



# Developmental Screening and Electronic Health Records (EHRs)

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The findings and conclusions in the presentation are those of the presenters and do not necessarily represent the official position of the Centers for Disease Control and Prevention



- About **4 million babies** born in the US each year
- **1 in 4** are at moderate to high risk for developmental delays
- **1 in 6** children will have a developmental disability
  - **1 in 68** with autism\*

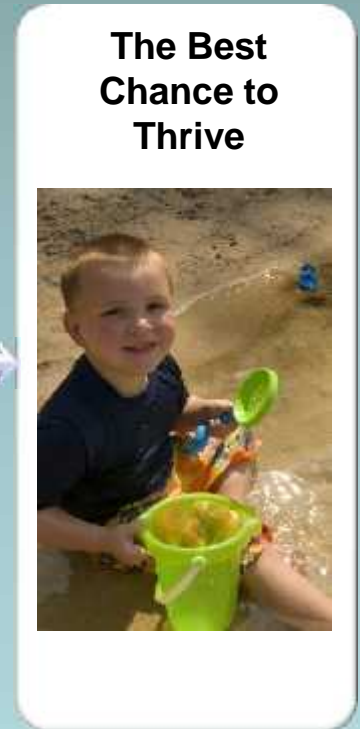


## The Issue

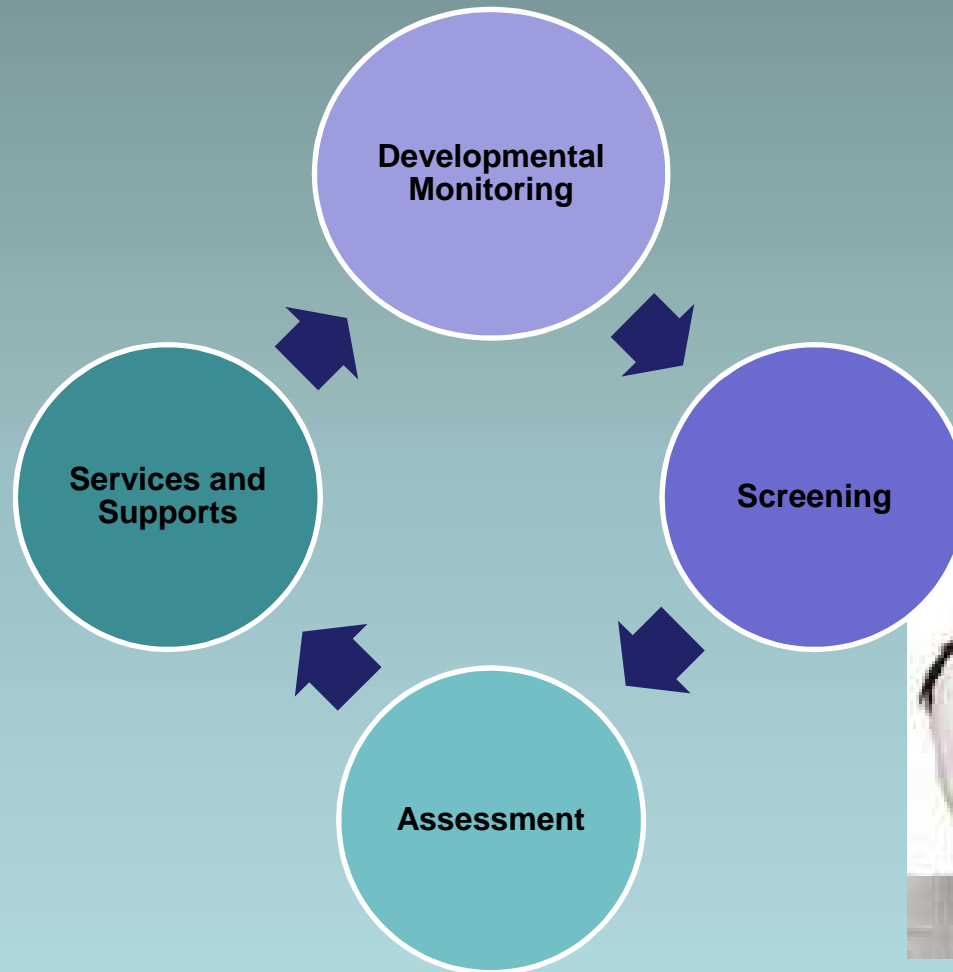
- AAP recommends screening of all children for developmental, behavioral, and social delays at 9, 18, and 24 or 30 months
- Less than 50% of pediatricians use valid and reliable screening tools
- Children who have developmental delays are at greater risk for later emotional and behavioral problems and poor educational achievement
- **1 in 4 children**, age 0-5 years, are at moderate or high risk for developmental, behavioral, or social delay



