Quality in Interventional Radiology

- There is no I in TEAM!!!

Michael Miller, Jr., MD

Quality

- Noun
  - An essential or distinctive characteristic, property, or attribute
  - Character or nature, as belonging to or distinguishing a thing
  - Character with respect to fineness, or grade of excellence
  - High grade; superiority; excellence
  - a personality or character trait
  - native excellence or superiority
  - An accomplishment or attainment

http://dictionary.reference.com/browse/quality

Quality

- Adjective
  - of or having superior quality
  - Producing or providing products or services of high quality or merit
  - of or occupying high social status
  - marked by a concentrated expenditure of involvement, concern or commitment

http://dictionary.reference.com/browse/quality

Types of Errors

- Diagnostic
- Error or delay in diagnosis
- Failure to employ indicated tests
- Use of outmoded tests or therapy
- Failure to act on results of monitoring or testing

- Treatment
- Error in the performance of an operation, procedure, or test
- Error in administering the treatment
- Error in the dose or method of using a drug Avoidable delay in treatment or in responding to an abnormal test
- Inappropriate (not indicated) care

- Preventive
- Failure to provide prophylactic treatment
- Inadequate monitoring or follow-up of treatment

- Other
- Failure of communication
- Equipment failure
- Other system failure

SOURCE: Leape, Lucian; Lawthers, Ann G.; Brennan, Troyen A., et al. Preventing Medical Injury. Qual Rev Bull. 19(5):144–149, 1993.

Adverse Events in Hospitals: National Incidence Among Medicare Beneficiaries:

Estimated 13.5% of hospitalized Medicare beneficiaries

↓

Adverse events during their hospital stays

(≈134,000 for October 2008)

26% were related to surgery or other procedures

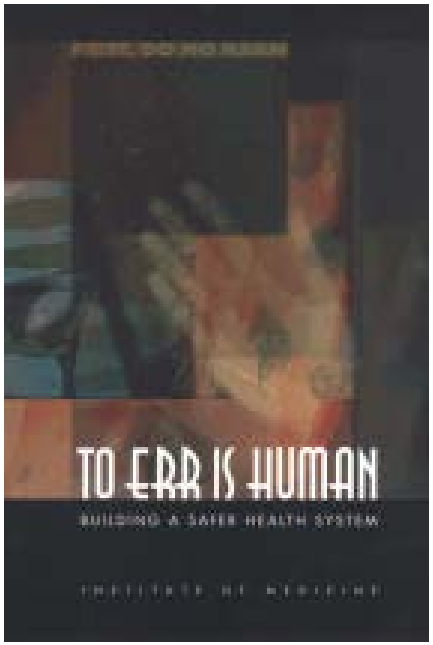
Dept. of Health and Human Services, Office of the Inspector General. Nov 2010

“To Err is Human:
Building a Safer Health System”
Institute of Medicine; September 1999

Medical errors: the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim.

These are system errors, not individual

We cannot assure quality



Adverse Events in Hospitals: National Incidence Among Medicare Beneficiaries:

44% of adverse and temporary harm events

↓

clearly or likely preventable

Hospital care associated with adverse/ temporary harm events estimated $324 million in October 2008 ($4.4 billion/year)

Dept. of Health and Human Services, Office of the Inspector General. Nov 2010

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AVIR
SIR 2015
February 28–March 5 \ Atlanta, Ga

Overview

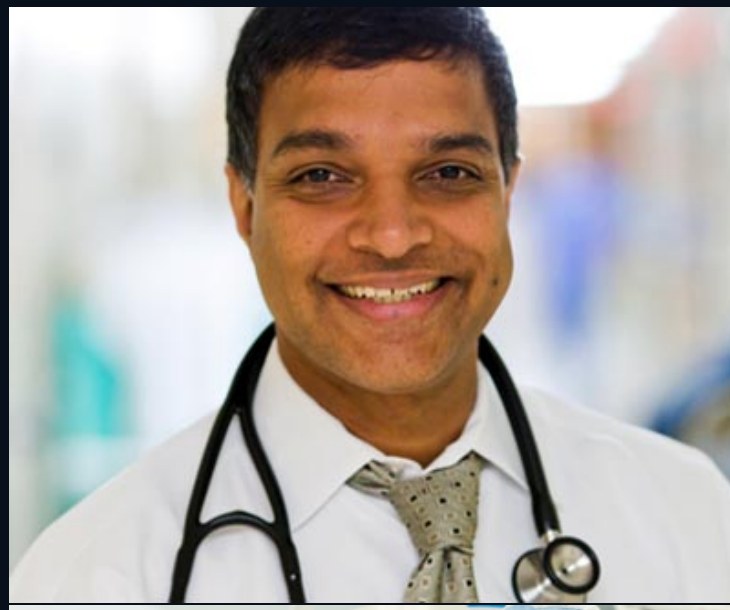
- What is Quality? "Beauty is in the Eye of the Beholder"
  - Look at Different perspectives
  - Can we find a common ground?
- Current Quality Measures
  - CONFORM AND COMPLY!!!!
  - Limits and stressors of current system
- Redefining Quality
  - Welcome to the 80's

