



PCM-3 Quality and Patient Safety Experiential Component

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WHAT IS QUALITY?

IOM definition:

"the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge"

Determining the effect of health care on desired outcomes

Determining degree to which care adheres to proven processes



IHI Open School modules in QI and PS

- ▶ Can complete to obtain certificate in QI
- ▶ Provides knowledge base and resources for conducting QI research and tackling PS issues
- ▶ Is free to you, easy to complete and useful throughout your career
- ▶ PSSSST. Looks good on your resume!

Open School

How to Access the IHI Open School Online Courses

Step 1: Log in to IHI.org.

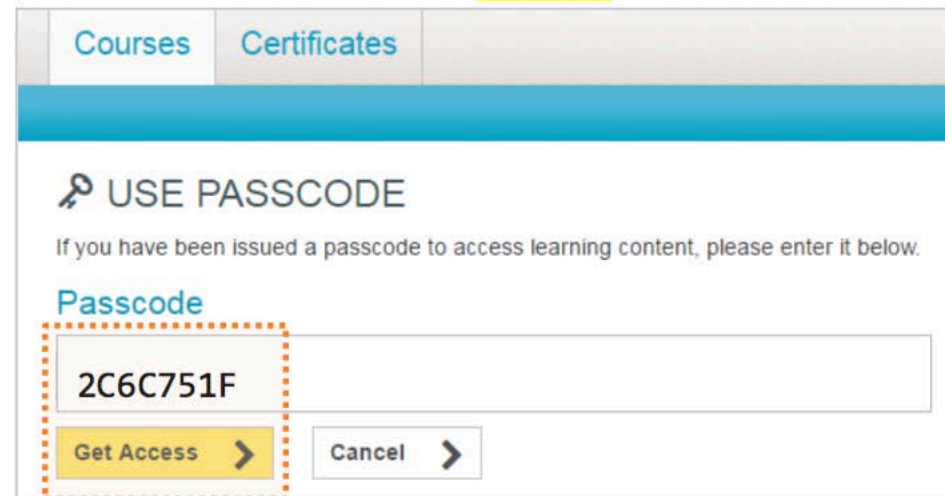
- Log in to IHI.org [here](#).
 - If you are not yet registered, do so at www.IHI.org/RegisterFull.

Step 2: Enter your group's passcode.

- After you have successfully logged in, go to www.IHI.org/EnterPasscode.



- Enter your group's 8-digit passcode **2C6C751F** and click the "Get Access" button.



Code:
2C6C751F

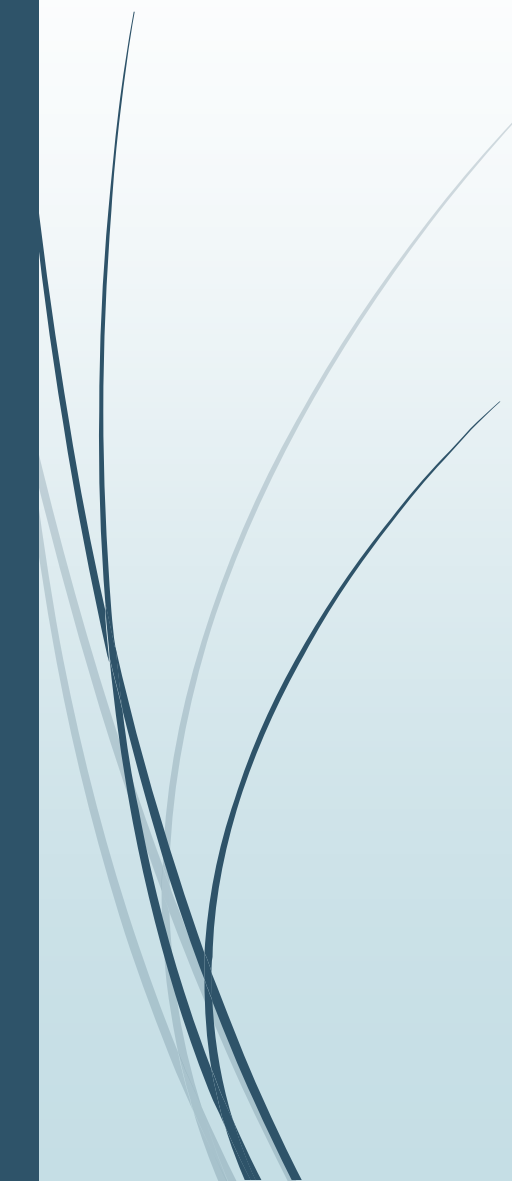
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NOW is your time!!

