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Building Medical Homes for Children: Measuring Outcomes for Policy and Program Development

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Maine's Improving Health Outcomes for Children (IHOC) Initiative

Collaborate with health systems, pediatric and family practice providers, associations, state programs and consumers to:

- Select and promote a set of child health quality measures.
- Build a health information technology infrastructure to support the reporting and use of quality measurement information.
- Transform and standardize the delivery of healthcare services by promoting patient centered medical home principles in child-serving practices.

Evaluate implementation and provide timely feedback to program and policymakers.

Alignment with Other Quality and Medical Home Initiatives in Maine

- Maine Patient Centered Medical Home Pilot project (Jan 2009 – Jan 2012; expanded through Health Homes initiative 2015).
- Pathways to Excellence – Public reporting initiative of quality metrics supported by employer, payer and provider coalition.
- Other AAP/Health System/State Child Quality Initiatives (AAP Asthma Collaborative, MaineHealth's From the First Tooth, *Let's Go!*, Maine Developmental Disabilities Council, ME CDC Autism).

Maine Pediatric and Family Practice Medical Home Indicators, 2011

Selected Indicators	Percent of Practices (n=108)
Any Medical Home Accreditation	41%
NCQA/PCMH recognized	37%
Level 1	25%
Level 2	8%
Level 3	55%
Use of Clinical Practice Guidelines	78%*
Mechanism in Place for Referrals	95%
Fully-installed Electronic Health Record	78%
Use of Patient Registries	62%*
Comparing Outcomes with Other Practices/Benchmarking	33%*

*Practices reporting they use “a great deal of the time”.

Source: *Improving Health Outcomes for Children: Maine Pediatric and Family Survey Chartbook.* Muskie School of Public Service, University of Southern Maine, Winter 2011/ 2012.

IHOC First STEPS Learning Sessions

- First STEPS (Strengthening Together Early Preventive Services) - 3-year quality improvement initiative to improve children's health care & preventive health (EPSDT*) screenings, led by Maine Quality Counts for Kids:
  - Phase 1: Childhood Immunizations
  - Phase 2: Developmental, Autism, and Lead Screening
  - Phase 3: Healthy Weight and Oral Health
  - Practices may participate in 1, 2, or all 3 phases.
- Promotes the use of the American Academy of Pediatrics (AAP) Bright Futures Guidelines and the Principles of the Patient Centered Medical Home (PCMH).
- Measure-driven QI approach to test/use IHOC measures.
- Targeted to PCMH practices and other practices serving high volume of children covered by MaineCare (>1000).

Total Practices Participating: 28 practices collectively serving 33,985 kids enrolled in MaineCare (26%)