Quality

- Administration Perspective
  - Cost
  - Charge Capture
  - Utilization

Quality

- Physician Perspective
  - PQRS
  - M+M
  - EMR
  - Radiation Dose
  - Reimbursement



Quality

- Patient Perspective
  - Survive
  - Mistake
  - Pain
  - Understand

Quality

- Staff Perspective
  - EMR
  - Reporting Standards
  - Compliance
  - Patient Satisfaction
  - Check list

http://www.ultrasoundschoolsinfo.com/vascular-interventional-sonography/

Common Ground

- Patient Centered
- Time
- Radiation
- Cost

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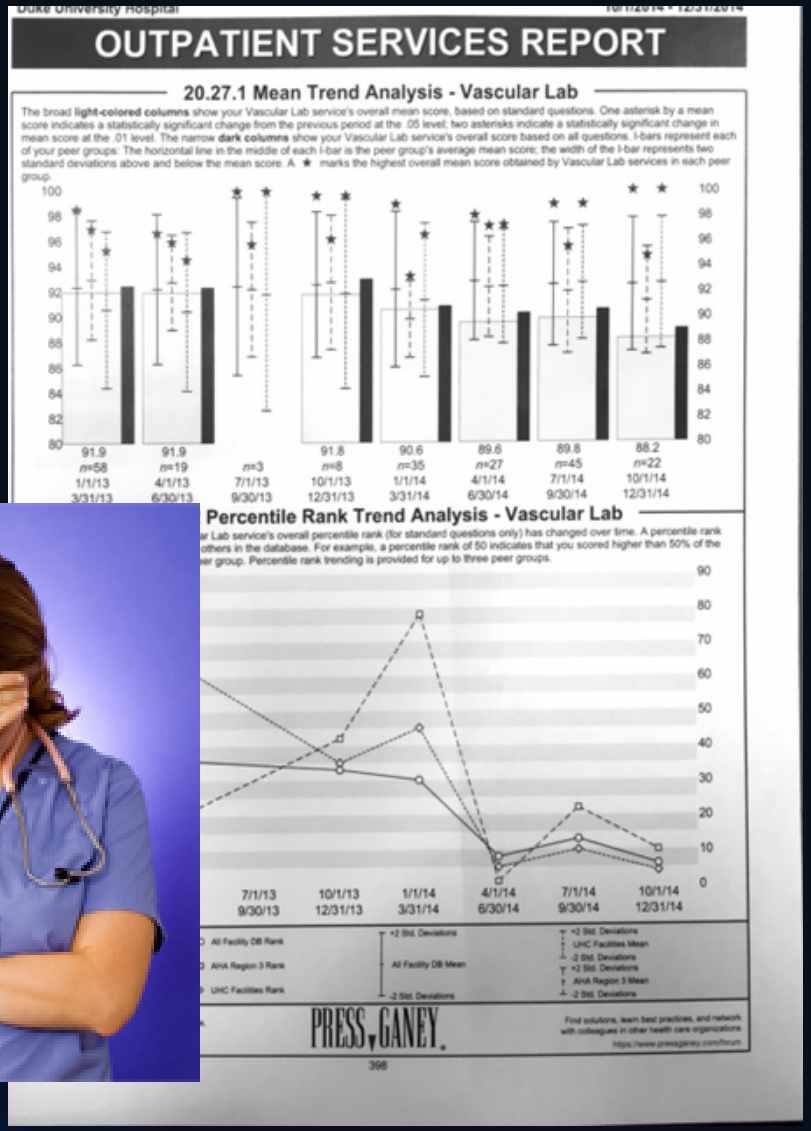
Current State

- EMR
- Press Ganey
- Self Reporting
- Sentinel Event



Current State

- Problem
  - Static
  - Conform
  - Confrontational
- Reality
- Task Oriented

Guidelines for Establishing a Quality Improvement Program in Interventional Radiology

