

Selecting a QI/PI Project

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What is “Performance Improvement (PI)”??

- A methodology for improving the quality of institutional and individual performance.
- PI, used interchangeably with Human Performance Technology has deep roots in:
 - Human resources
 - Instructional design and training
 - Systems theory
 - Learning psychology
 - Information technology
 - Feedback systems
 - Organizational development
 - Analytical systems
 - Ergonomics
 - Human factors
 - Psychometrics

- PI grew out of the realization that poor job performance seldom is due solely to the performer's lack of skills and knowledge, but usually to other factors in the system.
- PI is based on the theoretical framework of HPT, a systematic method based on data, aimed ultimately at improving human performance by ADDRESSING THE GAP BETWEEN THE PRESENT STATE AND THE DESIRED STATE.

The 5 states of PI

1. Getting agreement on the project goal from the clients, stakeholders and PI practitioner
2. Conducting a performance needs assessment (identifying performance gaps and their root causes)
3. Designing the interventions to close the gap
4. Implementing the interventions
5. Evaluating the change in the performance gap

Dr. W. Edwards Deming

- “An orchestra is judged by listeners, not so much by illustrious players, but by the way they work together. The conductor, as manager, begets cooperation between the players, as a system, every player to support the others. There are other aims for an orchestra, such as joy in work for the players and the conductor.”

- Dr. Deming railed against management that blindly asserted opinion as fact, out of convenience or ignorance. Instead, he challenged management to test its opinions, theories, hypotheses, hunches and beliefs against data to truly understand what is going on and learn what is necessary to improve the situation. Learning needs to be continual and organization-wide. Theories need to be developed, applied and tested to advance knowledge in a systematic fashion.

All projects start with A Great Idea

“Let’s have a Diabetes Faire”



Diabetes Faire Concept

- “I’m going to bring in diabetics all at once and take care of all their needs. After all, we want everyone to thrive!”

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Why we should do this:

- I heard that another clinic has been doing these for a while and they said their diabetes control rates improved a lot!
- I've decided that I don't need to consult with anyone about this. Why bother with a meeting?? Meetings just waste everyone's valuable time, people don't always agree anyway, and because it worked at the other clinic, there's no reason to think it won't work here!

What are the problems with this approach?

Problems with a “go it alone” approach:

- No input from people who know the process best (stakeholders).
- No process mapping—if you can’t do a process map—you don’t know what you are doing.
- No specific baseline data—why did the other clinic improve and how much?
- No articulation of lessons learned from other clinic: What problems did they face in implementation and how did they overcome their obstacles?

The Great Goal

- I'm going to target all the diabetics with last hemoglobin a1c readings from 7.0 to 7.5.
- After all, they are our 'low hanging fruit'.
- They are all close to goal so not much needs to be done to get them to goal—it's good for the patient and good for our quality scores.
- We can draw overdue or coming due labs when the patients get to the clinic.
- Oh, and the RNs can do diabetic foot exams for those patients who need it.

The Great Idea

“Let’s have a Diabetes Faire”



Execution of A Great Idea

- The project planner mailed out 330 letters anticipating 20% or 66 members would show up.
- 110 showed up to an area of the clinic that was already over crowded with patients waiting to be seen.

What happened?

- This group of patients (a1c 7.0-7.5%) as a group do NOT check their blood sugar at home. Thus, they brought in no glucose data.
- The RNs and diabetes case managers were unable to titrate medication because they had no blood sugar on which to base their decisions.

Were meds escalated?

- Those patients who had high home glucose readings and were taking maximum doses of glipizide and metformin, universally refused insulin.
- Unfortunately, the RNs had no training in the newer oral diabetes medications which could have been used to get patients to goal.
- Number of the patients who had their medications titrated=0.

What about the overdue lab tests?

- Tubes of blood for hemoglobin a1c testing were drawn for patients who were overdue or coming due.
- Unfortunately many patients did not have active orders in Health Connect, so the lab discarded their specimens.
- Patients who did have a1c tests ordered, also had other overdue labs such as medication safety labs (creatinine and potassium). The correct tubes for that testing were not drawn with the a1c.

What about the diabetic foot exams?

- 40 diabetic foot exams were done by the RNs and case managers.
- Unfortunately, the RNs were not trained how to properly code them in the EMR, so the work did not count, and this care gap remained open on all 40 patients.

Non-standard workflows

- There were limited exam rooms available. Some RNs were quick—focusing only on diabetes related needs. Other RNs took over a half hour trying to arrange colon cancer screening, vaccination, mammograms, etc.

The patients...

- In surveys, distributed to patients after the faire, patients expressed dissatisfaction due to disorganization, and many would be unlikely to participate in the future.

Opportunities to improve...

Engage the right people

- Medical assistants would have pointed out issues with waiting room and exam room space problems.
- Diabetes specialist physician in the clinic was not consulted about the best patient population to target.
- Foot exam coding training could have been done prior to the faire.
- RNs could have reviewed charts before hand to ensure appropriate orders active, and made a list for the phlebotomist of who needed what tubes drawn.

Opportunities to improve— Select the right intervention

- Additional training for patients close to a1c goal who refused insulin (new oral medications were available).
- RNs did not have treatment escalation protocols in cases where glucose data were not available.
- No nutritionist was available to give lifestyle information or sign people up for classes.

Invest some time in PI project selection

- Select an appropriate area of improvement
 - Clinical practice based on new, best evidence
 - Inefficient processes
 - Workarounds
 - Facility issues
- Understand the problem
 - Talk to the people involved
 - Learn the history of why it's done the way it is
 - Examine previous lessons learned
 - Review work by other medical centers or KP GME programs

PI Project Selection

- Identify well-scoped areas of change
 - Avoid biting off more than you can chew
 - Make sure you have buy-in from responsible parties
- Determine what you can measure and how to measure it
- Devise and prioritize effective solutions “tests of change” (brainstorm first, then narrow by engaging your team)

Helpful hints

- Start with your own curiosity: what is something that's been bugging you that you think could be done better?
- Choose something relevant to your own practice/daily professional life
- Avoid the “So what?” project
- Consult local experts, the literature and evidence based guidelines
- Check to see what projects are already in progress
- Propose practical solutions that are good enough to try now

Helpful hints

- Gather baseline data on a small sample and review findings
- Seek usefulness not perfection
- Keep implementation simple (think big, start small); avoid big sweeping changes
- Use qualitative and quantitative data
- Measure small representative samples
- Build measurement into your daily work