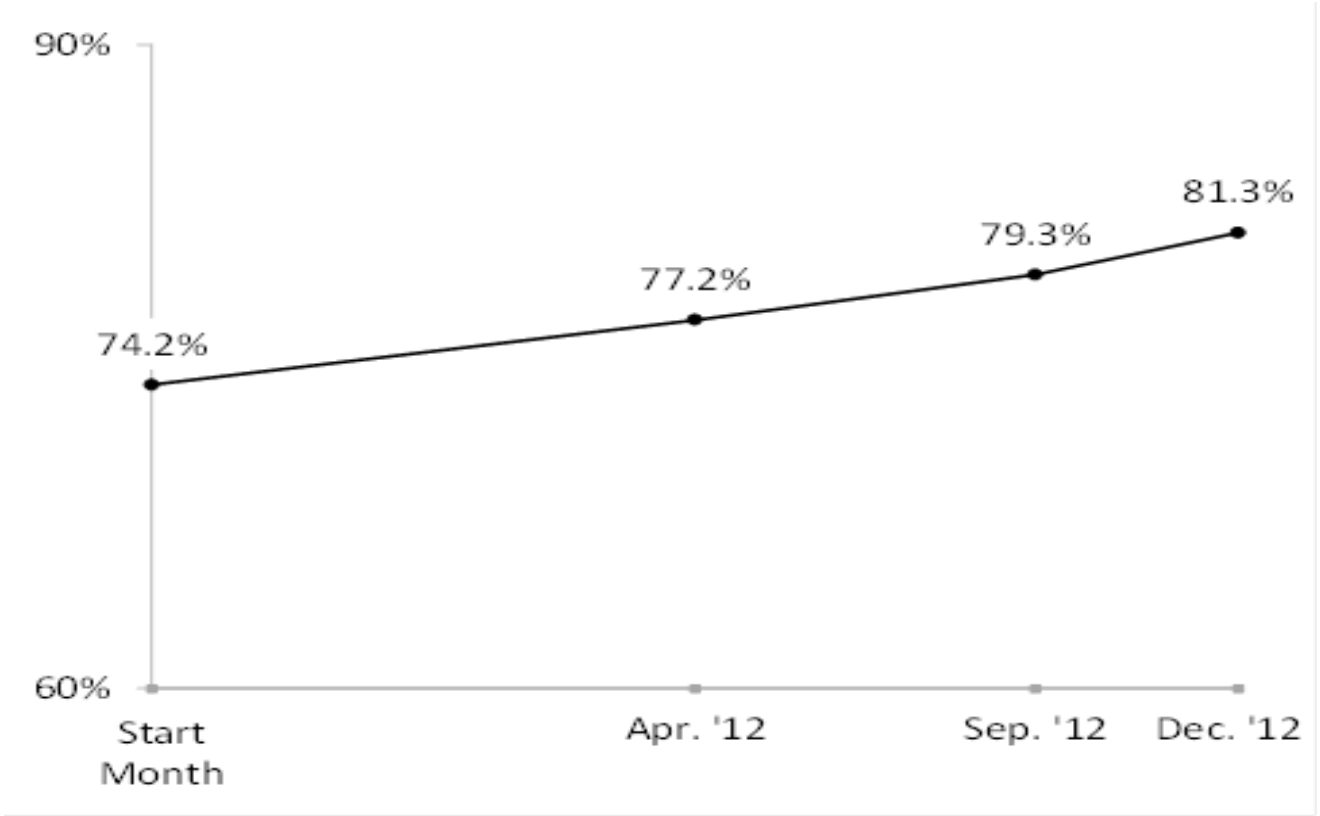
**Early and Periodic Screening, Diagnosis, and Treatment*

