Allina Health

The "ABC"s of Telehealth Quality Improvement Program Initiation

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Disclosure

Debbi Lindgren-Clendenen (Deb LC) nor any immediate family member has any financial relationship with, or interest in, any commercial interest connected with this presentation.

The material in this CE activity will not include discussion of unapproved or investigational uses of products or devices.

Abstract Submitted

Providing high quality patient care, such as cardiology to an older population has typically required a "brick and mortar" set up or a clinic building with patients presenting for "in-person" encounters involving face-to-face care with the cardiology provider. In 2014, our cardiology practice was faced with the overwhelming need to expand access to care to our rural patients in a timely manner using technology. Many leaders doubted that this patient population would embrace the use of technology, not only for the "in-person" visit replacement but also evaluating cardiac status.

Quality program metrics evolved with this program; starting with a simple paper patient survey proposal to capture patient satisfaction with change / use of technology and steadily evolving to use of designated metric(s) captured and reviewed to provide guidance to telehealth program direction.

This talk will discuss how starting simple with the patient in mind can pave the way for strong and solid foundation in telemedicine quality improvement.

OBJECTIVES:

At the end of this presentation, the attendee will be able to:

- Identify terms used frequently in quality improvement and telemedicine and determine how each might impact your program initiation.
- Identify a quality framework and evaluate your current/proposed telehealth program specifically for quality-driven metrics and outcomes.
- Define and differentiate four tenets integral to an evolving telehealth program and its QI environment.
- Using a case study approach, test these essential “ABC” concepts for telehealth QI program.

ASSUMPTIONS

- View thru the lens of the players; provider, program co-leader, quality “geek”, and patient advocate
- Telehealth is not a new type of healthcare, it is a method of delivering existing models of healthcare.
- Focus will be on the outpatient setting – inpatient is a whole other talk!
- KISS method
- Use of a framework to lay the foundation is a good thing!

MHI Slides Here

Background



the 1970s - viable healthcare delivery method
technology,
reimbursement,
acceptance of telemedicine
What is quality?
Clinical metrics versus quality?
Basic building blocks: defining, measuring and reporting
THEN: assessing, modifying and re-evaluating
REPEAT



TERMS

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“Terms”

- **Asynchronous or "Store and Forward":** Transfer of data from one site to another through the use of a camera or similar device that records (stores) an image that is sent (forwarded) via telecommunication to another site for consultation. Asynchronous or "store and forward" applications would not be considered telemedicine but may be utilized to deliver services. [2]
- **Distant or Hub site:** Site at which the physician or other licensed practitioner delivering the service is located at the time the service is provided via telecommunications system. [2]
- **Live (synchronous) videoconferencing**: A two-way audiovisual link between a patient and a care provider. [1]
- **Mobile health (mHealth):** Health care and public health information provided through mobile devices. The information may include general educational information, targeted texts, and notifications about disease outbreaks. [1]

1. Health Resources and Services Administration (HRSA) accessed 29-FEB-2020; https://www.healthit.gov/topic/health-it-initiatives/telemedicine-and-telehealth
2. Center for Medicare and Medicaid Services (CMS) accessed 29-FEB-2020; https://www.medicaid.gov/medicaid/benefits/telemedicine/index.html
3. American Telemedicine Association (ATA) accessed 29-FEB-2020 https://www.americantelemed.org/resource/why-telemedicine/

“Terms” (continued)

- **Originating or Spoke site:** Location of the Medicaid patient at the time the service being furnished via a telecommunications system occurs. Telepresenters may be needed to facilitate the delivery of this service.[2]
- **Parity:** Thirty-two states and the District of Columbia have parity laws that require private insurers to cover telehealth the same as in-person services.[3]
- **Remote patient monitoring (RPM):** The use of connected electronic tools to record personal health and medical data in one location for review by a provider in another location, usually at a different time.[1]
- **Store-and-forward (asynchronous) videoconferencing:** Transmission of a recorded health history to a health practitioner, usually a specialist.[1]

1. Health Resources and Services Administration (HRSA) accessed 29-FEB-2020; https://www.healthit.gov/topic/health-it-initiatives/telemedicine-and-telehealth
2. Center for Medicare and Medicaid Services (CMS) accessed 29-FEB-2020; https://www.medicaid.gov/medicaid/benefits/telemedicine/index.html
3. American Telemedicine Association (ATA) accessed 29-FEB-2020 https://www.americantelemed.org/resource/why-telemedicine/

