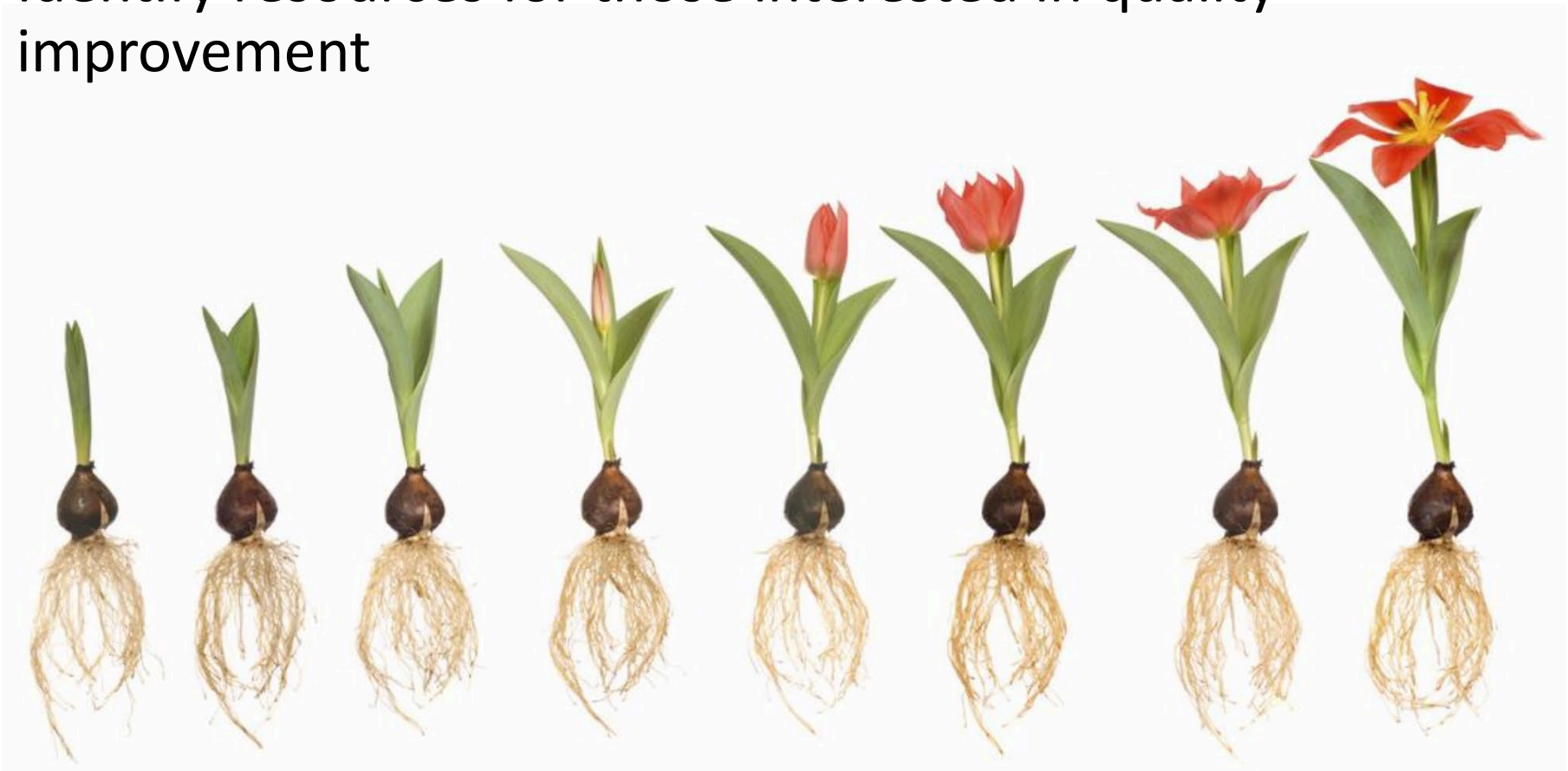
RADIOLOGY® LEADERSHIP INSTITUTE
AMERICAN COLLEGE OF RADIOLOGY

RLI
Power Hour

September 22, 2021

Objectives

- Describe my quality improvement journey
- Articulate a few ideas for developing a QI career
- Identify resources for those interested in quality improvement



