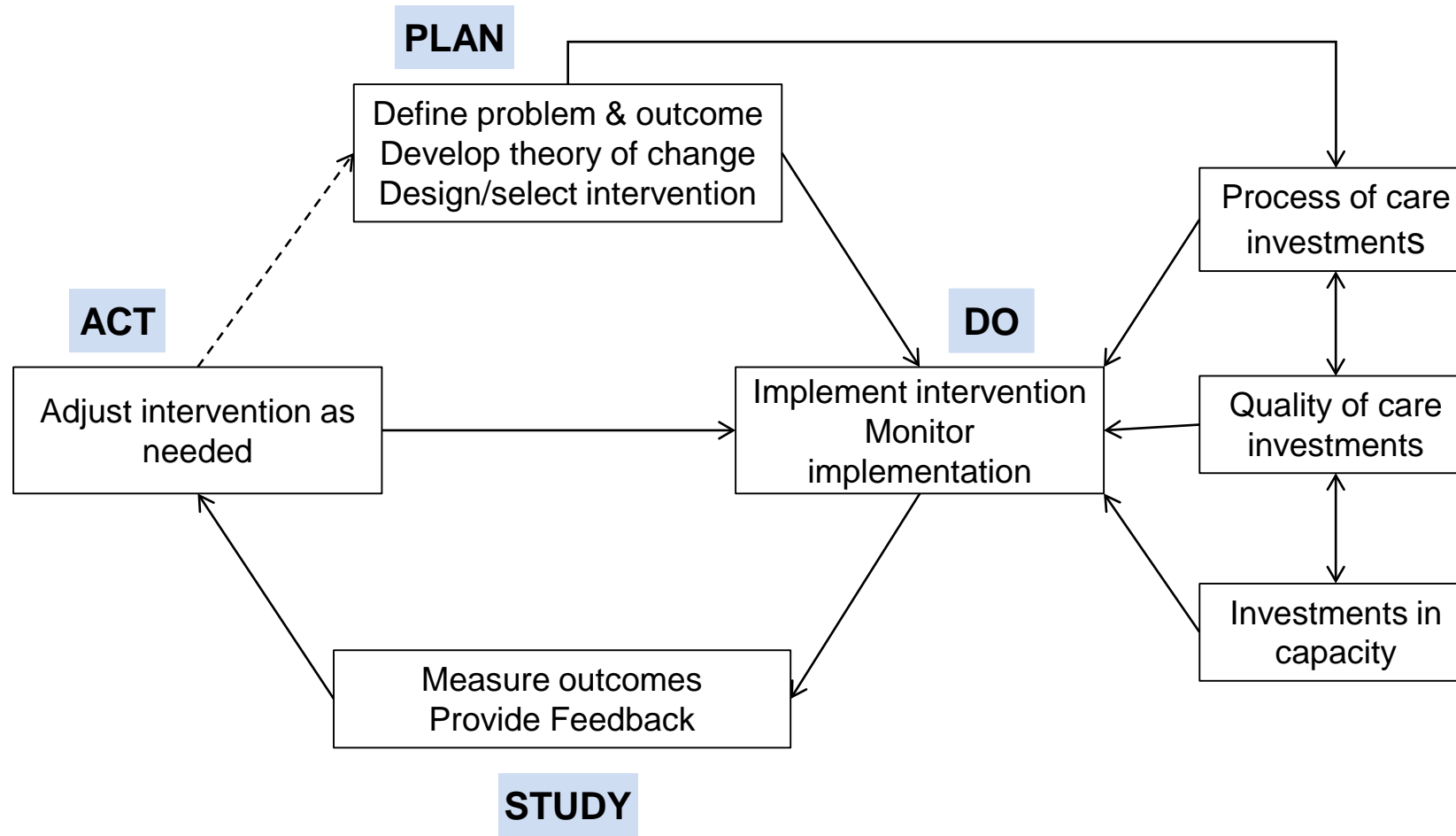
The individual role in CQI

“ In medicine, as in any profession, we must grapple with systems, resources, circumstances, people – and our own shortcomings, as well. We face obstacles of seemingly unending variety. Yet somehow we must advance, we must refine, we must improve. “