“Terms”(continued)

- **Telehealth:** The use of electronic information and telecommunications technologies to support and promote long distance clinical healthcare, patient and professional health-related education, public health and health administration. Technologies include videoconferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications.[1]
- **Telemedicine:** Remote clinical services; For purposes of Medicaid, telemedicine seeks to improve a patient's health by permitting two-way, real time interactive communication between the patient, and the physician or practitioner at the distant site. This electronic communication means the use of interactive telecommunications equipment that includes, at a minimum, audio and video equipment. Telemedicine is viewed as a cost-effective alternative to the more traditional face-to-face way of providing medical care (e.g., face-to-face consultations or examinations between provider and patient) that states can choose to cover under Medicaid. This definition is modeled on Medicare's definition of telehealth services (42 CFR 410.78). Note that the federal Medicaid statute does not recognize telemedicine as a distinct service.[2]

1. Health Resources and Services Administration (HRSA) accessed 29-FEB-2020; https://www.healthit.gov/topic/health-it-initiatives/telemedicine-and-telehealth
2. Center for Medicare and Medicaid Services (CMS) accessed 29-FEB-2020; https://www.medicaid.gov/medicaid/benefits/telemedicine/index.html
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Quality Improvement Program - Basics

- FDA requirements for CAPA are defined in 21 CFR Part 820.100 Corrective and Preventive Action:
- *(a) Each manufacturer shall establish and maintain procedures for implementing corrective and preventive action. The procedures shall include requirements for:*
- *(1) Analyzing processes, work operations, concessions, quality audit reports, quality records, service records, complaints, returned product, and other sources of quality data to identify existing and potential causes of nonconforming product, or other quality problems. Appropriate statistical methodology shall be employed where necessary to detect recurring quality problems;*
- *(2) Investigating the cause of nonconformities relating to product, processes, and the quality system;*
- *(3) Identifying the action(s) needed to correct and prevent recurrence of nonconforming product and other quality problems;*
- *(4) Verifying or validating the corrective and preventive action to ensure that such action is effective and does not adversely affect the finished device;*
- *(5) Implementing and recording changes in methods and procedures needed to correct and prevent identified quality problems;*
- *(6) Ensuring that information related to quality problems or nonconforming product is disseminated to those directly responsible for assuring the quality of such product or the prevention of such problems; and*
- *(7) Submitting relevant information on identified quality problems, as well as corrective and preventive actions, for management review.*
- *(b) All activities required under this section, and their results, shall be documented.*
- Further, in the FDA QSIT guide, they describe the purpose of CAPA as:
- *"The purpose of the corrective and preventive action subsystem is to collect information, analyze information, identify and investigate product and quality problems, and take appropriate and effective corrective and/or preventive action to prevent their recurrence. Verifying or validating corrective and preventive actions, communicating corrective and preventive action activities to responsible people, providing relevant information for management review, and documenting these activities are essential in dealing effectively with product and quality problems, preventing their recurrence, and preventing or minimizing device failures.* **One of the most important quality system elements is the corrective and preventive action subsystem.***"*

Quality Improvement (QI) Terms

- Adverse Event: is any undesirable experience associated with the use of a medical product in a patient. The event is serious and should be reported to FDA when the patient outcome is: death, life-threatening, hospitalization, disability/perm damage.
- Complaint: expression of grief, pain, or dissatisfaction : something that is the cause or subject of protest or outcry.
- Corrective and Action Plan (CAPA): Action taken to eliminate the cause of the existing non-conformity to prevent its recurrence.

Six SIGMA, Websters Dictionary

Telehealth Adoption vs Application

- Adoption (New Program)
  - Number of app downloads
  - Number of providers trained / credentialed
  - Number of telehealth versus in-person visits
  - Connectivity Rates
  - Number of telehealth “visits” completed
- Application (Established Program)
  - Time to first appt
  - Patient Satisfaction
  - Provider Satisfaction
  - Time to Downstream Revenue
  - “Pt Seen” rate

FRAMING THE TELEHEALTH QI PROGRAM

Triple Aim versus Quadruple Aim

Triple Aim [1]	"Quadruple" Aim
Improve individuals experience of care	Improving the patient experience of care
Improve the health of populations	Improving the health of populations
Reducing the per capita cost of care	Reducing the per capita cost of health care
	Health Equity/Readiness/Improving the experience of providing care

