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# A QI approach to care gaps

## My goals for this talk

1. Share my **enthusiasm** for embedding QI into our regular daily clinical work.
2. Share an **example** of how the QI approach can be used to address a relevant care gap (looking at hepatitis C care cascade)
3. Review available **resources** for QI coaching, training, and funding

## Start with a story

What follows is a brief summary of my clinic last Wednesday afternoon…

> **After having morning meetings from 9-12 and cutting lunch short, I arrived at the John Ruedy clinic right at the start of my 1pm session. In addition to having a couple of drop-ins waiting for me, I saw in my schedule that I had two patients booked back to back who would need opioid prescription refills, but didn't have opioid use disorder. They also usually came in with a list of several other complaints. I sighed as I thought about the tedious task of refilling duplicate medications in our EMR. Why was I spending a significant chunk of my patient visit doing something manually and potentially introducing error, when it could be automated? What else could I have covered with these patients if all that time had been given back to me over the past few years?**

It is these sorts of ***tedious*** tasks that eat away at time we could spend doing more high value work (eg. motivational interviewing for smoking cessation), and consequently make us feel that we *aren't providing the best care*. This is a key driver of **physician burnout**. We spend too much time on tasks that make us feel *worried, apathetic, or bored*. What's the solution?

We can **use QI** to shift more of work towards a **state of flow**, where we feel challenged but have the necessary skills to succeed. You can think of this as practicing near the edges of our scope. **Go with the flow:** Psychological studies assessing flow suggest that it can be **more rewarding** for us than even that well-deserved and relaxing tropical vacation.

Can you think of some **examples of tasks** that you do during your day that may be driving you closer to burnout? During the talk, we will use slido (https://www.sli.do/ #COLE) to share examples and then vote on others that resonate.

## Quality in Healthcare

### Addressing the gaps

In response to the emerging story of staggering numbers of preventable medical errors in the US, the Institute of Medicine released their report **Crossing the Quality Chasm** in 2001. In it, they laid out 6 dimensions of healthcare quality. When we improve healthcare, we ideally are touching on one or more of these:

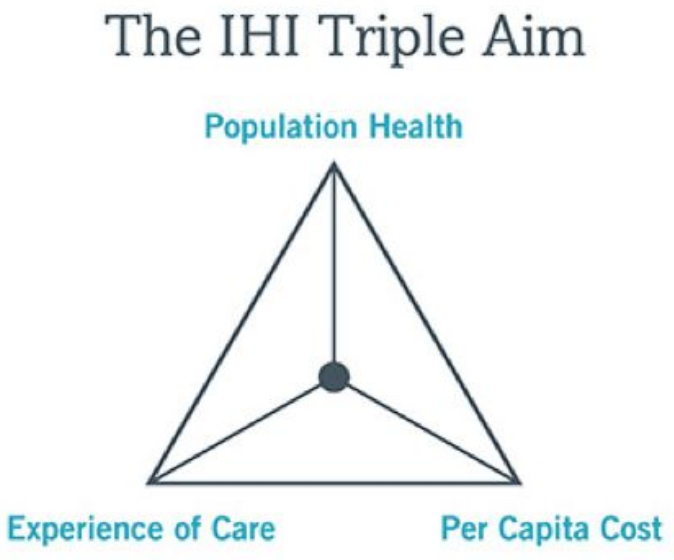
1. **S**afety
2. **T**imeliness
3. **E**fficiency
4. **E**ffectiveness
5. **E**quity
6. **P**atient-centredness
7. *BONUS - **P**rovider experience* *(not in original framework)*

*Pro tip: you can remember these dimensions with the STEEEPP acronym*

In BC, there is a locally developed framework called the **Quality Matrix**. This overlaps significantly with the dimensions above. Click on **Handbook** to find out more.

### Aims of QI

Most of us have likely heard of the frameworks developed by the **Institute for Healthcare Improvement (IHI)**. To the right is the Triple Aim, and we add ***Provider Experience*** to complete it and get the Quadruple Aim. Happily, we tend to get better quality care when workers enjoy what they are doing.



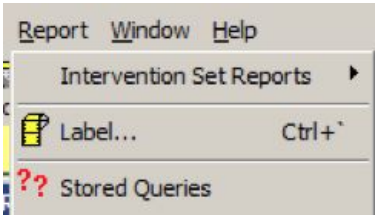
## Local case - our hepatitis C cascade of care

### Define your problem

When reviewing the care cascade provided by Gabriela and Dr Joe, we can see that there are still gaps, as a minority of those with hepatitis C and a positive RNA have documented sustained virologic response at 12 weeks (SVR12).

Citation: Joe, R., & Sincraian, G. (2019, Sept. 27). *[VCAT* Indicator Suite].* Unpublished raw data. Dept. Medical Affairs & Strategy Deployment Vancouver Coastal Health.* Vancouver Community Analytics Tool. Developed by the coauthors ©2019

Looking at my own practice, I have no way of easily seeing my list of clients with hepatitis C along with key clinical factors. To review hepatitis C management for my clients, I have to search disparate areas of the medical chart, and this takes a lot of time. Consequently,  I think I may be missing some opportunities for care.