The individual role in CQI

“ **Betterment is a perpetual labor.** The world is chaotic, disorganized, and vexing, and medicine is nowhere spared that reality. To complicate matters, we in medicine are also only humans ourselves. We are distractible, weak, and given to our concerns. Yet still, to live as a doctor is to live so that one’s life is bound up in others’ and **in science and in the messy, complicated connection between the two.** It is to live a life of responsibility. The question, then, is not whether one accepts the responsibility. Just by doing this work, one has. The question is, having accepted the responsibility, **how one does such work well**”.

The Cycle of CQI



Underlying Principles of CQI

CQI is a cyclical process of problem solving activities that require the deliberate use of evidence

- Developing and testing hypotheses rooted in a theory of change.
- Converting data to evidence—a process that has certain rules.
- Understand variation: Some subpopulations have better outcomes than others.
- Implementation (Plan-Do-Study-Act)
 - Process, quality, and capacity investments tied to a theory of change
 - Baseline, target, actual
- Research evidence use as process

Conversion of data to evidence

Evidence is information that is used to support an observation, claim, hypothesis, or decision.

Evidence can be found in or derived from a number of places (e.g., administrative data archives, case record review, stakeholder feedback, social science literature).

Evidence:

- points to the outcomes that need improvement (**Plan**)
- informs the selection of interventions (**Do**)
- guides the assessment of interventions (**Study**)
- informs decisions about what to do in light of those results (**Act**).

Conversion of data to evidence




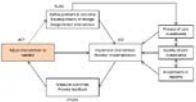
No matter where in the CQI cycle it is being introduced, the **strength and suitability of the evidence** depends on the **appropriateness of the analysis** used to generate it.

The discipline of converting data to knowledge is centered around the **match between the research question and the analytic process** you use to answer it.

The evidence people rely on

A brief reflection on the challenges of relying on sound evidence

- Judgement & decision-making are the cornerstone of social services work
- Behavioral economists have shown that they are very susceptible to the biases of intuition. *Thinking Fast and Slow* (2011)
- Trained rational thinkers can make errors in judgement
- Decision making – especially in uncertain situations – can be influenced in unexpected ways
- Being deliberate – in the use of the data we generate and rely on - is essential to the proper use of evidence

CQI Phase	Hypothesis development/testing	Evidence use/How do you know?
<p data-bbox="524 211 586 234">Plan</p> 	Define the problem. ("I observe that...")	What evidence supports this observation?
	Hypothesize as to the cause of the problem. ("I think it's because...")	What evidence supports this hypothesis?
	Identify a solution. ("So I plan to...")	What evidence supports the hypothesis that the proposed dose of the intervention will lead to this specific degree of improvement?
	Set a performance target. ("...which I think will result in...")	Taken together, what evidence supports the theory of change—i.e., the claim about how this intervention will have the intended effect on the target population?
<p data-bbox="529 596 580 619">Do</p> 	Implement the intervention.	Collect data required for an analysis of intervention effectiveness and analysis of implementation fidelity.
	Monitor implementation.	What evidence is there that the intervention was (or was not) implemented with fidelity?
<p data-bbox="514 803 596 826">Study</p> 	Measure progress toward the target outcome.	What evidence is there that the intervention was effective (or not effective)?
	Provide feedback to relevant stakeholders and decision makers.	Transmit evidence regarding outcomes and fidelity to those who will interpret the findings and make decisions accordingly.
<p data-bbox="529 1011 580 1033">Act</p> 	Determine the extent to which the problem still exists.	What evidence supports this observation?
	Confirm or refute the theory of change.	What evidence supports this claim?
	Adjust the intervention as needed.	What evidence supports the decision to continue, modify, or discontinue the intervention?

Back to *Better*...

Dr. Gawande's parting thoughts

1. Ask a different question
2. Stop complaining
3. Count something (count it correctly)
4. Write something
5. Make a change

Above all, keep the conversation going . . .



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