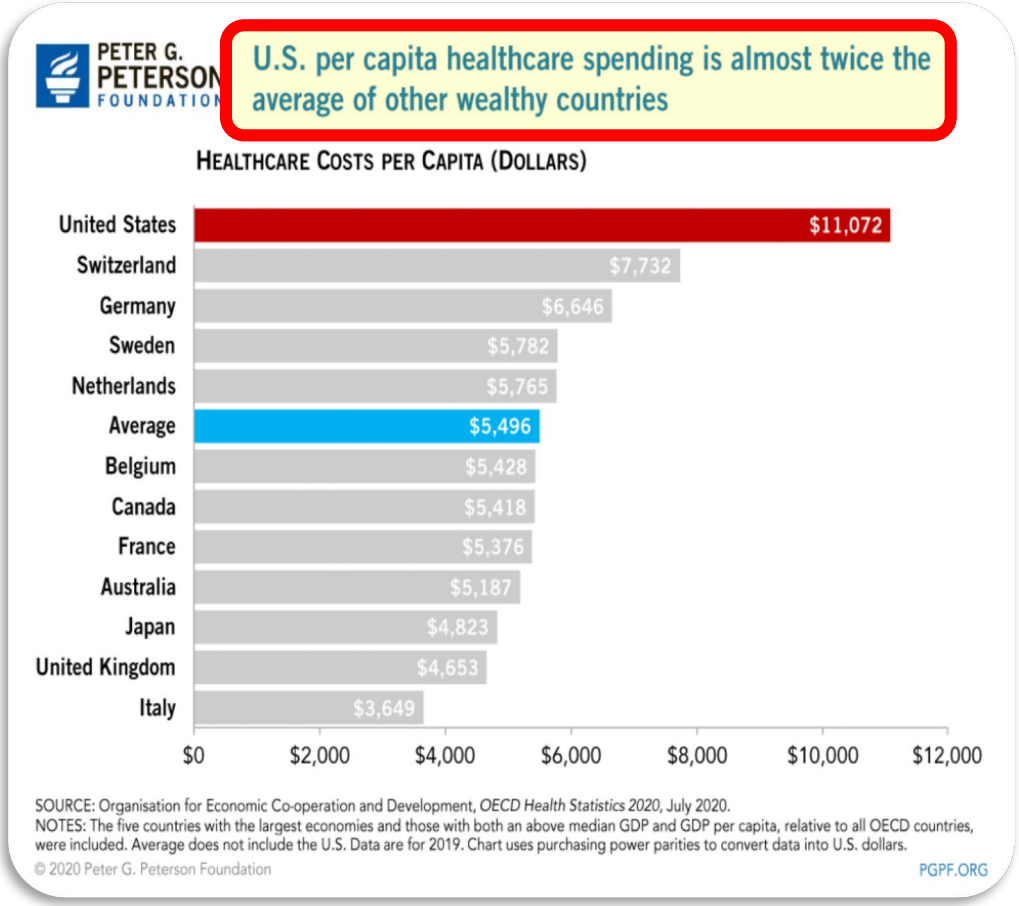
Early QI germination

College ambulance service:

- *Problem*: It was hard to restock an ambulance that had 200 different items, some of which were potentially life saving.
- *Solution*: Implemented equipment management system.

Medical school: QI roots expand

- We ordered many tests, cost and value was unknown.
- Asked questions about the system, affordability, quality, value, etc.
- Was directed to a summer healthcare economics course at the business school
- Realized I had an interest not just in providing care but also in designing the system around care
- Enrolled in the combined MD MBA program.
- My 2008 class graduated 4 MD MBA students.



Question the status quo. Strive to create value.