QC for Kids
Maine Quality Counts

First STEPS Phase I: Using Practice-Level Immunization Measures

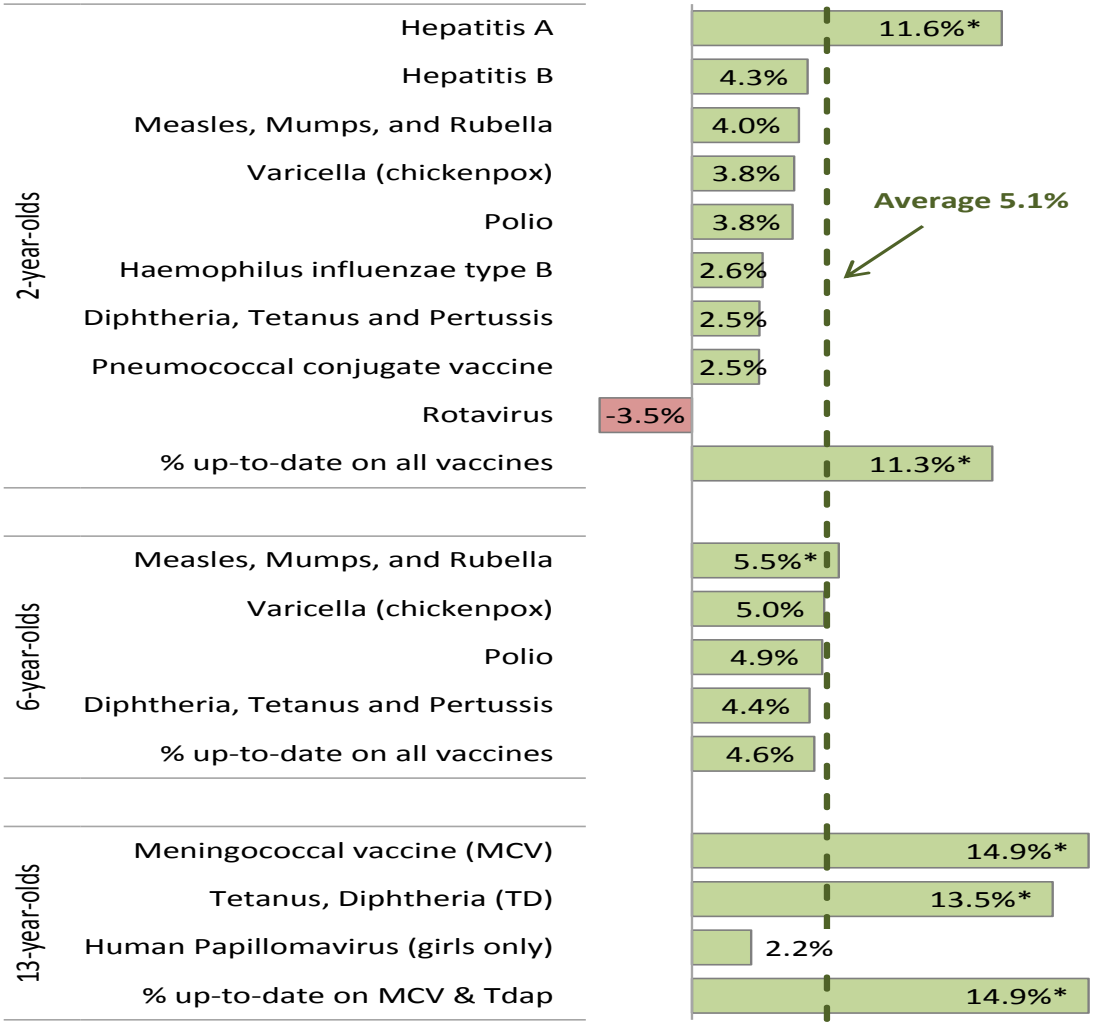
- First STEPS Phase I: Raising Immunization Rates & Building a Patient Centered Medical Home (Sept 2011 – April 2012):
  - Piloted modifications of state registry data (ImmPact) collection and practice-level reporting (e.g. Initial Core Set Immunization Measures 5 and 6).
  - Provided learning sessions, practice coaching, assistance with PDSA cycles, pre/post office system surveys. Also used Medical Home Index in practice improvement work.
  - Goal: Within 12 months to increase overall immunization rates by more than 4 percentage points.
  - 24 clinical practice teams with 96 physicians collectively serving 30,866 children covered by MaineCare (representing 24% of all children covered by MaineCare).

Overall Immunization Rate Increase in First STEPS practices



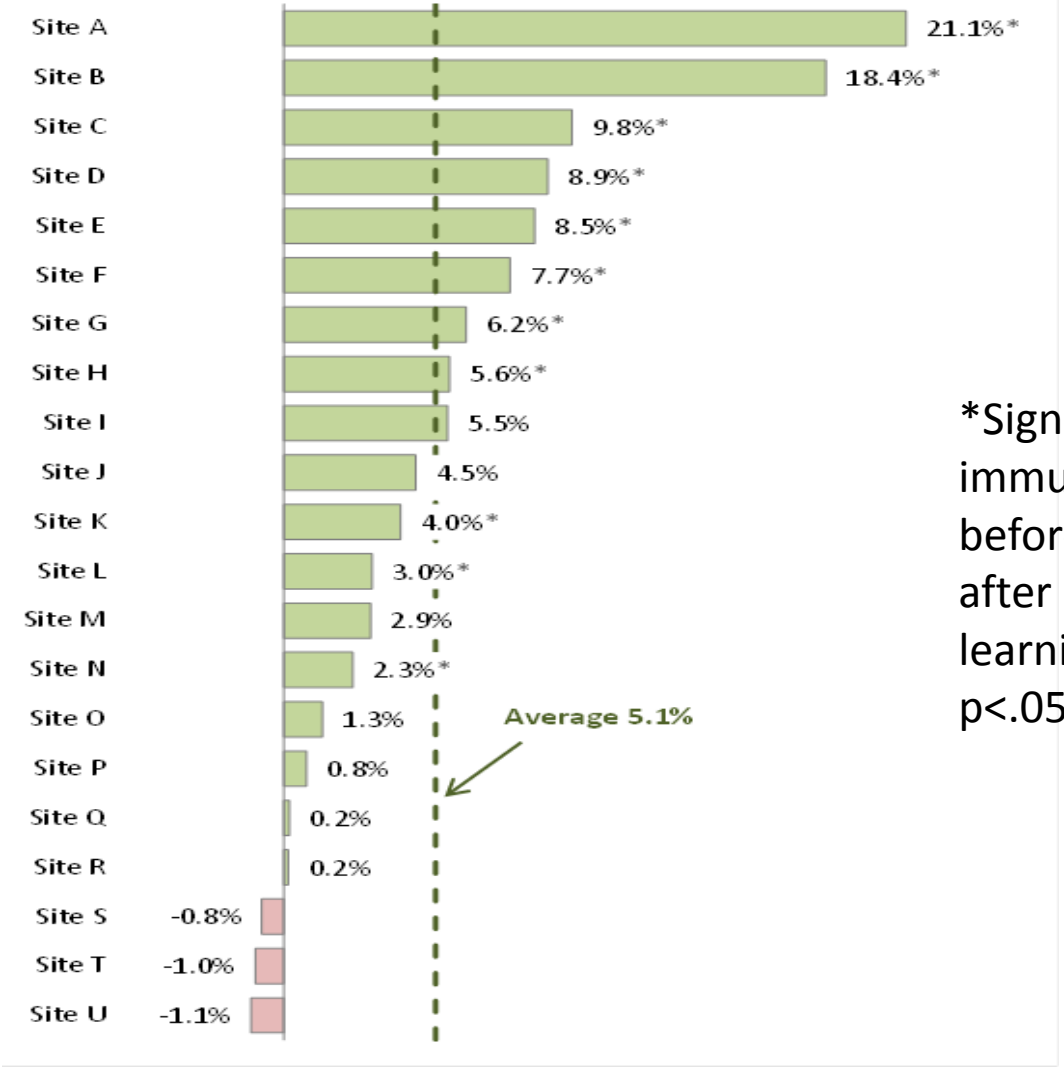
Source: Improving Health Outcomes for Children (IHOC) First STEPS Phase I Initiative: Improving Immunizations for Children and Adolescents Final Evaluation Report, Muskie School of Public Service, University of Southern Maine, March 2013.

