QUALITY IMPROVEMENT IN PEDIATRIC PAIN SERVICE

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SPPM/SPA Annual Meeting
March 12, 2015

Disclaimer

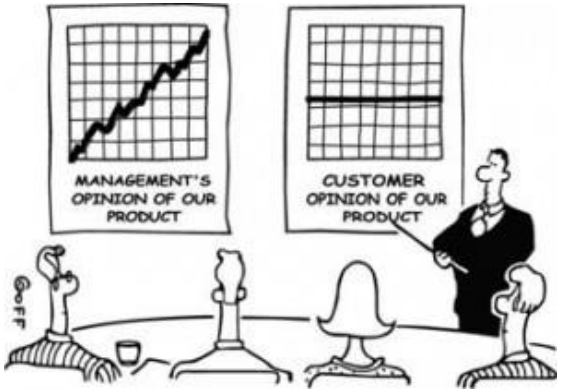
- No commercial conflict of interest
- Unpublished data

Objectives

- Recognize the importance of and the need for quality improvement initiatives
- Describe the process of selecting QI measures for pediatric pain
- Understand how QI processes can be directly linked to care coordination, clinical outcomes and research

Why Focus On Quality

- Time was ripe
  - IOM (1999 To Err Is Human, 2001 Crossing the Quality Chasm)
  - JCAHO
  - Public awareness
  - Payors
- Our own need to improve
- Use of information technology



What is Quality?

The extent to which health services increase the likelihood of desired health outcomes and are consistent with current professional knowledge"
(evidence-based medicine)*

*Definition by IOM

Quality Management

- **Control** - a system for **verifying and maintaining** a desired level of quality
- **Assurance** - the planned or systematic actions for **evaluating** the delivery of services or the quality of products necessary to provide enough confidence that a product or service will satisfy the given requirements
- **Improvement** - the purposeful **change of a process** to improve the reliability of achieving an outcome

IOM: Six Aims for Improvement

- Safety
- Patient-centeredness
- Efficiency
- Effectiveness
- Timeliness
- Equity

Getting Started

- Select what is important for you and/or your institution
- Measure it
- Analyze it
- Present it

Getting Started

- Tackle one small project successfully, then move on the next one
- Manpower
- Time
- Commitment
- Readiness to learn

Safety First

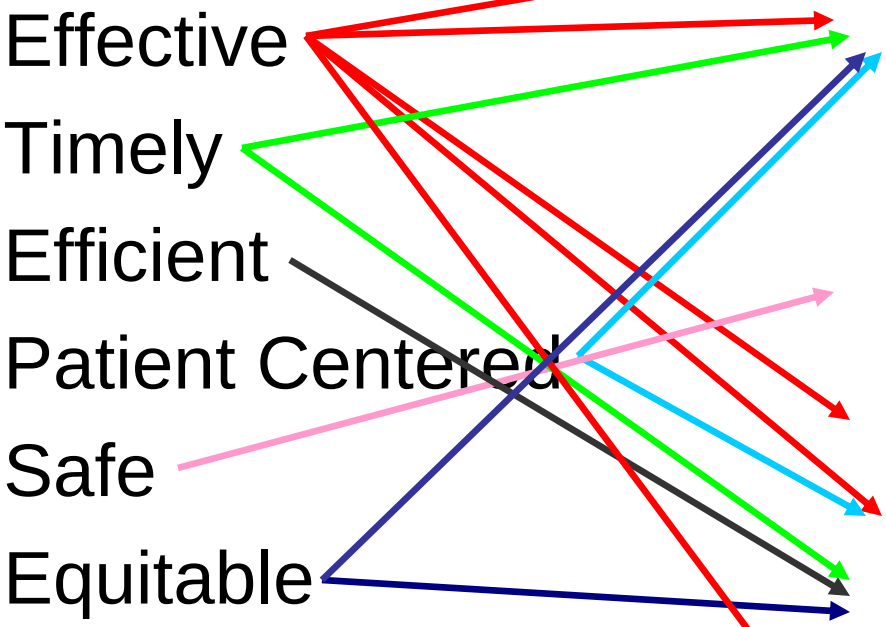
- PCA
- Opioid Side Effects
- Sedation
  - Pharmacy audits
  - Incident reports come to divisional quality officer