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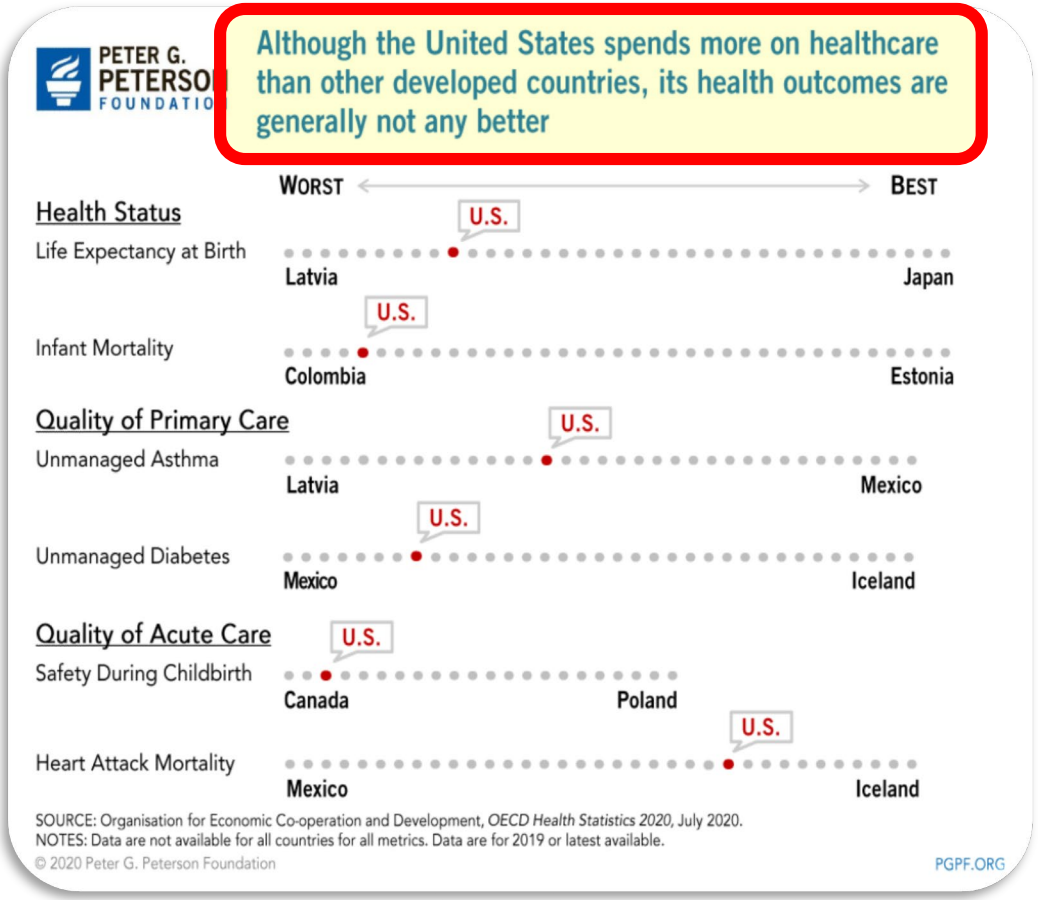

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QI leaves emerge

My first QI project, although I didn't know it at the time

- Find a mentor
- Evaluated the quality of reporting of a series of articles.
- Helped me understand the importance of being thorough in planning and reporting quality projects

RSNA'03
COMMUNICATION FOR BETTER PATIENT CARE

Abstract Archives of the RSNA, 2003

K16-1001

Application of Standards for Reporting of Diagnostic Accuracy (STARD) to the MR/US Literature on Benign Uterine Abnormalities: A Systematic Review