Percentage Point Change in First STEPS Phase I Practices' Combination and Individual Rates, 8/11 – 9/12



*Significant change in immunization rate before and one year after First STEPS Phase I learning sessions, p<.05.

Percentage Point Change in IHOC Immunization Rates by Practice Site, First STEPS Practices, (8/11 – 9/12)



*Significant change in immunization rate before and one year after First STEPS Phase I learning sessions, $p<.05$.

Percentage Point Change in Immunization Combination Rates by Participation in Maine PCMH Pilot, 8/11-9/12

Combination rates by age	First STEPS PCMH Pilot Practices (n=5)	First STEPS Non-PCMH Pilot Practices (n=16)
% up-to-date on all vaccines, 2 year olds	5.2%*	13.2%*
% up-to-date on all vaccines, 6 year old	-2.0%	6.7%
% up-to-date on MCV & TD, 13 year olds	11.1%*	16.1%*

** Significant change in immunization rate comparing rate before and one year after First STEPS Phase I learning session, p<.05.*

Implementing Practice-level CHIPRA Immunization Rates

Challenges

- Existing reporting functions based on ACIP guidelines did not support the calculation of CHIPRA measures.
- Modifying state registry to produce practice-level CHIPRA measures took longer than expected, requiring an interim approach.
- Additional challenges due to not all practices entering dose data consistently for all age groups, or for doses given in the past.

Implementing Practice-level CHIPRA Immunization Rates

Successes

- Increased use of state registry/ accuracy of data reported.
- Monthly practice-level reports helpful in measuring progress toward quality improvement goals.
- Producing registry reports for pediatric practices not in First STEPS to submit rates for public reporting to Pathways to Excellence.
- Changes to registry underway so practices will be able to:
  - Produce reports based on CHIPRA measures
  - Produce reports according to MaineCare eligibility status
  - Produce reports for comparison across affiliated locations.