*But wait*, I should probably start by figuring out how many patients I have with hepatitis C. Luckily, in VCH's Profile EMR, we can run a query to get this list without too much hassle. This would be my **Population of Focus (POF)**. The *Stored Queries* can help us here. If you need more guidance here, talk to a local QI champion, tech-savvy EMR user, or shoot me an email **here**. If your Problem List needs some cleaning up (you are unsure if you have the right code in there), you can used the Incorrect Diagnosis query to fix this.

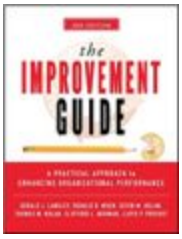
> **For my clinic, I found 27 patients with hepatitis C (070.54) in the Problem List. This will be my Population of Focus (POF).**

### Choosing my approach

Not every care gap needs a full QI team. In QI we *start small*. Consider doing some initial PDSA cycles within your realm of control before forming a QI team. If a problem is big enough and crosses multiple clinics, then you can consider a Collaborative approach. The **IHI Breakthrough Series** is a popular approach for this, and was the framework used for the **BOOST Collaborative**.

## The Model for Improvement

### Aims, Measures, Change Ideas

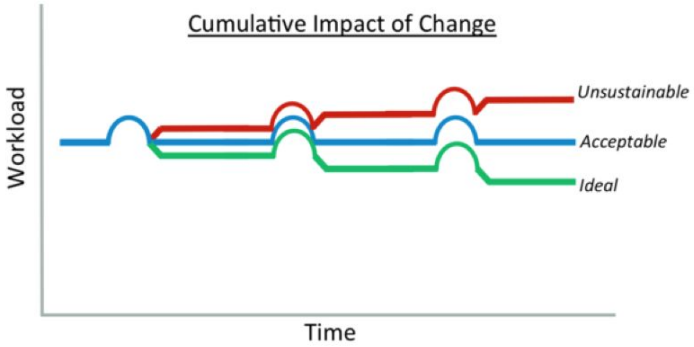



This is the most commonly used framework in healthcare. Others sometimes used are LEAN, Six Sigma, 4DX, DMAIC, and more. The "bible" for The Model For Improvement is *The Improvement Guide, 2nd Edition,* pictured to the right. Here are the three key elements of the model:

- **Aims** - what are we trying to accomplish?
- **Measures** - How will we know that a change is an improvement?
- **Change ideas** - What changes can we make that will result in improvement?


> **My aim: By December 15, 2019, I aim to have reviewed key clinical factors and documented next steps for 100% of my clients with hepatitis C (070.54) in their Problem List (Key clinical factors summarized in Susan's talk and displayed on HCV form).**

Be mindful of how much extra work a change idea may produce, and ideally find those that decrease workload over time. This is **highly adoptable QI**, shown in the graph below. *Resist doing a large amount of work up front* that will be hard to sustain later. And finally, is your aim SMART?




With these figured out, we then get going on our **Plan-Do-Study-Act** (PDSA) cycles. Remember to *start small* (eg. one provider, one patient, one day). See the **PDSA worksheet** from IHI at the following link. If your plan is complex, make sure you break it down into a task list include who does the task and when and where it takes place.

> **Plan: I will test the form on three patients and make create a brief encounter note with next steps for three patients to see if I am satisfied with the form and can adopt it for future use. I will do this on Saturday at home.**

We next need to figure out some measures. **Don't skip this step!** Humans (*even physicians!*) are very prone to **cognitive biases**. There are three types of measures we should think of:

- **Outcome** - measures what we are aiming for
- **Process** - "voice of the system", measures parts of process that lead to outcomes
- **Balancing** - checks for effects of change on other parts of the complex system

> **Outcome: Is my user satisfaction high enough to warrant using this instead of the old way? (sifting through disparate areas of the chart)**
>
> **Process: (1) time to load form, (2) number of forms actually created, (3) time taken to create the forms and document, (4) qualitative info including feedback on form design**
>
> **Balancing: (1) my free time, (2) my partner's mood?**

Now we need to predict what the results will be. *Predictions are often missing from PDSA cycles*, but are necessary.

> **My predictions: (1) the form will provide a clear advantage in quickly pulling together the necessary info for HCV management, (2) I will identify opportunities to improve the form design for better function, (3) the form loading time will be tolerable, (4) I will be able to run this test of change in less than 15 minutes**

Next comes the "Do" step in PDSA. Here you actually run the test and document what happened, noting anything unexpected.

> **No major problems occured during my test, other than the Remote Access being slow and crashing once.**

Then comes the "Study" part of the cycle. Compare you results to your predictions here.