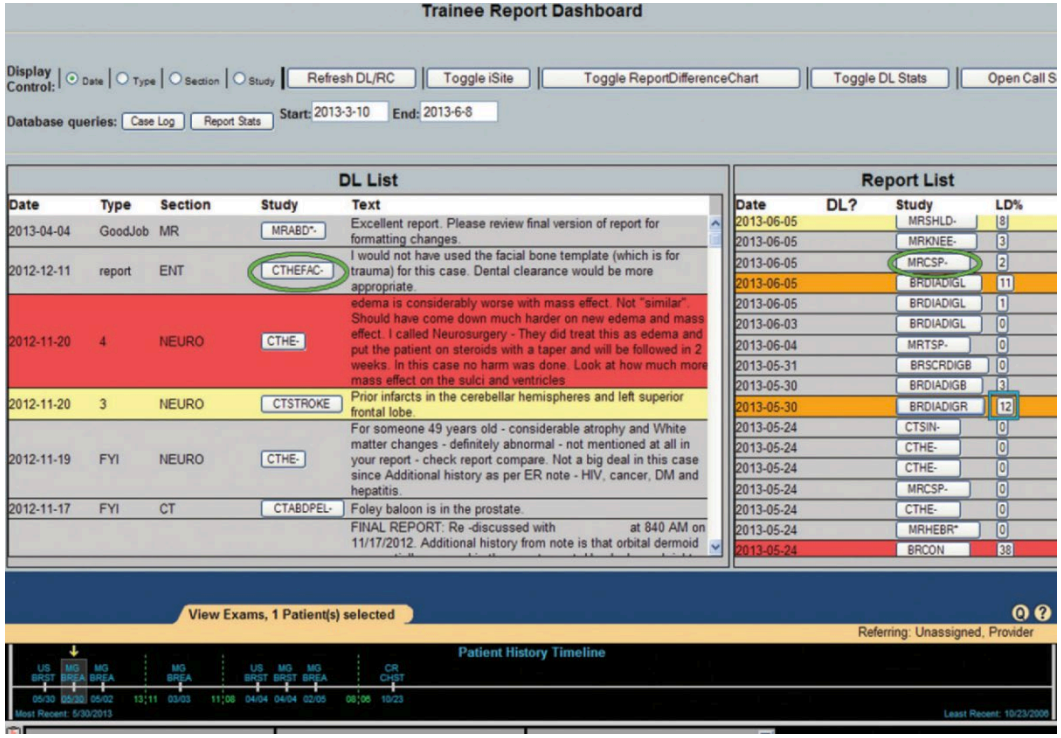
Scientific Papers

Presented on December 3, 2003
Presented as part of K16: Health Services, Policy and Research (Issues in Research Methodology)

Conclusion: **The series of articles reviewed is deficient in reporting items to assess their internal and external validity.** Resources spent yearly treating these patients may be misguided. Researchers should apply the STARD recommendations to improve the accuracy and completeness of reporting of studies of diagnostic accuracy.

Residency: QI flower buds

- Residency strengths: IT, education
- *Problems*: Trainees often didn't know their reports had been edited, didn't learn from those experiences, and other trainees were unable to learn as well.
- *Solution*: Created a system to visualize report changes, log discrepancies, and make them available to all trainees.



Focus on problems people care about. Learn IT. Leverage local resources. Solve problems.

Published: 29 September 2011

Radiology Report Comparator: A Novel Method to Augment Resident Education

Richard E. Sharpe Jr, David Surrey, Richard J. T. Gorniak, Levon Nazarian, Vijay M. Rao & Adam E. Flanders

Journal of Digital Imaging **25**, 330–336 (2012) | Cite this article

J Digit Imaging. 2013 Aug; 26(4): 678–682. PMCID: PMC3705016
Published online 2013 Feb 5. doi: 10.1007/s10278-013-9574-y PMID: 23381098

QRSE: a Novel Metric for the Evaluation of Trainee Radiologist Reporting Skills

David Surrey, Richard E. Sharpe, Jr.,[✉] Richard J. T. Gorniak, Levon N. Nazarian, Vijay M. Rao, and Adam E. Flanders

