



The Importance of Continuous Quality Improvement in Pediatric Practice

Thomas McInerny MD, FAAP
AAP Immediate Past President

Disclosures

- I have no relevant financial relationships with the manufacturers of any commercial products and/or providers of commercial services discussed in this CME activity

- I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation



Changes in Practice

- Few pediatric practices are performing continuous quality improvement (CQI) as part of their daily activities
- This presentation will discuss why and how to implement CQI in your practices leading to
 - Higher quality of care for your patients
 - Improved satisfaction for you and your staff



Outline

- Why CQI
- Examples of QI in practices
- How to implement CQI
- AAP's role
- Engaging families
- QI Collaborative networks
- Improvement partnerships
- Payment



CQI (kŏn-tin'yū-ŭs kwahl'i-tē im-prūv'měnt)

Noun 1. The daily use of QI methods as a regular part of practice engaging all practice staff, constantly measuring structure, processes, outcomes against best practices (benchmarking), moving from one QI project to the next, pursuing the goal of “The right care for every child every time”

Why CQI?

- **Significant variations in quality of care provided to pediatric patients**
 - Leading to substandard care for some
- **Affordable Care Act “Triple Aim”**
 - Improve individual experience
 - Improve population health
- **Control inflation of per capita costs**

Why CQI? *(cont.)*

- **Accountable Care Organizations**
 - Value-based care instead of volume-based care
- **Optimal care to prevent unnecessary illnesses, office and ED visits, hospitalizations, complications of chronic illnesses**
- **Patients' expectations (consumerism)**
- **It's the right thing to do!**

IOM Dimensions of Care

- **Safe** – avoiding injuries to patients from care intended to help them
- **Effective** – providing services based on scientific knowledge to all who could benefit; refraining from providing services to those not likely to benefit
- **Patient-centered** – providing care that is respectful of/responsive to individual patient preferences, needs, values,
 - Ensuring patient values guide all clinical decisions



IOM Dimensions of Care *(cont.)*

- **Timely** – reducing waits/ harmful delays for both those who receive and those who give care
- **Efficient** – avoiding waste, in particular waste of equipment, supplies, ideas, energy
- **Equitable** – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographical location, and socioeconomic status

IOM Old v. New Rules (Top Ten)

Old

1. **Care based on visits**
2. **Professional autonomy drives variability**
3. **Professionals control care**

New

1. **Care based on continuous healing relationships**
2. **Care customized based on patient needs and values**
3. **Patient is source of care**



IOM Old v. New Rules (Top Ten)

Old

4. Information is a record
5. Decision-making based on training, experience
6. “Do no harm” is individual responsibility

New

4. Knowledge is shared, information flows freely
5. Decision-making is evidence-based
6. Safety is system priority



IOM Old v. New Rules (Top Ten)

Old

7. **Secrecy is necessary**
8. **System reacts to needs**
9. **Cost reduction sought**
10. **Preference given to professional roles over system**

New

7. **Transparency is necessary**
8. **Needs are anticipated**
9. **Waste continuously decreased**
10. **Cooperation among clinicians a priority**



Examples of QI Projects From *Pediatrics* Quality Reports

- Improved Antibiotic Prescribing for Community Acquired Pneumonia
 - Vol. 131 #5
- The ONE Step Initiative: QI in a Pediatric Clinic for Secondhand Smoke Reduction
 - Vol. 132 #2
- Improving Screening for Diabetes in a Pediatric Cystic Fibrosis Program
 - Vol. 132 #2
- Depression Screening in Adolescents with Type 1 Diabetes
 - Vol. 132 #5