- ▶ You have entered the world of clinical medicine
- ▶ Use your fresh eyes as an opportunity to examine the status quo, to question, to study, to plan...
- ▶ PLAN DO STUDY ACT!



The summary from QI 104



- ▶ Run Charts are useful for visually representing your data over time
 - ▶ You learn from the run chart about your innovation and other forces governing your data
- 

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Most broadly used tool in displaying and analyzing data

- ▶ <https://www.youtube.com/watch?v=9uwRPE8OBY0>

What happened there?

 Common Cause Variation	 Special Cause Variation
Inherent to the system or process	Not inherent to the process design
Due to regular, natural, or ordinary causes	Due to irregular or unnatural causes
Affects all the outcomes of a process	Affects some but not necessarily all aspects of the process
Results in a "stable" process that is predictable	Results in an "unstable" process that is not predictable
Also known as <i>random</i> or <i>unassignable variation</i>	Also known as <i>non-random</i> or <i>assignable variation</i>



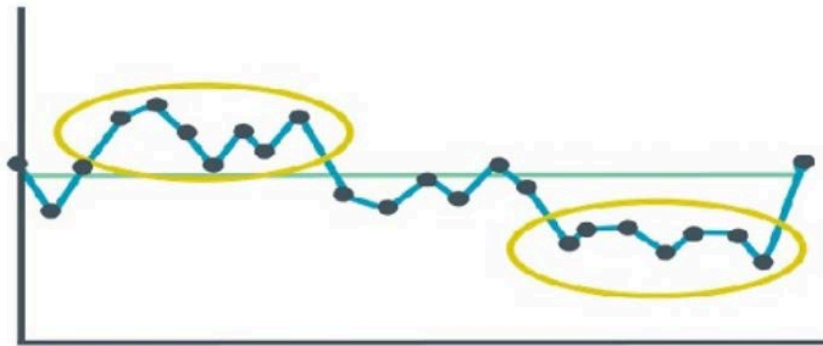
RUNS

A run is a few data points on the same side of the median

- ▶ You are looking that evidence of change is not just random, but due to your intervention

A few rules regarding non-randomness

Shift



Rule 1: A shift is indicated by six or more consecutive points above or below the median.

Trend



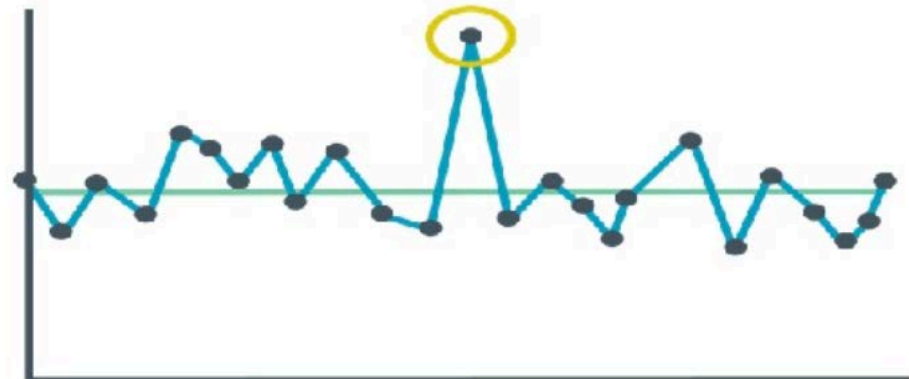
Rule 2: A trend is indicated by five or more consecutive points all increasing or decreasing.

Too many or too few runs



Rule 3: Too many or too few runs is calculated with a mathematical equation.

Astronomical data point



Rule 4: An astronomical data point is indicated by a data point that appears far away.