RadioGraphics
INFORMATICS 2105

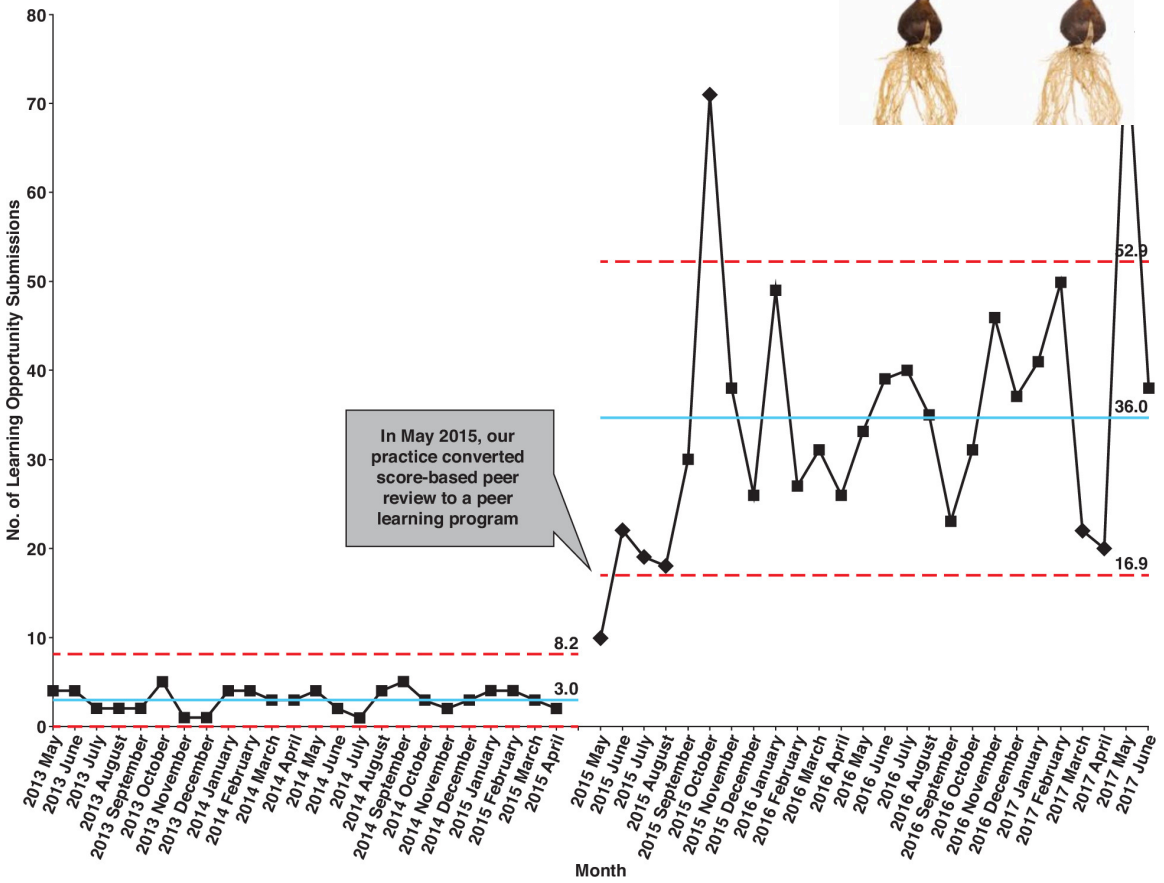
Trainee Report Dashboard: Tool for Enhancing Feedback to Radiology Trainees about Their Reports[1]

TEACHING POINTS

Richard J. T. Gorniak, MD • Adam E. Flanders, MD • Richard E. Sharpe, Jr, MD, MBA

QI flower grows: 1st attending position

- Started first attending position.
- Attended a peer review meeting uninvited. Wasn't asked to leave
- Kept suggesting changes to improve the practice and spread learnings
- 3 meetings later was asked to lead quality and peer review
- Created peer learning, a new transparent way of identifying QI opportunities, then using them to learn and improve the practice
- ACR has recently approved peer learning as an alternative to peer review



Choose a team that values improvement. Show up. Be brave. Think differently.