Examples of QI Projects from “Pediatrics” Quality Reports

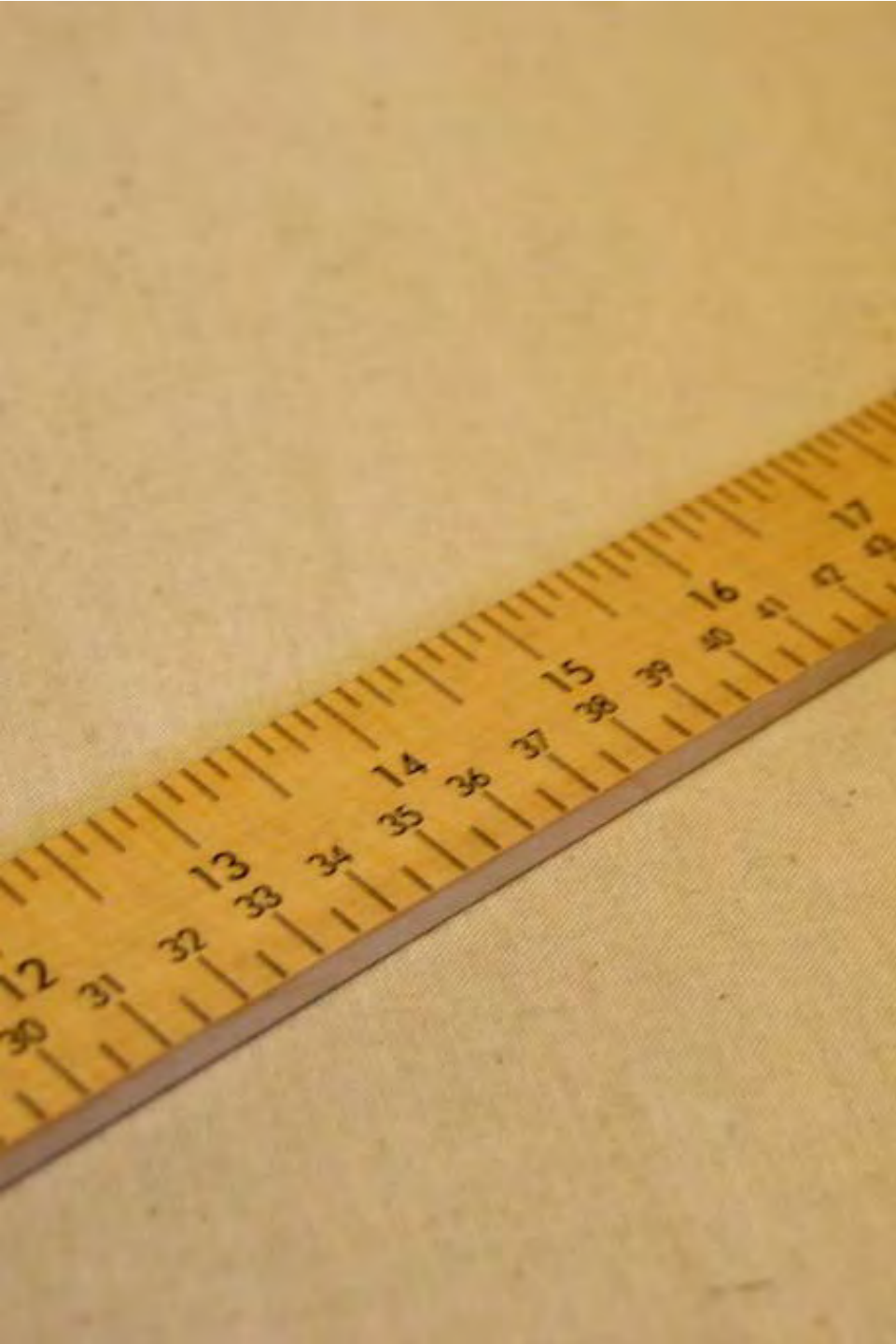
- Central Line Maintenance Bundles and CLABSIs in Ambulatory Oncology Patients
 - Vol. 132 #5
- Improving Immunization Rates in Hospital-Based Primary Care Practices
 - Vol. 133 #4
- Effectiveness of an Asthma Quality Improvement Program Designated for Maintenance of Certification
 - Vol. 134 #1



How to Perform QI Projects

- Measure, Measure, Measure
- Benchmark best practices
- Develop and use registries and quality measures regularly
- Identify your team
- Leadership steps for successful change
- Understand the “Model for Improvement”
- Initiate Plan-Do-Study-Act cycles of small changes