Joseph R. Steele, MD, Michael J. Wallace, MD, David M. Hovsepian, MD, Brent C. James, MD, MStat, Sanjoy Kundu, MD, Donald L. Miller, MD, Steven C. Rose, MD, David Sacks, MD, Samir S. Shah, MD, and John F. Cardella, MD

J Vasc Interv Radiol 2010; 21:617–625

Abbreviations: CQI = continuous quality improvement, PDSA = plan do study act, QA = quality assurance

Quality

Physician	Avg Cost	Avg Room Time(M)	Avg Fluoro Time(S)	Avg Fluoro Dose
1	$2,066.01	141	1306	386096
2	$2,758.90	162	1535	644892
3	$2,327.84	167	1568	520443

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Foundation

Kaizen (改善, Japanese for "improvement")

Japanese philosophy that *focuses on continuous improvement throughout all aspects of life*.

When applied to the workplace, Kaizen activities continually improve all functions of a business, from manufacturing to management and from the CEO to the assembly line workers.

Imai, Masaaki (1986). *Kaizen: The Key to Japan's Competitive Success*. New York, NY, USA: Random House.

Foundation

"We are what we repeatedly do; excellence is not an act, but a habit"

- *Aristotle*

- "Work smarter – not harder"
- "Every deficit is a treasure"

Definition of Quality

Meeting the needs and exceeding the expectations of those we serve

It is NOT…

- Yelling at people to work harder, faster, or safer
- Creating order sets or protocols and then failing to monitor their use or effect
- Traditional Quality Assurance
- Research

The Co-morbidities of Poor Safety Culture

Horrible Handoffs
Toxic Work Environments
Caregiver Burnout/Depression
Caregiver Self Injury
Disruptive Behavior
Staff Turnover
Patient Harm
Defensive and Distrustful Staff
Repeat Sentinel Events
Innovation Fatigue
Loss of Sense of Purpose/Meaning

Principles

#1 Improvement Requires Change

- Every system is perfectly designed to achieve exactly the results it gets.
- Change is not just doing something different, but engineering something different.

#2 Less is more

- Must not destroy productivity.
- Keep it simple.

#3 Communication

- Identify Stakeholders
- Open Conversation (Learn first, Comment third)

The Co-morbidities of Good Safety Culture

Non-negotiable respect for every person, in every interaction, every day

Staff surface solutions, rather than problems

Autonomy over responsibilities

Mastery of skills

Purpose: “this is my calling”