Effectiveness

- Evidence based care
- **Analyzing multiple endpoints in clinical trials of pain treatments: IMMPACT recommendations. Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials.**
- In the Moment
  - Satisfactory comfort while on APS
  - Collected in 5-day stretches
- Global
  - Satisfaction with overall care
  - Survey given after APS signs off
    - To avoid appearance of coersion or bias

Pain. 2008 Oct 31;139(3):485-93

IOM vs. IMMPACT



- Pain intensity
- Global judgment of satisfaction with treatment
- Symptoms and adverse events
- Physical recovery
- Emotional response
- Economic factors
- Role functioning
- Sleep

Patient Centeredness

- Meeting individual patient's needs\
- Feedback from families included:
  - Better education regarding treatment and side effects
  - Nurse staffing issues
  - Pharmacy response time
  - Communication among services
  - Inconsistent bedside presence

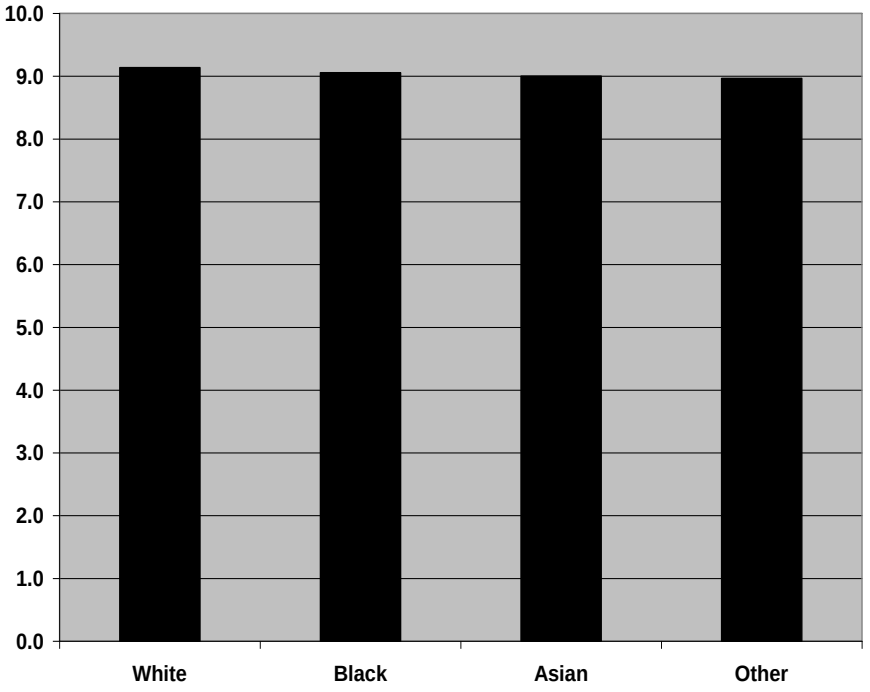
Efficiency

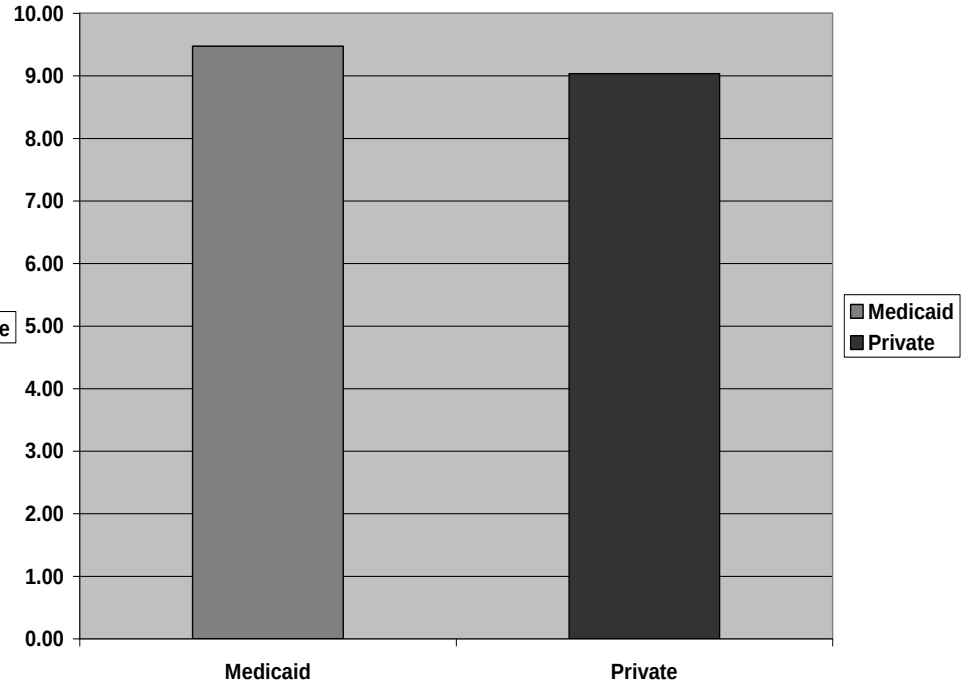
- Making the best use of resources
  - ASA RVUs/ day
  - Schedule and provider utilization
  - Non-clinical time as scheduled
  - Meetings end on time
  - 360˚ Reviews for entire Division

Timeliness

- Getting what you need when it is needed
  - Delayed or absent bedside presence
  - Referring service feedback