Measure, Measure, Measure

- “You can’t manage what you don’t measure”
- Program EHR system to measure important data
 - Well-child visit rates, screening rates, immunization rates, chronic illness visits, referrals, imaging, lab tests
- Review data on a regular basis, at least Q 3 months
 - To develop information
 - Use it to determine QI projects

Benchmark Best Practices

- Start with evidence-based clinical practice guidelines
- Ideal goals
 - 100% for recommended procedures
 - 0% for non recommended procedures
- Best practices
 - Published rates in literature
- Realistic goals
 - Determine gap between your practice's rates, best practices
 - Select reachable target
 - 20% improvement

Registries

- Registries should be generated automatically by your EHR system
- Age, gender of ALL patients in your practice
- List by type of insurance
 - Medicaid, CHIP, commercial
- Lists of patients with chronic illnesses
- Individual immunization rates
- Program registry so that system automatically develops reminder/recall systems



Identify Your Team

- Engage right people
- Participation builds buy-in
- All staff involved in some manner
 - Front-line workers have knowledge of process, “work-arounds”
- Start by identifying key stakeholders – usually receptionists and nurses

Successfully Leading Change

- **Ready** (communicate, communicate)
 - What will change, what will stay the same
 - How/when individual will be affected
 - Clear vision
- **Willing**
 - Understand: “What’s in it for me?”
 - Involve stakeholders in change process
 - Personal fulfillment, sense of accomplishment

Successfully Leading Change *(cont.)*

- **Able**

- Staff have received necessary info and training
- Necessary tools, technology, processes available
- Necessary TIME available
- Continued coaching of skills/behaviors

- **Celebrate successes**



Model for Improvement

- What are we trying to accomplish?
- How will we know that ***change*** is ***improvement***
 - All improvement requires change, but not all change results in improvement
- What changes can we make that will lead to improvement?



PDSA Cycles of Small Change

- **Plan:** Always include prediction
 - Measurable objective, when, by whom
- **Do:** Execute change; pick start date
- **Study:** Most important step, often overlooked
 - Did my prediction hold?
 - What assumptions need revision?
- **Act:** Adapt (modify), adopt (incorporate change as routine process), abandon (if unsuccessful)

Available Measures

- **Structure:** Organization of the practice
- **Process:** Activities of the practice (*easy*)
- **Outcomes:** Changes in patient's health status (*difficult*)
- **Measures for accountability:** Not well accepted by physicians
- **Measures for improvement:** More likely to be accepted

Available Measures *(cont.)*

- Child Health Insurance Reauthorization Act (CHIPRA) of 2009 established Pediatric Quality Measurement Program by Agency for Healthcare Research and Quality
 - Developing measures
- National Committee on Quality Improvement (NCQA) HEDIS measures
- National Quality Forum (NQF), NICHQ and CHA endorse measures
- Many subspecialty societies and children's hospitals have developed measures

A group of six diverse children of various ethnicities and ages are hugging each other in a warm, joyful embrace. They are smiling and looking towards the camera. The children are wearing colorful clothing: a pink shirt, a blue shirt, a red shirt, and a green shirt. The background is plain white.