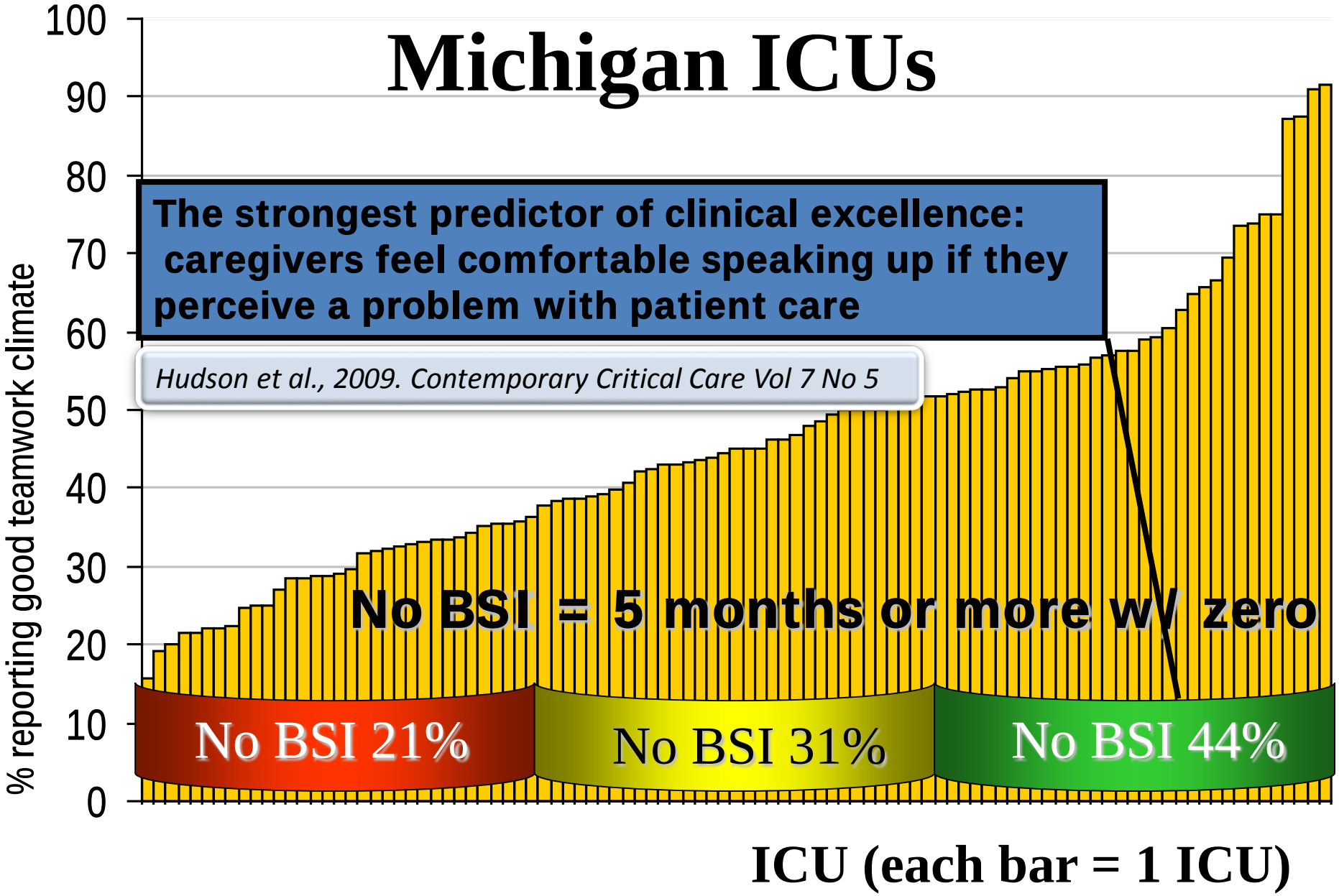
Well rested healthcare workers

Creativity and Innovation flourish

Resilience and self-care is the norm

Trust in leadership, colleagues, and the “system”

Teamwork Climate Across Michigan ICUs



Herd Immunity≥60%

When ≥ 60% report good teamwork or safety norms, there is a significant DECREASE in bad outcomes

Safety Culture Drill Down

- If low on teamwork – what pulled the score down?
  - Difficulty Speaking Up
  - Breakdowns in Interdisciplinary Care Coordination
  - Difficulty Resolving Conflicts
  - Difficulty Asking Questions
- If low on safety norms – what pulled the score down?
  - Lack of trust
  - Lack of feedback
  - Lack of engagement

Mindfully Learning from Defects:

- Monthly (to be sustainable)
- Hybrid of RCA and Debriefing for “less than Sentinel” events
  - Structure keeps glitches on the radar for improvement
- Local ownership for quality
- Improve patient safety norms:
  - Learning from errors of others
  - Encouraged to participate in patient safety
  - Know the channels to direct questions
- Reliability through resilience, not at the expense of it

Compelling Reasons

- Why develop a culture of quality improvement within your practice?
  - We're not as good as we think we are…
    - $2.4 trillion spent on healthcare with quality worse than developing countries with lower spending
    - Gaps in care
      - Care should be safe, timely, effective, efficient, equitable & patient-centered (STEEEP)
  - Consumers demand:
    - Demonstrated high quality
    - Timely access
    - Convenience
    - Low cost

Especially within the walk-in, episodic, urgent care setting…

Overcoming the Barriers - Leadership

- Leadership
  - What providers' want
    - Help people
    - Respect
    - Autonomy
    - Financial rewards
    - Recognition
  - Provider's role is essential
    - Key decision maker
    - Viewed as leaders by patients, staff and peers.
  - Providers are:
    - Educated – give them definitions
    - Scientists – give them data
    - Proud & Competitive – give them peer information
    - Results oriented – give them goals

Model for Improvement

PDSA

Plan Do Study Act

PDSA →PDSA → PDSA → PDSA→ PDSA → PDSA

Improve incrementally. Learn through action.

Test your changes.

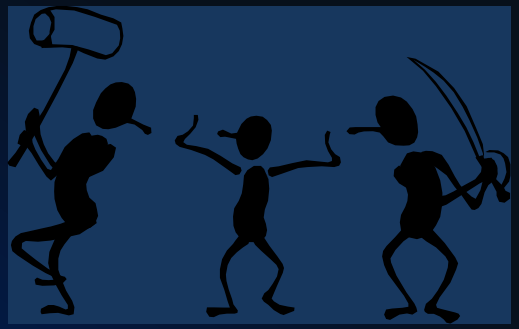
Assess their effect.