# The "ONE" in the "1 in 6"



# Cycle of Developmental Health



# Healthcare Providers Need to Provide Developmental Monitoring and Screenings

- **Well-child visits for all children should include:**
  - Developmental Monitoring
    - Informal probing about development and behavior at every well-child visit



- ASD-specific screening 18 and 24 or 30 months
  - **If concern identified from screening**
    - Refer for evaluation
    - Refer for intervention
- [www.aap.org/autism](http://www.aap.org/autism)  
<http://brightfutures.aap.org/>

ASD: autism spectrum disorder

AAP Policy Statement on Developmental Screening (2006)

AAP Clinical Report on Diagnosis of Autism (2007)

# Steps to Successful Screening Programs

- **Healthcare providers**

- Monitor development at each well-child visit
- Use validated screening tools at established intervals, time a concern is raised
  - Use validated screening tool
- Include developmental screening in EHR
- “Don’t defer, refer.”



- **Parents**

- Ask about your child’s development
- Learn the signs
- Be persistent, follow-up if concerned

- **Community-wide tools**

- *Birth to 5: Watch Me Thrive*
- *Learn the Signs. Act Early.*





## Vision

- *Support of electronic information to improve early identification of children with developmental delays, linkage to services, and tracking progress and outcomes.*
- Relation to “Benchmarks” for early identification: developmental monitoring, screening, linkage to services, and monitoring outcomes.
  - EHRs may help
    - Improve clinical services
    - Improve referrals
    - Provide data for tracking progress and outcomes



# Many Facets of EHRs



Where we left off...

Table 1  
2010-2015 Recommended Schedule for Well-Child Visits

Visit	Age Range (Years)	Visit Interval (Months)	Screening
Age and Height (AZD) (parent administered)	0-18	24-36	None
Redox Status (parent administered)	0-18	24-36	None
Weight Status (AZD) (parent administered)	0-18	24-36	None
Behavioral Screening Test (parent administered)	0-18	24-36	None
Developmental Screening Test (parent administered)	0-18	24-36	None
Multiple Sclerosis for Adults (parent administered)	0-18	24-36	None



- Clinical Quality Measures for developmental screening: status and use



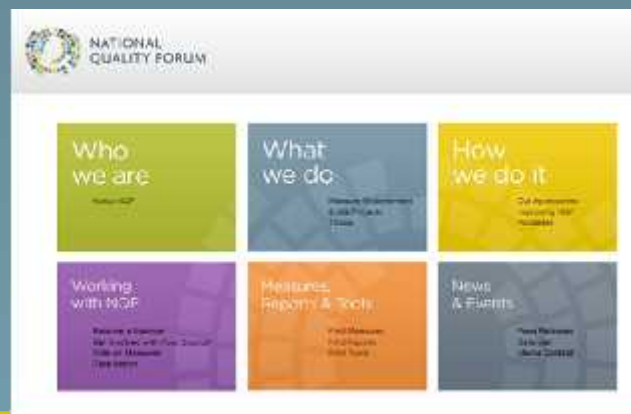
# HP2020 – Maternal, Infant, Child Health

- MICH-29 Increase the proportion of young children with an autism spectrum disorder (ASD) and other developmental delays who are screened, evaluated, and enrolled in early intervention services in a timely manner

HP2020	Increase the proportion of young children...	Data Source
29.1	...who are screened for an Autism Spectrum Disorder (ASD) and other developmental delays by 24 months of age	NSCH (MMWR on dd monitoring and screening up to age 4)
29.2	... with an ASD with a first evaluation by 36 months	ADDM
29.3	... with an ASD enrolled in special services by 48 months	MADDSP (GA)
29.4	... with a developmental delay with a first evaluation by 36 months	NSCH (starting 2011/2012)
29.5	... with a developmental delay enrolled in special services by 48 months	NSCH (starting 2011/2012)