Quality is integral to the day-to-day practice of every pediatrician

- AAP Quality Mission:
Every child gets the
right care every time

Quality Improvement

AAP Model for Quality

Setting the Standard for Quality

Improving Quality

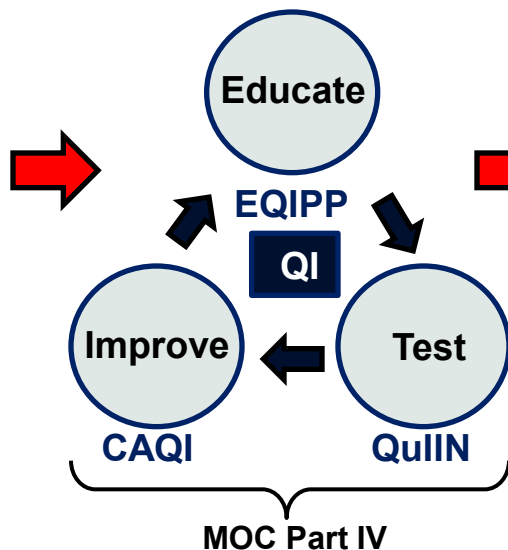
Measuring and Reporting Quality

Advocating for Quality Payment for Members

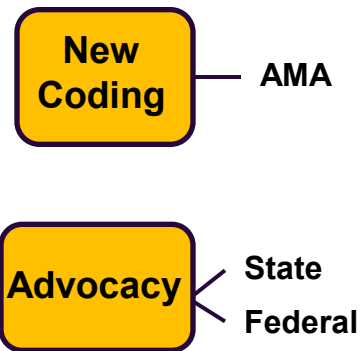
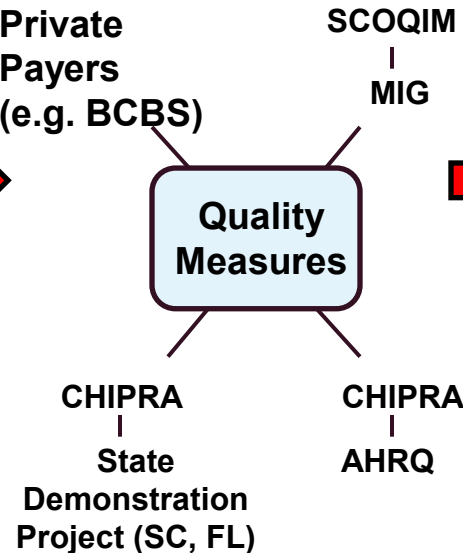
Identify Best Practice

Members + Content Expert

- Policy
- Evidence-based Recommendations



Private Payers (e.g. BCBS)





Increased Member Engagement/AAP Offerings



Evidence of Advanced Quality Strategy

- 363 COQIPS members
 - 106 new since January
- 547 QuIN participant members
 - 182 hospitalists/122 hospitals
- CQN: 6 chapters, 103 practices, 600 providers
- MOC Projects: 49
- 8 EQIPP courses; 3,400 enrollments
- MCHB grant/AAP National Coordinating Center for epilepsy launched
 - New Mexico pilot underway



Courses Providing MOC Part II Opportunity

- PREP®: ID
- DB:PREP®
- PREP® The Course
- Practical Pediatrics Course
- PREP®:EM
- Practical Pediatrics Course
- PREP® The Course
- NCE: Pediatrics for the 21st Century





Education in Quality Improvement for Pediatric Practice (EQIPP)

- Online Quality Improvement CME Program
- Launched in 2002
- Robust quality improvement educational program
 - Evidence-based
 - Translates research into practice
 - Weaves QI principles (Model for Improvement) with clinical content
 - Interactive and action oriented
- Meets Maintenance of Certification requirements
- Member benefit at no charge



Engaging Physicians in Practice

- Quality Improvement Innovation Networks
 - Total QuIIN membership: 423
 - Practice Improvement Network
 - 298 pediatricians from 265 practices
 - Value in Inpatient Pediatrics Network
 - 115 pediatricians from 85 hospitals
 - Others (including specialists): 29
- Meets MOC requirements