First STEPS Phase II: Developmental Screening Measures

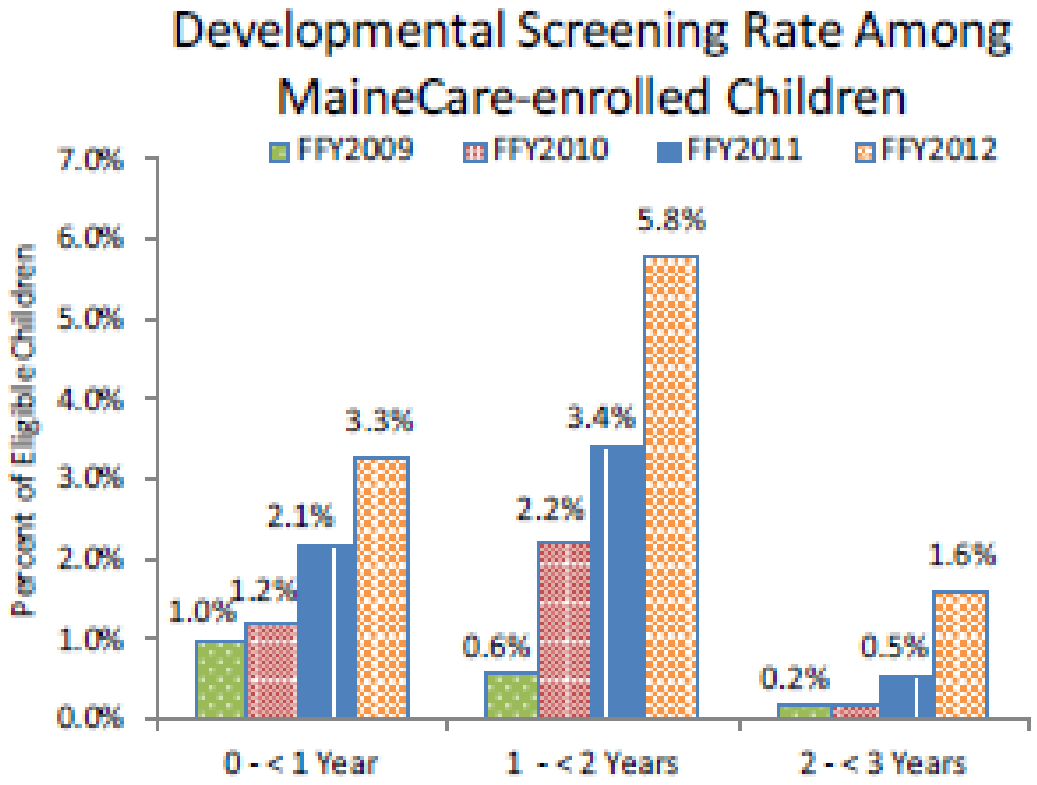
- **First STEPS Phase II: Developmental, Autism and Lead Screening (optional anemia screening)**:
  - Practice Teams from 12 child-serving outpatient practices, including 45 physicians collectively serving just over 20,000 children covered by MaineCare.
  - Monthly data reports based on chart review.
  - Practices could focus on one or more of these screenings.
  - Practices were given the choice of using either the ASQ or the PEDS, and each practice was provided with their tool of choice.
- **Goal for developmental, autism, and lead screening rates:**
  - Improve the rate of these screenings (according to Bright Futures guidelines) by 50% between May 2012 and December 2012.

Measurement: Developmental Screening

- **Challenges with Claims-based measure:**
  - Extremely (and unexpected) low statewide rates.
  - Difficulty identifying specific types of screenings using the 96110 billing code as specified in the measure.
- **Policy Response:**
  - MaineCare clarified and modified the billing method for developmental and autism-specific screenings (and autism testing) for use by primary care providers.
  - Clarified existing rate structure for related screenings and tests.
  - Added modifiers* to existing billing codes to distinguish between global developmental & autism-specific screening, and follow-up autism testing.

*96110 = global developmental screening
*96110 HI = autism-specific screening
*96111 HK = autism testing

Statewide Claims-based Developmental Screening Rates Increasing



Source: MaineCare Claims Data

Lessons Learned

- Child health measures need to be actionable and available at the practice-level to improve performance.
- Data source matters - Measures cannot be operationalized without reliable methods for capturing, collecting, calculating, and reporting the data.
- Integrating data system improvements as part of child QI efforts helps increase visibility and accuracy of data and demonstrates how data can be 'meaningfully used' to sustain quality improvement over time.
- Aligning measures across state initiatives is key for provider buy-in and to sustain quality improvement work after grant funding.

Questions or Comments?

For more information:
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Or visit the IHOC website:
http://www.maine.gov/dhhs/oms/provider/ihoc.shtml