E STEEP (Effective, Safe, Timely, Equitable, Efficient, Patient-centered)[2]

1. Institute for Healthcare Improvement. Berwick et al; 2008
2. Institute of Medicine, 2001 "Six Aims for the HealthCare System; Crossing the Quality Chasm"

Other - quality process/framework

- Keep It Simple (KISS) i.e. compare against in-person visits
- Checklists – foley.com/telemedicine
- On-demand metrics (numbers, CC, medication regimen, etc.)
- Patchwork approach
- MIPS framework - IA
- Natl Committee on Quality Assurance (NCQA)
- National Quality Forum (N.Q.F.)

“Adoption (KISS) framework”

The basics – only relevant to telemedicine/telehealth service offered.

- Number of Telehealth Visits
- Number of Technology interruptions
- Safety events
- wait time
- Documentation/billing audits (GT modifier)

National Quality Forum (NQF) measures

- 2017 NQF report - specific to Telehealth
- Four domains
  - Access to Care
  - Financial impact/cost
  - Experience
  - Effectiveness

NQF

Domain	Subdomains
Access to Care	Access to pt/family, and/or caregiver Access for care team Access for information
Financial Impact/Cost	Financial impact to pt/family, and/or caregiver Financial impact to care team Financial impact to healthsystem or payer Financial impact to society
Experience	pt/family, and/or caregiver experience Care team member experience Community experience
Effectiveness	System effectiveness Clinical effectiveness Operational effectiveness Technical Effectiveness

Source: Adapted from the National Quality Forum: Creating a Framework to Support Measure Development for Telehealth 2017: https://www.qualityforum.org/Publications/2017/08/Creating-a-Framework-to-Support-Measure-Development-for-Telehealth.aspx



Access to Care





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Comparison Shopping-A2C

- In-person appointments versus telemedicine appointments
  - wait times - (time to first appt availability) overall versus consults versus f/u
  - Cancellations
  - No-shows
- Underserved populations – access rates by demographics (insurance status, race/ethnicity, educational status, age, geographic distance, socioeconomic status
- Flexible service hours – specialty care access outside of urban centers
- Not enough providers – pt access to chosen or preferred provider
- Other?



Financial Impact/Cost



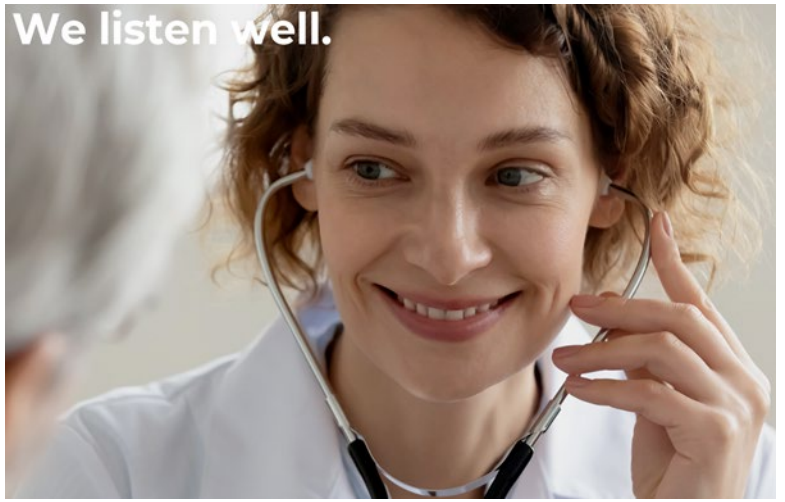
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Comparison Shopping – FI/C

- In-person appointments versus telemedicine appointments
  - wait times - (left without being seen –ED / urgi care)
  - Reduced travel costs / windshield time pt versus provider
  - Staffing ratios
  - Clinical Office sq ft cost versus Telehealth space cost
  - Procedure yield - downstream revenue
  - Cost of care per DRG or episode



Experience



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Comparison Shopping – X-Factor

- In-person appointments versus telemedicine appointments - Patient Satisfaction Survey
  - Recommend the service?
  - Positive/neutral/Less than desired - benchmark (pre/post)
    - Benchmark against their own perceptions
    - Pre-Covid
    - During Covid
  - Technical success
    - Patient
    - Provider
    - Peripherals
    - Bumpy versus smooth
  - Number of minutes “waiting to be seen”





Effectiveness



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Comparison Shopping – “EF”-Factor

- In-person appointments versus telemedicine appointments - Disease Specific quality metrics (Readmission rates)
  - Medication management – wearables and peripherals
  - Post “Event” visits
    - Post hospitalization
    - Post procedural f/u
  - Blood Pressure Clinic
  - Bridge Clinic

WHY DO THIS?