AJR

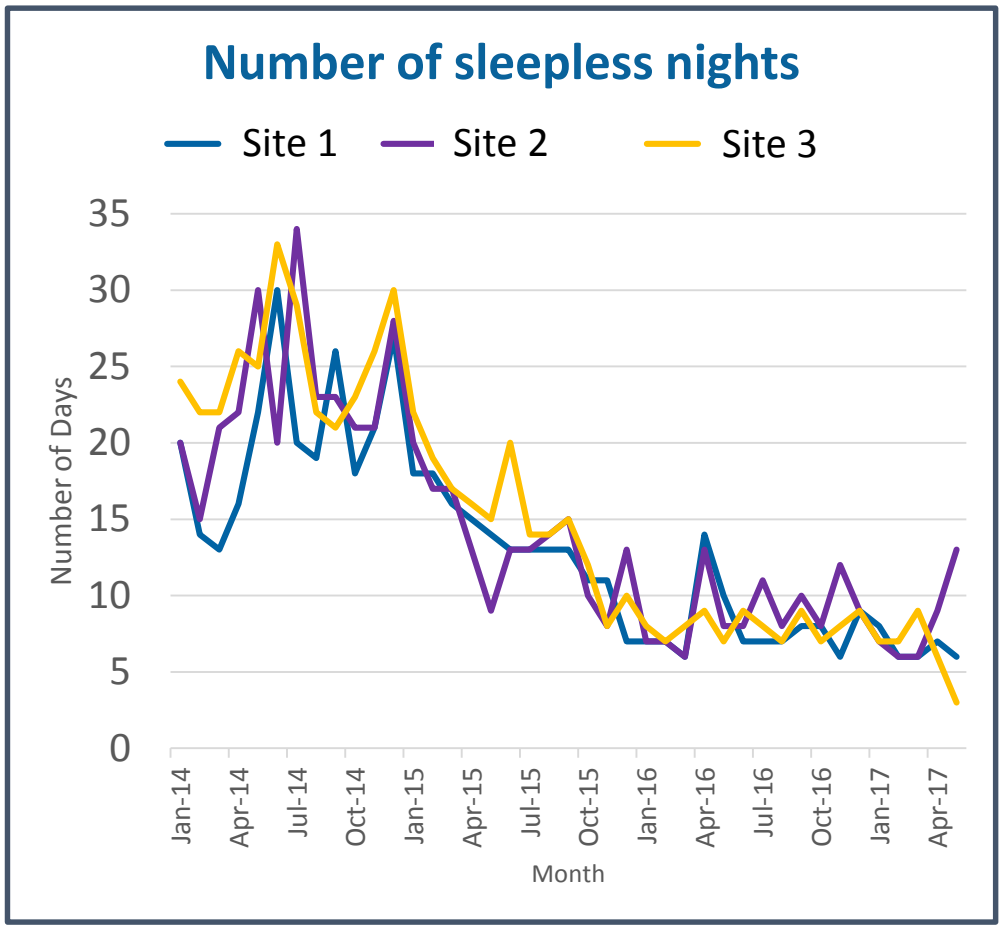
Implementation of a Peer Learning Program Replacing Score-Based Peer Review in a Multispecialty Integrated Practice

Richard E. Sharpe, Jr.[1]
Ryan I. Huffman
Robert G. Congdon
L. Alan Plunkett
Brian A. Tschumper
David T. Stewart
Eric K. Bode

QI flower grows: reduce sleepless nights

- Problem:
  - Most women spent > 1 month awaiting results of their evaluation for breast cancer.
- Solution:
  - Socialize the problem
  - Obtain data and create patient centered metric your team can relate to and wants to improve: # Sleepless nights.
  - Ideate improvements
  - Implement changes
  - Track gains
  - Repeat

Focus on the patient.



Align enterprise: QI flower matures

- Appointed Chair of the Kaiser Permanente Interregional Radiology Clinical Practice Group
- *Problem:*
  - Imaging care varied across the 9 states we operated. Some care must have been lower quality.
- *Solution:*
  - Created practice parameters to standardize management of common conditions.
  - Create electronic safety net to ensure appropriate follow up.

Align with organizational priorities. Standardize high quality care across the enterprise.

Suggestions to develop a QI career:

- **Learn!**
  - Read quality articles
  - Join quality listserves: LCIR google group
  - Take courses at radiology meetings, in person/online
  - Earn a certificate (ACR Radiology Leadership Institute, RSNA Advanced Level Quality)
  - Earn a degree: MBA, MPH, MMM, MSc, others
- **Practice!**
  - Join a team that values practice improvement
  - Join a quality project
  - Identify a quality improvement opportunity, recruit a team to improve it!
  - Formal vs less formal approaches
- **Align!**
  - Align your improvement efforts with your organization's goals and priorities
  - Team will better understand the impetus for change.
  - Resources will be more available.
  - Quantify current state, document gains as improvement is implemented.

Summary: Your patients need you. Improve systems to provide better care.

- Show up
- Find a mentor
- Be brave
- Think differently
- Learn IT
- Question the status quo
- Create value

- Focus on problems people care about
- Leverage local resources
- Create patient centered metrics that your team can relate to and wants to improve
- Align with organizational priorities
- Standardize high quality care across the enterprise.

How I started in quality improvement

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Heavy lift projects: Flower maturing

Create care value streams across multiple disciplines to ensure consistent high quality care.

- Problem:
  - Some imaging studies need follow up, yet those studies are not always performed
- Solution:
  - Bring together leaders in multiple specialties, radiologists, QI experts, data analysts, software engineers, nursing staff to create an electronic safety net.