  - Parent feedback

Care is Equitable





Satisfaction by ethnicity and insurance type

Selecting QI Measures for Pediatric Pain - Chronic

- Safe opioid prescribing practices:
  - Informed consent
  - Opioid Agreement
  - Risk assessment
  - OARRS screen
  - UDS screen

Survey Questions asked of 15% of families after discharge from the APS

Today's Date: _____	Strongly Agree	Agree	Somewhat Agree/ Somewhat Disagree	Disagree	Strongly Disagree
1. Your child was treated with respect and dignity by everyone you encountered from the Pain Team. Comment:	☐	☐	☐	☐	☐
2. You were confident in the clinical care your child received from the Pain Team. Comment:	☐	☐	☐	☐	☐
3. The Pain Team worked with your child to set realistic goals for his/her pain. Comment:	☐	☐	☐	☐	☐
4. You were kept well informed regarding your child's treatment for pain and your child's questions were answered in a timely manner. Comment:	☐	☐	☐	☐	☐
5. The Pain Team helped your child feel better prepared to deal with his/her pain after leaving the hospital. Comment:	☐	☐	☐	☐	☐
6. Please rate your overall experience with the Pain Team during your child's stay at the hospital. Using a scale from 0 (zero) to 10 (ten), with 0 being the worst possible care and 10 being the best possible care. Comment:	1	2	3	4	5 6 7 8 9 10
7. What could we have done better? _____					