Moving from Adoption to Application…

- Organizational goals for telehealth – What are they?
- Quality metrics for telehealth – What are they and how do we collect them?
- Gap analysis in metric gathering –What are we missing and how do we capture it?
- Data Analysis and dashboards – make decisions operationally off of this analysis
- Standardize definitions so we can then benchmark – departmentally, organizationally and systematically.

By using telehealth, what improves? What deteriorates? What stays the same?

- wait times?
- Underserved populations
- Flexible service hours
- Social inclusion/distancing
- Not enough providers
- Other?

CASE STUDY

Case Study – "Opportunity or Necessity?"

- Set up a telehealth program for an "entrepreneurial-focused" specialty service
- Current patient wait time is increasing to secure a consult appointment
- Leader is a senior partner, loves technology
- Other providers have expressed mild interest, others not so much
- No contract for technology
- Reimbursement – not sure, not worried
- Some initial funding secured
- Wants to start tomorrow…



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Case Study - Current Practice Setting

Well respected, inner city specialty clinic with outreach services.

Sends many physicians out to rotating clinic sites for consult visits.

Patient wait time can be up to 6 weeks

Traditional professional culture

MHI Teleheart Program
“Dip a Toe into the QI world”

Patient Survey - Then

TeleHealth Patient Pre-Visit Survey

Name: _____(optional) Male Female (optional)
Date: _____(optional) Age: _____ (optional)

First Telecardiology Visit Yes No

Circle the answer that best fits for Questions 1, 2 and 3

1. The type of provider I am seeing today is :

   Cardiology Vascular Surgery Stroke Rehabilitation Cancer Genetic Counseling Mental Health

2. I think the quality of medical care using the telehealth system will be:

   better than in-person same as in person not as good as in-person

3. Given the choice of seeing the provider in person or using the telehealth system, I would prefer:

   Telehealth system no preference in person

Mark the box with an (x) that best fits your answer for Questions 4 - 9

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4. I believe my medical needs will be met during my telehealth session					
5. Using the telehealth system made it easier for me to see the provider today					
6. I believe having a clinic person (medical assistant, nurse, nurse practitioner) in the room with me during my telehealth session will help me feel that I have a team of people contributing to my treatment					
7. I will be comfortable with the audio and video equipment used during the telehealth visit					
8. I believe I will feel at ease using the telehealth system to see the provider.					
9. I do not have privacy and confidentiality worries about using the telehealth system.					

10. I believe I would recommend Allina TeleHealth visits to others: Yes No

Additional Comments:

_____

_____

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TeleHealth Patient Post-Visit Survey

Name: _____(optional) Male Female (optional)
Date: _____(optional) Age: _____ (optional)

First Telecardiology Visit Yes No

Circle the answer that best fits for Questions 1, 2 and 3

1. The type of provider I saw today was :

   Cardiology Vascular Surgery Stroke Rehabilitation Cancer Genetic Counseling Mental Health

2. I think the quality of medical care using the telehealth system was:

   better than in-person same as in person not as good as in-person

3. Given the choice of seeing the provider in person or using the telehealth system, I prefer:

   telehealth system no preference in person

Mark the box with an (x) that best fits your answer for Questions 4 – 9.

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4. My medical needs were met during my telehealth session.					
5. Using the Telehealth system has made it easier for me to see the provider now and in the future.					
6. Having a clinic person (medical assistant, nurse, or nurse practitioner) in the room with me during my telehealth session made me feel that I have a team of people contributing to my treatment.					
7. I was comfortable with the audio and video equipment used during the telehealth visit.					
8. I felt at ease using the telehealth system to see the provider.					
9. I was not worried about my privacy and confidentiality when using the telehealth system.					