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Summary of QI 105

- ▶ Four phases of QI projects
- ▶ Human aspects and change psychology
- ▶ Working with interdisciplinary teams—y' all know what's up now!

QI 105

The complete “life cycle” of an improvement project contains four distinct phases:



Innovation —
coming up with new
ideas for change

Pilot —
testing a change on a
small scale

Implementation —
making the change the
new standard process
in a defined setting

Spread —
implementing the
change in several
settings

It takes a team!

- ▶ Authority in the system
- ▶ Technical expertise
- ▶ Day to day driver

Team 1:

Aim: Reduce adverse drug events on all medical and surgical units by 75 percent within 11 months.

Team Leader: _____, MD, chair of pharmacy committee, patient safety officer

Technical Expert: _____, RPh, director, clinical pharmacist

Day-to-Day Leader: _____, RN, manager of medical/surgical nursing

Additional Teammates: risk manager, quality improvement specialist, staff nurse, and information technology expert

Innovation

Innovation
<input type="checkbox"/> Assemble your team, assign roles, and plan for meetings.
<input type="checkbox"/> Identify your patient/target population.
<input type="checkbox"/> Decide which delivery sites and providers will eventually be involved in the project.
<input type="checkbox"/> Consider current best practices, protocols, and guidelines based on evidence.
<input type="checkbox"/> Describe an ideal system; identify major gaps between this and the current state.
<input type="checkbox"/> Develop a preliminary picture of how all the elements of the system work together to get a result. (Use visual tools, such as driver diagrams and cause and effect diagrams.)
<input type="checkbox"/> Decide what should be measured and how, including outcomes and processes.
<input type="checkbox"/> Write a formal aim statement. ("How much, by when, for whom?")
<input type="checkbox"/> Make a plan for real-time data collection and sharing of information.
<input type="checkbox"/> Begin to think about long-term tactical issues: Can you tackle an "easy" part of the system first? How can you eventually spread to all sites and providers? Consider the key players and decision makers for promoting or blocking this work.

Credit: Adapted from IHI and Richard Scoville's "Improvement Project Roadmap."

Pilot

Pilot

- Get to know the current process in detail. Use observation, process maps, run charts, and surveys.
- Select which changes to test using PDSA cycles.
- Test changes and refine them by starting small — with one patient or event. (Remember, testing and refining changes is an iterative, continuous process.)
- Regularly measure to see if the changes are leading to improvement, adjust changes as needed, and continue testing based on your analysis.
- Track and document tests of change and results over time.
- Educate frontline staff on problem identification and PDSA testing.
- Provide regular feedback (at least weekly) to process participants and sponsors.
- When you are confident that the change is leading to improvement, begin planning for implementation (i.e., making the change permanent).

Credit: Adapted from IHI and Richard Scoville's "Improvement Project Roadmap."

Implementation + spread

Implementation

- Ensure that new, successful standard processes are truly adopted in the local system, units, or practice sites.
- Develop a regular system for continuous measurement and feedback on key results.
- Embed (or "hardwire") new standard processes in the local system (e.g., through trainings, job descriptions, support processes).
- Consider how to continuously spread or "scale up" successful processes to all sites, providers, and/or patients; identify required resources and support.

Credit: Adapted from IHI and Richard Scoville's "Improvement Project Roadmap."

Spread

- Develop a communication and dissemination plan.
- Package content for easy implementation by new teams and sites.
- Spread to additional sites, and monitor adoption and performance.

Credit: Adapted from IHI and Richard Scoville's "Improvement Project Roadmap."

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Resistance to change

- Autonomy
- Stability of routine
- Programmed behavior
- Tunnel vision
- Lack of resources
- Accumulation of policies
- NOPD

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So how can you guys get involved?

- ▶ We are striving to create a culture of quality and safety
- ▶ Who is responsible for that? Everyone!
- ▶ What will it take? Believing that everyone person at Loyola has a shared responsibility and every patient in our midst deserves safe and effective care



Experiential component = Choose your own adventure

You get enough curriculum crammed into your brains

You need to be free to follow your interests and explore your curiosity

Most specialties have some projects ongoing, in the works, or already going and need some help

And don't forget, you and some friends can do your own thing!

BOTTOM LINE: GET INVOLVED IN QI!!!