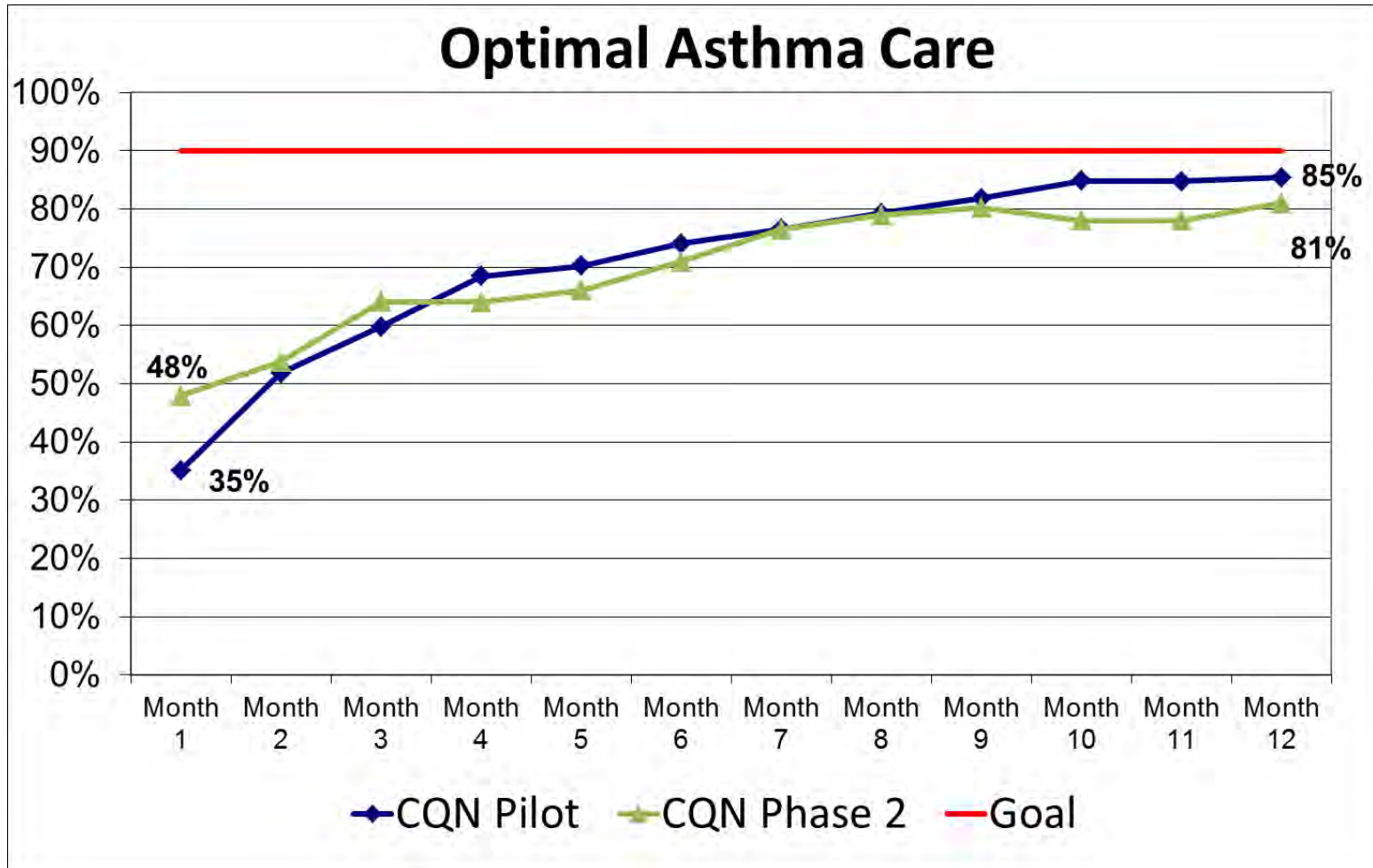


Current QullN Project Examples

- Genetics in Primary Care Institute
 - 14 primary care practices identifying core components to include in family history
 - Pilot for QIDA system
- Quality Measures
 - AHRQ-CMS CHIPRA PMCoE
 - Feasibility, reliability of ADHD measures
 - Center for Advancement of Pediatric Quality Measures
 - Phone interview
 - Measure creation for children with asthma ED visits
- CHIPRA FL Pediatric Medical Home Demonstration
 - Outcomes include more toddlers being screened at 24-months, asthma control assessment, action plan
- Comparison of Immunization QI Dissemination Strategies
 - Immunization coverage of children 3 – 18 months



Build Chapter Capacity to Improve Child Health Care and Outcomes



CQN2 – Key Outcomes

- 49 CQN2 practices contributed to 16 months of data collection
- 13,633 patient encounters were collected electronically on 14 asthma-related measures (as of December)
 - 100% of CQN2 leaders would recommend participation in CQN project to their peers
 - 90% said participation led to considerable development of leadership skills, ability to run formal learning collaborative



Leveraging EHRs to Accelerate QI

Recent HIT Activities

- Comment on Meaningful Use Stages 2 and 3
 - Stage 2 focuses on advanced clinical processes
 - Stage 3 recommendations build upon stages 1 and 2
- Web service
 - Exploring strategy to support management of AAP content through web service for point-of-care clinical decision support with Bright Futures