Then re-work the changes and do it again…and again…

Stages of Working with Data

- Deny

- Ignore



- Shoot the Messenger

- Accept and Use

Engineering Change

What do we want to achieve?

What changes will drive our progress?

How will we measure our progress?

How should we modify our latest changes?

i from: ***The Foundation of Improvement*** by Thomas W. Nolan *et. al*

Culture – Communication and Transparency

THE BERYL INSTITUTE

Patient Experience

The sum of all interactions, shaped by an organization's culture, that influence patient perceptions across the continuum of care.

The Beryl Institute

Why CG CAHPS?

Clinician & Group

Consumer

Assessment of

Healthcare

Providers and

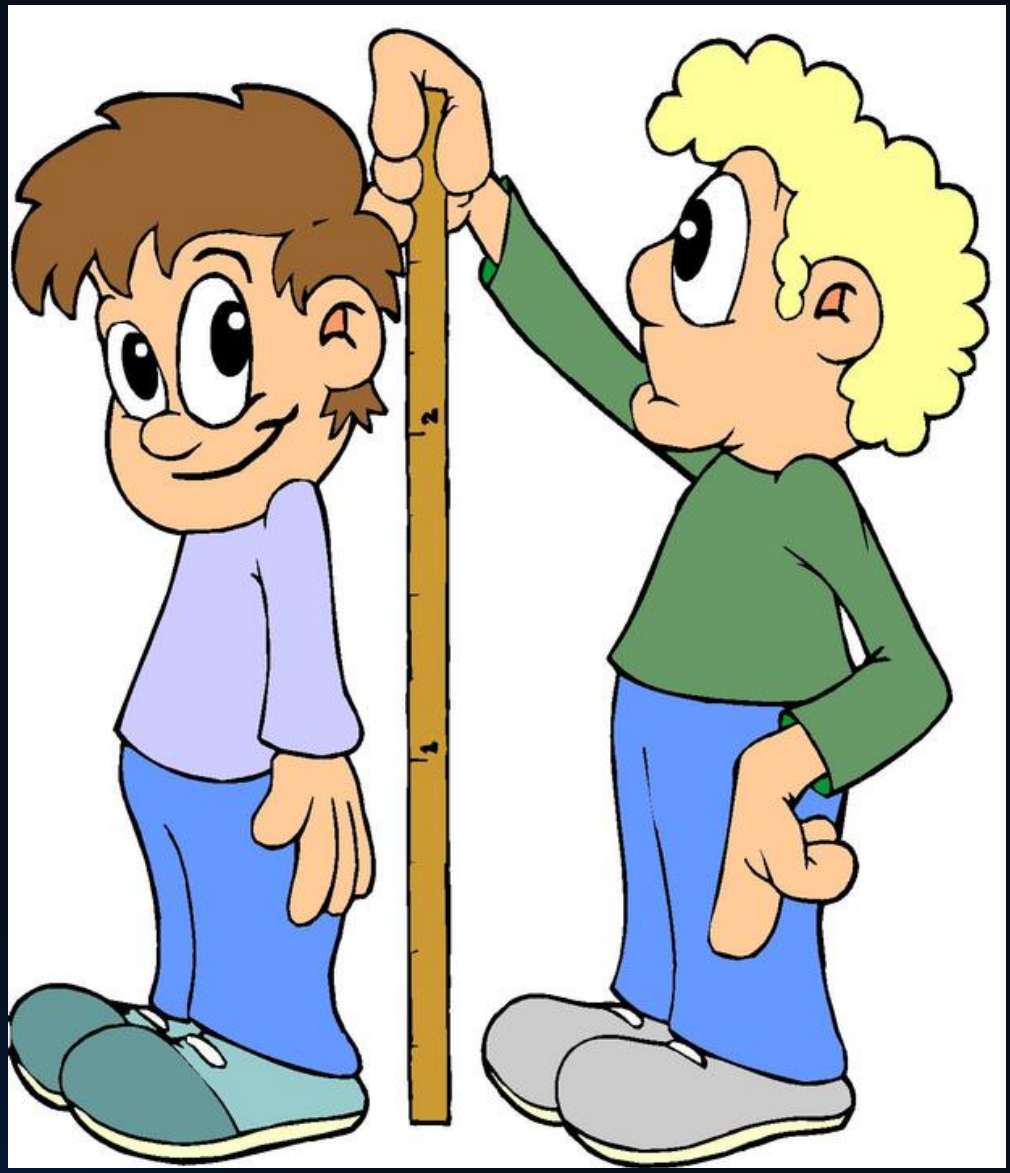
Systems

- Tool developed by CMS and the Agency for Healthcare Research and Quality (AHRQ) to understand patients' perception
- Comparable data for public reporting
- Enhance accountability and transparency
- PQRS CAHPS mandatory for 2015 performance year
- Publicly reported beginning in 2016 – CG CAHPS included in 2% payment at risk

How Measurements Translate?

IR Audit Tool Date_____ _ MR#_____ Auditor:_____

Pre Procedure	yes	no	n/a	Comments
Is the Physician credentialed for moderate sedation?				
Consent for sedation/procedure signed, dated, timed?				
H&P completed 30 days and pt. examined prior to procedure start?				
ASA class score documented by MD?				
Timeout completed immediately prior to start of procedure?(before sedation)				
Did all staff participate in timeout?				
VS completed within 10 minutes of start of procedure (immediate reassessment)?				
All medications and VS documented and syringes labeled(date,time,intitials)				
Sterile field basins, syringes and injector labeled.				
Isolation status Reviewed				
Procedure				
Read back of medication orders?				
Proper Hand Hygiene completed for entire process				
Addition Time Out completed as necessary				
Immobilization devices used according to policy (all prone and GA cases require Velcro Straps)				
Post Procedure				
Post Proc. Notes: Description of procedure/findings				
Post Proc. Notes: Pre-procedure diagnosis				
Post Proc. Notes: Adverse response to sedation/procedure				
Discharge criteria LOC documented				
Discharge pain score and RASS score documented				
Discharge instructions documented				