10. I would recommend Allina TeleHealth visits to others: Yes No

Additional Comments:

_____

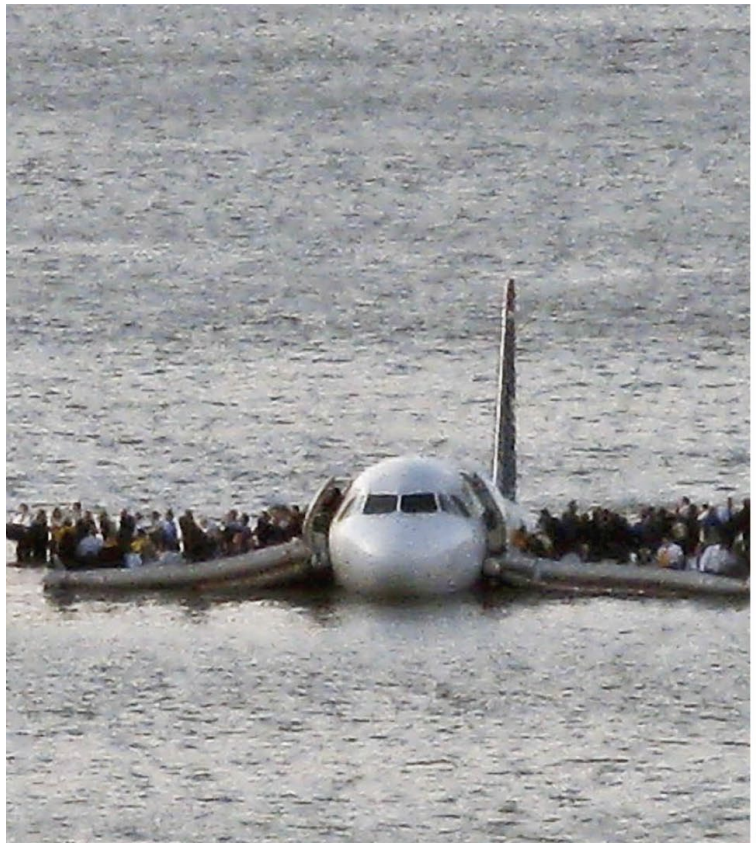
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Electronic Survey Slides here - Proprietary

Summary

Adopter or Applier?





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What is your Framework?

NQF
KISS Method
Clinical Metrics
Telehealth Specific
Comparators



Traditional CQI is ok

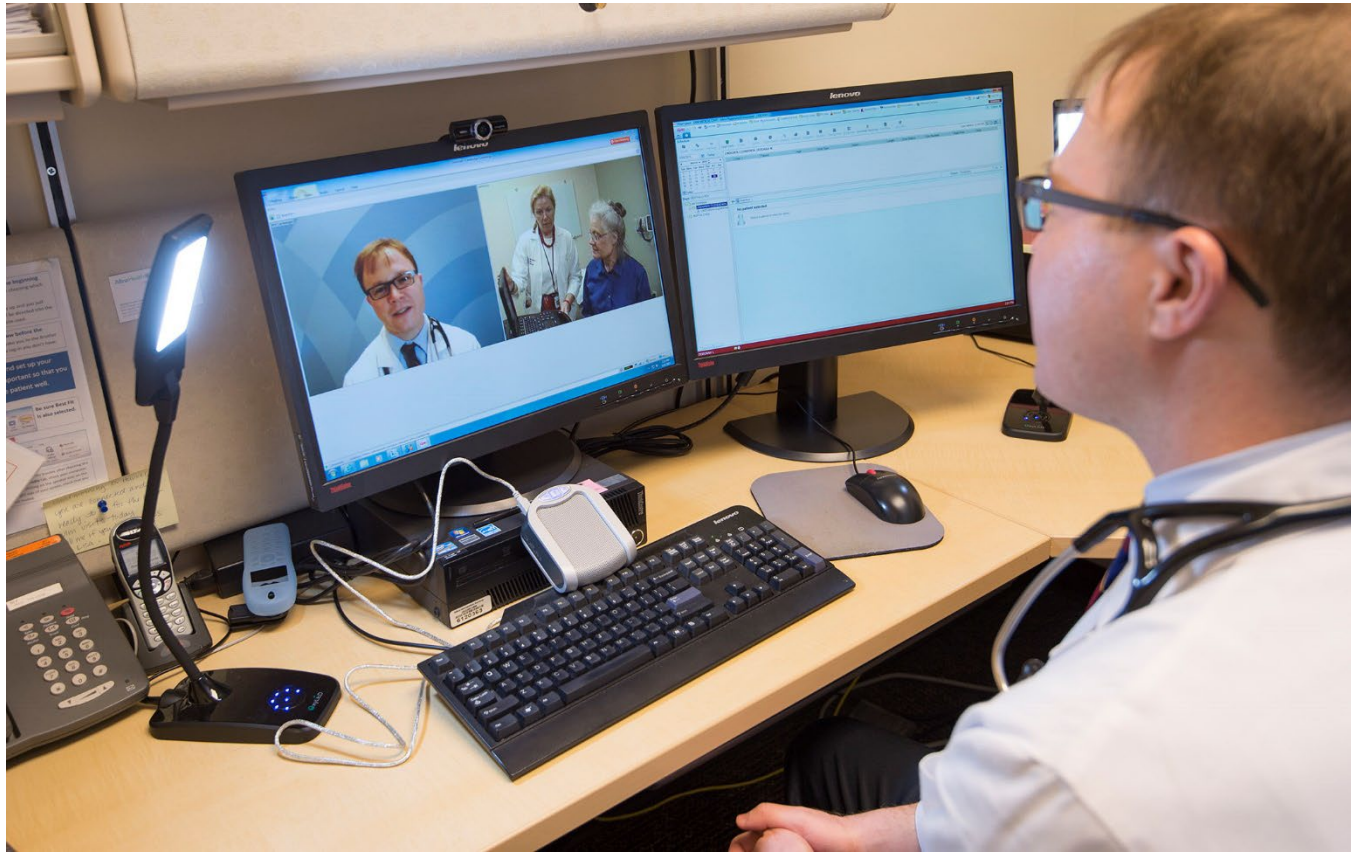
Initial / Get Started
Define
Measure
Report
Benchmark/ Compare
Assess
Modify
Re-Evaluate