AAP Maintenance of Certification (MOC) Portfolio Program

- AAP authorized by ABP to review, approve proposals for Part 2, Part 4 MOC
- AAP Quality Cabinet oversees MOC Portfolio Program
- Practices obtain, complete, submit application forms to Jill Healy, manager, Quality Improvement and Certificate Initiatives
- Quality Cabinet reviews applications
- If approved, practices provide Quality Cabinet ongoing reports
- No charge for AAP members

AAP QI Project Dissemination Strategy

- Hub and Spoke model
 - AAP National interacts with districts and chapters to disseminate QI knowledge and projects
- First meeting – Atlanta, Jan. 2014 – 2 days
 - 60+ attendees
 - Experts from AAP, Cincinnati Children’s Hospital, Cleveland Clinic Children’s Hospital, Children’s Healthcare of Atlanta
- Theoretical, practical presentations on QI, including “hands on” exercises

ABP Performance Improvement Modules (PIMs)

- Web-based tools that enable pediatricians to implement improvements in clinical care using QI methods
- PIMs provide 20 credit points towards Part 4 activities
- To access information re PIMs
 - abp.org/abpwebsite/moc/performanceinpractice/approvedprojects/pims.htm

Engaging Families

- Engaging families in QI projects is highly recommended by QI experts and organizations
- Engaging families leads to:
 - Better design of QI projects as families can advise what will work for them
 - Improved physician communication skills, true family-physician partnership
 - Improved transparency, trust by families
- CQIPS has found addition of a family member to be very valuable

QI Collaborative Networks

- Allow pediatricians to learn from experts each others' successes, failures in QI projects
- Provide infrastructure support
- Can be regional or national
- Can be face-to-face (time consuming and expensive) or remote via teleconference
- Provide sufficient number of patients with rare conditions to measure results

Examples of QI Collaborative Networks

- AAP Chapter Quality Network (CQN)
- AAP Quality Improvement and Innovation Network (QUINN)
- National Institute for Children's Health Quality (NICHQ) QI collaborative projects
- Pediatric Research in the In-patient setting (PRIS)
- Vermont Oxford Network (VON)
- Children's Hospital Association Quality Transformation Network



Examples of QI Collaborative Networks

- Cystic Fibrosis Foundation Care Center Network
- ImproveCareNow (GI)
- Joint Council on CHD National Pediatric QI Collaborative (NPC-QIC)
- Pediatric Rheumatology Care and Outcomes Improvement Network (PR-COIN)
- Vermont Child Health Improvement Project (V-CHIP)



National Improvement Partnership Network: State-Based QI Collaboratives

- 15 AAP chapters working with state public health departments, Medicaid, Academic Institutions, Healthcare Delivery Systems, Advocacy Groups, MCOs, Private Insurers, to improve preventive care/care for children with asthma, ADHD, ASD, mental/behavioral health, obesity
 - Vermont, Utah, New Mexico, Washington DC, Arizona, Minnesota, Ohio, Oregon, New York, Maine, Indiana, Iowa, Idaho, Missouri, New Jersey

Payment for QI Implementation

- QI project implementation physicians, staff time reduces time available to see patients
- Payment for these activities (in some form or other) critical to their success, practices' financial solvency
- Represents shift from volume-based to value-based care

Conclusion

- CQI is necessary, requires significant change in how care is delivered
- CQI and practice transformation require hard work but are ultimately rewarding for patients, physicians, staff
- Many tools, resources, organizations available to help
- You CAN do it!



The time to start is next Tuesday.

- Don Berwick, former
Administrator of the Centers for
Medicare and Medicaid Services

Reference and Resources

- “Quality Improvement in Pediatric Health Care: Supplement to *Academic Pediatrics*”, Vol. 13 # 6S (Nov./Dec. 2013)
- www.AAP.org
 - Click on Practice Transformation, then Quality Improvement and Safety; also EQIPP, CQN and Digital Navigator
- www.ABP.org
- www.NICHQ.org
- Institute for Healthcare Improvement
 - www.IHI.org
- Institute for Patient and Family Centered Care
 - www.ipfcc.org