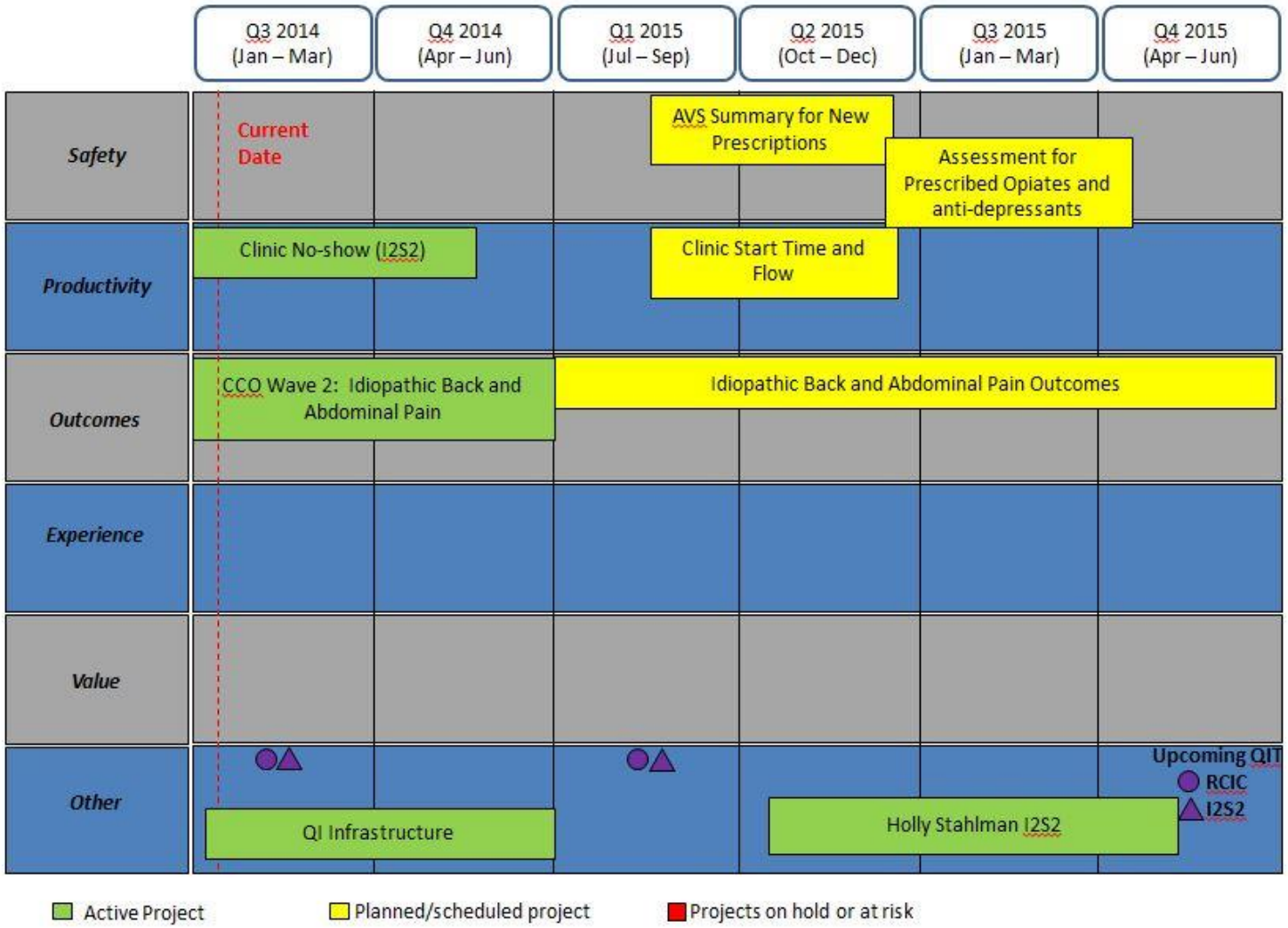
Big Picture

- Institutional investment in Quality Improvement Initiatives
  - Strategic plan
  - **Education - <u>Basic, Intermediate, Advanced</u>**
- QI Processes can be directly linked to care coordination and clinical outcomes
  - Identifying interventions
  - Implementing interventions and **<u>measuring</u>** their clinical effects

•Dynamic, ever evolving (problems solved, new issues, new measures)

•The way of living, philosophy

Division of Pain Management: QI Project Portfolio



QI vs Research

- Most QI projects include data collection in small samples, frequent changes in protocols and interventions, discarding poor ideas, and pursuing ideas that work - **constantly changing** baseline makes it problematic to think of QI as traditional research
- Research seeks to provide more generalizable answers
- QI project can be considered research if (1) the tested intervention involves a deviation from established practices, (2) individual patients are the subjects, (3) randomization or blinding is conducted, and (4) participants are subjected to additional risks or burdens beyond usual clinical practice to make results generalizable
- RCTs, controlled studies, preintervention and postintervention studies, and time series are commonly used methods in QI research