Start and end times for procedure documented				
Sharps and fluids disposed of properly				



Ideas

- What if you asked Press Ganey questions during the Pre-procedure phone call?
- PED's (Not just for athletes)
- Beta Testing
- Industry (Not healthcare) Standards

Thank you

- Tony Smith, MD
- Don Frush, MD
- W. Kevin Broyles, MD, MHS-CL
- Sanne Henninger, MSW, LCSW, Ed D

Bibliography

- AAFP. Clinical Quality Improvement. http:/www.aafp.org/online/en/home/practicemgt/quality. Accessed online 22 March 2011.
- Boan, D, Funderburk, F. Healthcare Quality Improvement and Organizational Culture. Nov 3, 2003. *Delmarva Foundation.*
- Brent James, MD, MStat (Intermountain Health Care's Institute for Health Care Delivery Research): concepts, content, figures.
- Broyles, WK, Allen, NA, et al. Primary Care Provider Orientation Handbook – Duke Primary Care, Duke University and Health System. *Accessed online – Duke Intranet*, 21 March 2011.
- Ebert, TC. Creating a Culture of Quality and Patient Safety. Executive Briefing. A Thought Leader Discussion. *Amerinet.* 2010.
- Greg Maynard, MD, MSc (University of California, San Diego): editorial composition and review.

Bibliography

- Emswiler,T, Nichols, LM. New American Foundation. Case Study – High Performing Health Care Organization – March 2009. Hill Physicians Medical Group: Independent Physicians Working to Improve Quality and Reduce Costs. www.commonwealthfund.org. accessed online 23 Mar 2011.
- Jason Stein, MD (Emory University School of Medicine): editorial composition.
- Laiben, G. Engaging Physicians – Quality Basics for Providers Series. Primaris. *Accessed via internet 22 March 2010.*
- Liebhaber, A, Draper, DA, Cohen, GR. Hospital Strategies To Engage Physicians in Quality Improvement. Center for Studying Health System Change. Issue Brief No. 127, October 2009.
- Postal, LH. Director of Nursing and Performance Improvement – Duke Primary Care. *Email communication.* 21 March 2011.

Overcoming the Barriers - Culture

- Developing an:
  - Informed culture – communication
    - (to patients, as well as staff & providers)
    - Storyboards, posters
    - Meetings
    - Newsletters, emails
  - Reporting culture
    - Transparency
    - Accountability
  - Flexible culture
  - Learning culture
    - Committed to improvement
    - Everyone engaged
    - DNA of the organization
  - Just culture
    - Safe