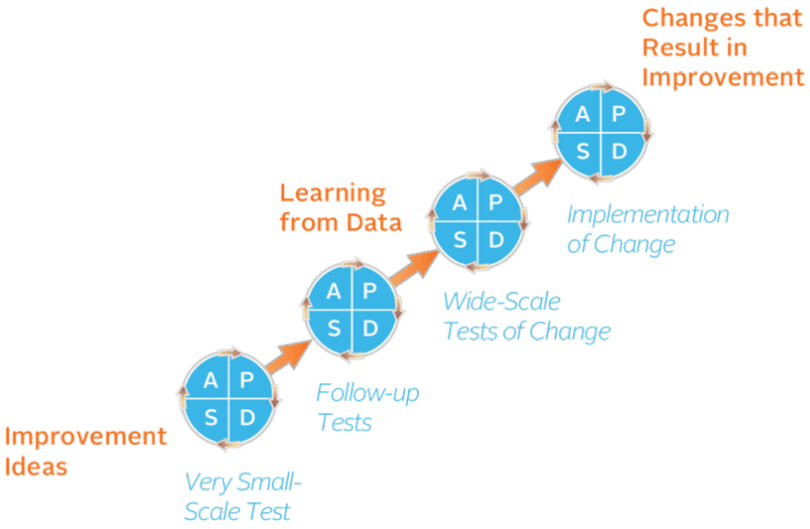
> **Outcome: I was satisfied with the form enough to keep using it**
>
> **Process: I completed the three forms as planned, the form loaded in <2s, but it took me a bit longer than anticipated (20min) given the crash. I also**

> **documented some design ideas to share with Susan.**
>
> **Balancing: My free time on the weekend decreased by two hours. My partner's mood may not be a great balancing measure, as it is currently driven by many external factors.**

Finally, you "Act". Here you decide what comes next based on the results. Will you adapt, adopt, or abandon the change you have tested?

> **Since it worked on a small scale, I will plan to use the form on all of my patients. Over the next week, I aim to have the form created for 100% of my clients who see me in clinic and have hepatitis C in the Problem List.**

The "Act" usually leads you into your next PDSA cycles. If something worked, expand the scale, and adapt the change based on what you learned. With continued success, the scale-up should continue until changes can be **implemented.** This can be depicted with a ramp.




> **Once I have 100% of my clients with a completed HCV form, I can then review a report of my clients and key clinical factors to see where gaps remain. This might lead me to a new aim of making sure 90% of those in need of a Fibroscan get it from 3 months from now. If not everyone has come in to see me and had a form completed, I could run PDSAs on re-engagement. If my clinic team is interested, we can form a QI team. Our efforts will hopefully improve the care cascade when we review next.**

It is difficult to run a high quality PDSA cycle. People talk about "PDSAing everything", but often parts are missed. Here is a checklist to ensure you get the most out of your PDSA cycles:

- ❏ Documentation
  - ❏ All stages documented
  - ❏ 'Study' section is in past tense
- ❏ Learning activity present (you are planning to find out something new)
- ❏ Prediction documented explicitly

- ❏ Iterative cycles are run - PDSA cycles are linked (on ramp)
- ❏ Small-scale testing - iterative series with increase scale over time
- ❏ Use of data over time - iterative series using regular data over time

Checklist source: Evolving quality improvement support strategies to improve Plan–Do–Study–Act cycle fidelity: a retrospective mixed-methods study

## Ingredients for QI Success

### Training

PLQI -http://medicalstaff.vch.ca/working-for-change/vch-phc-plqi/

PSP - http://www.gpscbc.ca/taxonomy/term/6

BCPSQC - https://bcpsqc.ca/sharpen-your-skills/quality-academy/

IHI - http://ihi.org

VCH QI Lead - contact me, **Cole Stanley**

### Coaching

Draw on local expertise where possible (eg. BOOST team members)

PSP - http://www.gpscbc.ca/taxonomy/term/6

VCH QI Lead - contact me, **Cole Stanley**

### Funding

Available through PSP and PLQI. Shared Care also has $10K per physician per fiscal year for Leadership/QI training.
http://www.sscbc.ca/physician-engagement/leadership-training-scholarship

For VCH clinicians on clinical services contract, there is a note on QI being incorporated in your daily work.

### Dedicate time to do the work

Favour short frequent dedicated periods of time to keep your QI work going.

### Hold effective meetings

You can get so much more done if you use this framework in your meetings. Go to this link: http://www.dartmouth.edu/~cfm404/Effective%20Meeting%20Skills%202-3-10FINAL-1.pdf

## Choose the right topic

Choose something that matters to you AND your patients. This can be an area you are particular passionate about, or focused on something that really irritates or annoys you (a great focus for improvement).

## Think about sustainability

Think about this from the beginning. Highly adoptable QI is best. Build into standard protocols, procedures, job descriptions when implementing.

## Create a closed-loop system

Have a follow-up plan for every change you test, and have a way of easily reminding you of this plan and scheduling it. I often use post-dated tasks to myself.

## Include the patient voice

QI work becomes much richer when patient voice is included. Involve peers and people with lived experience, and also consider caregivers and family. There are several resources to help you get started here.

CEAN at VCH - http://www.vch.ca/get-involved/community-engagement

Patient Voices Network - https://patientvoicesbc.ca/

**Wanting to take your clinic's QI game to the next level? I'd love to hear what you have planned.**

**Email me: cole.stanley@vch.ca**