QI&Research In Real Life – FDI By Pain Psychologists

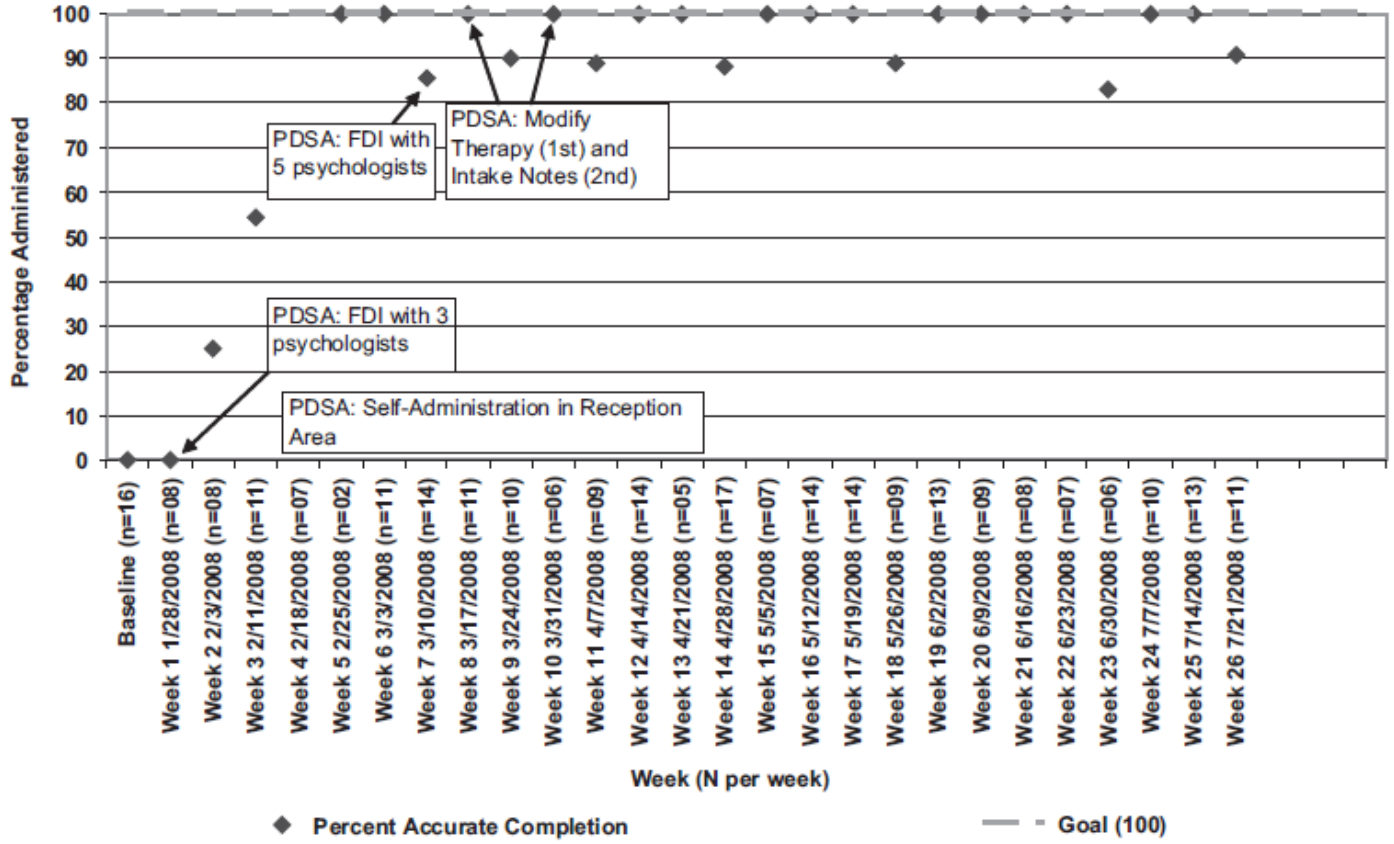


Figure 2. Run chart of FDI administration across 26 weeks.

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