# National Quality Forum (NQF):

- Reminder:
  - Builds consensus on national priorities and goals for performance improvement and works with partners to achieve them.
  - Endorses national consensus standards (quality measures) for measuring and publicly reporting on performance
  - Often form the basis for integration into clinical practice, e-measures, EHR use (including Meaningful Use)



[www.qualityforum.org](http://www.qualityforum.org)

## NQF Measures and LTASE

- Do the NQF Measures match objectives LTSAE wants to support?
  - Developmental Monitoring
  - Developmental Screening
  - Access to Developmental Services

# NQF and Developmental Screening

Measure	NQF #	Steward
Developmental screening using a parent completed screening tool (Parent report, Children 0-5)	1385	Maternal and Child Health Bureau, Health Resources & Services Administration
Developmental Screening by 2 Years of Age (Updated 01/04/13 to include the First Three Years of Life (now similar to 1448)	1399	NCQA
Developmental Screening in the First Three Years of Life	1448	NCQA and CAHMI
Promoting Healthy Development Survey (PHDS)	0011	Oregon Health & Science University
Well-Child Visits in the First 15 Months of Life	1392	National Committee for Quality Assurance
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	1516	National Committee for Quality Assurance

# NQF #1385 Developmental screening using a parent completed screening tool (Parent report, children 0-5)

Description	Population	Data Source/ Type of Measure	LTSAE Objectives (Monitoring, Screening, Access to Services)	Can this help us monitor systems changes or LTSAE-specific?
<p>Developmental screening using a parent completed screening tool (Parent report, children 0-5).</p> <p>Assesses whether the parent or caregiver completed a developmental screening tool meant to identify children at risk for developmental, behavioral or social delays.</p>	<p>National, regional, state</p>	<p>National Survey on Children's Health (NSCH) - Patient Reported/Survey</p> <p>Process measure</p>	<p>Monitoring, Screening (basis for MMWR on NSCH Screening pre-ACA; reported ages to align with HP2020)</p>	<p>Possible connection to system level changes. Cannot attribute directly to LTSAE without specific survey questions re: LTSAE</p>

# NQF #1399: Developmental Screening in the First Three years of Life

Description	Population	Data Source/Type of measure	How is it Used?	LTSAE Objectives (Monitoring, Screening, Access to Services)	Can this help us monitor systems changes or LTSAE-specific?
<p>Developmental screening in the first 3 years of life.</p> <p>Children who had documentation in their medical record who had developmental screening performed by 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> birthdays.</p>	<p>National, regional or individual clinical level</p>	<p>Clinical Data/Claims data</p> <p>Process measure</p>	<p>Corresponds with HP2020 MICH 29.1, but no national measure</p>	<p>Screening</p>	<p>Systems</p>



# NQF #1448 Developmental Screening in the First Three Years of Life

Description	Population	Data Source/ Type of Measure	LTSAE Objectives (Monitoring, Screening, Access to Services)	Can this help us monitor systems changes or LTSAE- specific?
<p>Developmental screening in the First Three Years of Life.</p> <p>Percentage of children screened for the risk of developmental, behavioral and social delays using a standardized screening tool in the first 3 years of life.</p> <p>Since updated in Jan 2013, similar to 1399. Guess that 1399 replacing 1448.</p>	<p>Regional, state, individual systems</p>	<p>Overlaps with HP2020 MICH 29.1, but no national measure</p> <p>Claims data. Only coded as developmental screening*Does not account for modified or additional screens such as ASQ-SE or autism screening</p>	<p>Screening/Monitoring, but will miss children who might be coded only for additional screens</p>	<p>Systems change</p>

# NQF #0011 Promoting Healthy Development Survey

Description	Population	Data Source/ Type of Measure	LTSAE Objectives (Monitoring, Screening, Access to Services)	Can this help us monitor systems changes or LTSAE-specific?
<p>Promoting Healthy Development Survey (PHDS)</p> <p>Assesses national recommendations for preventive and developmental services for young children.</p>	<p>Clinician or individual practice, but can be implemented at regional or national levels</p>	<p>Patient reported data-Survey</p>	<p>Access to developmental screening/monitoring. Access to services questionable.</p>	<p>Could be implemented in the context of a demonstration project or other process to determine LTSAE specific change or monitoring system change.</p>