REPEAT



“Change is 96.4% of the time for the better”

Remember... Telehealth is not a new type of healthcare, it is a method of delivering existing models of healthcare.



Personal photo - DLC

References

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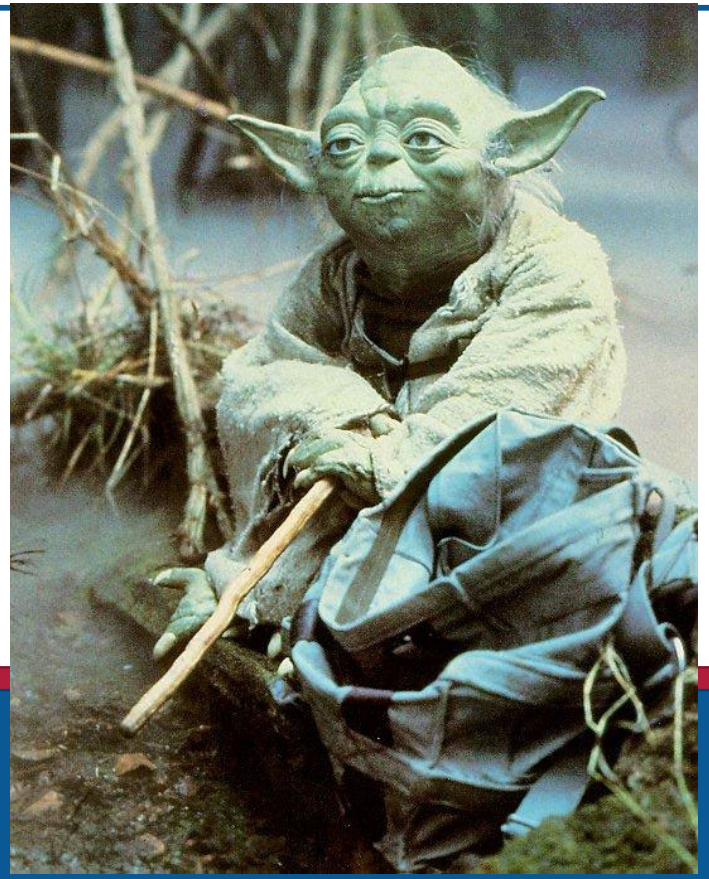
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- Institute of Medicine, 2001 “Six Aims for the HealthCare System; Crossing the Quality Chasm”
- National Committee on Quality Assurance https://www.ncqa.org
- Public Health Institute/Center for Connected Health Policy 2020 https://www.cchpca.org
- FDA requirements for CAPA are defined in 21 CFR Part 820.100 Corrective and Preventive Action:

Questions?

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THANK YOU FOR COMING!