So actually what can you do?

You might be asking, where do I go, who do I talk to?

For the past few months, I have been starting these conversations

I have got my foot in the door in various regards

Here are some highlights of ongoing projects and activities that you can get involved in



ACTIVE QI

Radiation Oncology

- ▶ Quality assurance, effect on treatment on depression, pain
- ▶ Weekly operations meetings
- ▶ Chart review, improve documentation
- ▶ Collaboration with business school re: clinic throughput

Orthopedics

- ▶ Monthly quality task force, doing reviews on selected problems
- ▶ Resident projects



ACTIVE QI

Urology

- ▶ Runs of dehiscence, look at patient data
- ▶ Radical cystectomy morbidity database
- ▶ Resident projects

Neurosurgery

- ▶ Timing of intra-op ABX study

Ophthalmology

- ▶ Resident projects are in planning mode



ACTIVE QI

Ambulatory/Population Health

- Clinic based projects can assess CRC, BMI, smoking, falls, depression, a1c, medrec, etc
- Can be site and doctor specific
- Patient outreach

General Surgery/Anesthesia

- Surgical Site Infection group
- Perioperative Quality and Safety Committee



ACTIVE QI

Hospital Medicine

- ▶ CHF, COPD, PNA, UTI, Sepsis--assessing bundled care
- ▶ C-diff committee
- ▶ Weekly readmission meeting, evaluating week prior readmission
 - ▶ Project is expanding into risk identification and follow-up
- ▶ RCA on CLASBI, CAUTI, occur within 1 week of event
- ▶ Chest pain stress test vs cardiac CT in observation unit



But wait there's more

Psychiatry

- ▶ Inter-professional Collaboration during Hospital Psychiatry
 - ▶ Project to measure team-based care

ENT

- ▶ Monthly meeting
 - ▶ Trending complications and mortality
 - ▶ Evaluating if ENT primary patient and gathering other data

Radiology

- ▶ Chart Review



Possible opportunities

Pathology

- In review at Dept level, TBD

Neurology

- In review at Dept level TBD

Ob-Gyn TBD

Peds TBD

Cardiology/CT surgery TBD

EM(non-active)



Some examples

Low value care initiatives—look at “Choosing Wisely” and “things we do for no reason”

→students at Mt Sinai lead initiatives such as “Lipase Only, please” and “Dump the Docusate” in an innovation contest

Patient outreach in ambulatory setting, ie send MyLoyola query to patient lacking CRC screening to assess willingness and then track order placement



Don't forget the residents

The residents are becoming more and more responsible for QI efforts as required by ACGME

Ask your resident if they are involved or have any ideas, could hatch a plan there.



Not ready to commit?

That's ok, may be not your cup of tea

Get some experience anyway..

- ▶ Attend 3 quality-related meetings over the course of the next year. Times and dates TBD, look out for follow-up emails

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Quality Meetings

- ▶ Lead by physician-nurse dyad
- ▶ Clinician and administrative leaders participate
- ▶ Multidisciplinary team members
- ▶ Discuss updates and needed decisions
 - ▶ The work gets done between meetings
- ▶ Targets and milestones have been developed earlier in the fiscal year
- ▶ Barriers get escalated to higher level committees



SIGN UP!!!

Please come down to the front of the room before you leave and write your name and email address for one of the specialties to be plugged into the QI experiences within that specialty

Also sign up if you plan to just go to meetings

Please indicate you are actively involved in an ongoing QI project and this will suffice



Further Resources

We plan to aid you in learning how to perform chart review through our resources with the CCE

We also have access to vast data sets if you have a clinical query

- ▶ SLICR-DICR

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Odds and Ends

We will meet again in February to re-group and track progress

I can serve as project advisor for any group or individual projects if you guys are interested

These effort are loosely organized; once I know who wants to go where, I will contact Quality Directors of the specialties to coordinate your assimilation into projects or and meetings and help coordinate your experiences



Summary

The QI modules 104 and 105 are useful modules for learning how to display and interpret clinical data, and how to strategize and implement a QI project from start to finish.

We want you to have a chance to experience change efforts, so please do!!

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THANK YOU!