# NQF Developmental Screening and LTSAE

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Promoting Healthy Development Survey (PHDS)	0011	Oregon Health & Science University

# How NQF-Endorsed Measures Get Implemented in Clinical Practice...

- Do the NQF Measures match objectives LTSAE wants to support?
- If no, do we want to propose another measure to be reviewed and endorsed by NQF?
  - 3 year schedule for endorsement with 22 priority areas
- If yes, what is happening with the use of the NQF measure in clinical practice?
  - Has the case been made and integration started?
    - Vendors who have adopted to integrate into EHR packages
    - Clinical entities using the measure in practice (Kaiser, CHOA, etc.)
    - Programs (AAP Bright Futures, ABCD, CAHMI)
  - Does a case need to be made for integration into clinical use?
  - How is the use monitored?

# Next steps...

- Define the goals and objectives of LTSAE's interest in NQF Developmental Screening Measures
  - ***Vision: Using electronic information to improve early identification of children with developmental delays, linkage to services, and tracking progress and outcomes.***
    - Quality measures as a way to have a Benchmark for developmental screening (what about developmental monitoring, screening, linkage to services, and monitoring outcomes?).
    - Quality measures and actual use including EHR integration
    - Can these measures and their implementation help
      - Improve clinical services
      - Improve referrals
      - Provide data for tracking progress and outcomes
- Identify key partners
  - Start with fact-finding (Christy Bethell, Oregon; Marion Earls, NC)
  - Local partnership (Marcus/CHOA; KP)

# HEDIS Measures and LTASE

- What is a HEDIS measure?
  - Healthcare Effectiveness Data and Information Set
  - Measures health plan performance on dimensions of care and service
    - 76 measures
    - 5 domains of care
    - Used by 90% of health plans
    - Allows for an “apples to apples” comparison

# HEDIS Measures and LTSAE

- How are HEDIS measures collected ?
  - Measures collected through online portal and goes directly to NCQA from health plans.
    - Health Organization Questionnaire for survey data.
    - Interactive Data Submission for non-survey data.
    - Data collection methodology described in HEDIS narrative, but usually based in billing and coding.
  - How are HEDIS measures used?
    - Health Insurance Plans Rankings report.
    - Quality Compass.
    - Reporting to employers who offer health plans.
    - Quality of care/service improvement .

# HEDIS Measures of Interest

## Measure

### **CAHPS-12 Month Survey with Patient Centered Medical Home Items-Child CAHPS-12 Month Survey 2.0 CAHPS- Visit Survey 2.0**

*“In the last 12 months, did you and anyone in this provider’s office talk about the kinds of behaviors that are normal for your child at this age?”*

*“In the last 12 months, did you and anyone in this provider’s office talk about how your child’s body is growing?”*

*“In the last 12 months, did you and anyone in this provider’s office talk about your child’s moods and emotions?”*

### **CAHPS-Supplemental Items for the Child Surveys**

*“Does your child currently need or use medicine prescribed by a provider, other than vitamins?”*

*“Is this medicine for a condition that is expected to last for at least 12 months?”*

*“Does your child need or use more medical care, more mental health services, or more educational services than is usual for most children of the same age?”*

*“Are these services or medical care for a condition that is expected to last for at least 12 months?”*

*“Is your child limited or prevented in any way in his or her ability to do the things most children of the same age can do?”*

*“Does your child need or get special therapy, such as physical, occupational or speech therapy?”*

*“Does your child have any kind of emotional, developmental or behavioral problem for which he or she needs or gets treatment or counseling?”*



# Partners

- Federal
  - Bright Futures (preventive health services in ACA)
    - AAP, HRSA, AHRQ
- Local
  - Marcus, CHOA
  - KP

# Measures

- AHRQ Children's Health Record Format
  - <http://www.healthit.ahrq.gov/health-it-tools-and-resources/childrens-electronic-health-record-ehr-format>
- CHIPRA Measures
- CMS – EPSDT Standards

# IT Interoperability Standards

- IHE
  - <http://ihe.net/>
- HL7
- Use case and standards
- [https://www.accompa.com/vi/a5/sh\\_usecase\\_view.php?view\\_id=2851](https://www.accompa.com/vi/a5/sh_usecase_view.php?view_id=2851)