

eMeasure Title	Follow-up Referral after Positive Developmental Screen		
eMeasure Identifier (Measure Authoring Tool)	376	eMeasure Version number	0.0.005
NQF Number	None	GUID	d47f5664-bd76-4a65-88aa-f73f6fb6a2c8
Measurement Period	January 1, 20xx through December 31, 20xx		
Measure Steward	Agency for Healthcare Research & Quality (AHRQ), Pediatric Measurement Center of Excellence (PMCoE)		
Measure Developer	PMCoE		
Endorsed By	TBD		
Description	Percentage of patients aged 6 to 36 months who were referred for follow-up care within 7 calendar days of receiving a positive developmental screening result		
Copyright	Please see Attachment 2.2 for Copyright information		
Disclaimer	<p>Disclaimer Language: These performance Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.</p> <p>THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.</p>		
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	Race, ethnicity, socioeconomic status, sex, source of payment		
Risk Adjustment	None		
Rate Aggregation	State, geographic region, health plan, practice, provider, Medicaid/CHIP		
Rationale	<p>The following clinical recommendation statements are quoted verbatim from the referenced policy statement and represent the evidence base for the measure:</p> <p>If screening results are concerning, the child should be scheduled for developmental and medical evaluations. They should be scheduled as quickly as possible and professionals should coordinate activities and share findings.¹</p> <p>In addition: It has been reported that physicians fail to identify and refer 60 to 90% of children with developmental delays in a timely manner.² Similarly, among children classified as having delays at 9 months, only 9% received follow-up services and among children classified as having delays at 24 months, only 10-12% had received services.³ Likewise, a study by Tang et al. found that 34-37% of high risk infants who failed a developmental screen were not referred to either Early Intervention or other therapies. A study cited in the report notes that the mean time between identification of a developmental delay and Early Intervention referral is greater than 5 months.⁴ Furthermore, in a qualitative study focusing on barriers to evaluation for Early Intervention services, Jimenez et al. found that parents who reported that their child was not evaluated for developmental delay were more likely to report that their pediatrician did not explain what EI was or how to obtain services.⁵</p> <p>An implantation study of the American Academy of Pediatrics (AAP) recommendations for developmental screening and referrals found that not only were referral rates among children with failed screens low (27%-100%), but practices tended to deviate from the recommendation that children with failed screens be simultaneously scheduled for developmental/medical evaluations and referred for early-intervention services. Providers tended to stratify their referrals by perceived severity of symptoms, age of child, and type of delay and occasionally failed to refer a child despite a failed screen.⁶ As a developmental delay can profoundly impact a child's ability to function in multiple settings, it is imperative that children who fail screens are referred to follow up services as soon as possible.</p>		
Clinical Recommendation Statement	Not applicable		
Improvement Notation	A higher score equals better quality.		
Reference	1. Council on Children with Disabilities Section on Developmental Behavioral Pediatrics, Bright Futures Steering Committee, Medical Home Initiatives for Children with Special Needs Project Advisory Committee. (2006). Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. <i>Pediatrics</i> , 118(1), 405-420.		
Reference	2. National Collaborative for Innovation in Quality Measurement Center of Excellence (NCINQ). (2011). Developmental screening in children. Developed for NCINQ for use in the AHRQ PQMP Consortium.		
Reference	3. Feinberg, E., Silverstein, M., Donahue, S., Bliss, R. (2012). The impact of race on participation in Part C early intervention services. <i>Journal of Developmental & Behavioral Pediatrics</i> , 32(4), 284-291.		
Reference	4. Tang, B.G., Feldman, H.M., Huffman, L.C., Kagawa, K.J., Gould, J.B. (2012). Missed opportunities in the referral of high-risk infants to early intervention. <i>Pediatrics</i> , 129(6), 1027-1034.		
Reference	5. Jimenez, M.E., Barq, F.K., Guevara, J.P., Gerdes, M., Fiks, A.G. (2012). Barriers to evaluation for early intervention		

services: parent and early intervention employee perspectives. *Academic Pediatrics*, 12(6), 551-557.

Reference	6. King, T.M., Tandon, S.D., Macias, M.M., Healy, J.A., Duncan, P.M., Swigonski, N.L., Skipper, S.M., Lipkin, P.H. (2010). Implementing developmental screening and referrals: lessons learned from a national project. <i>Pediatrics</i> , 125(2), 350-360.
Definition	<p>1: Referral for follow up care is defined as the formal event by which the clinician provides a referral to the patient family (and does not include any further steps in the process like securing the appointment, confirming appointment attendance, etc.) and refers to any type of therapy, intervention, or education to mitigate developmental delays and can be within the medical home or outside of the medical home. A referral can also include a form of watchful waiting by which the clinician offers practice-based intervention(s) and schedules a follow-up visit within 3 months. Some referral types are listed as examples below but the list is not exhaustive:</p> <p>Part C, Early Intervention Program Referral for Follow-up Testing Home Visiting for 0-5 Physical Therapist Occupational Therapist Speech/Language Pathologist Medical Home Clinician Internal Specialty Clinician External Early Head Start Network Care Manager Family-to-family Support Hearing and Vision Specialists Mental Health Specialist</p> <p>2: A positive developmental screening result refers to a result from a validated developmental screening tool that indicates the patient tests positive for risk of a developmental delay</p>
Guidance	None
Transmission Format	TBD
Initial Population	Patients aged 6 month to 36 months who received developmental screening using a validated tool
Denominator	All patients aged 6 months to 36 months who received a positive developmental screening result or an indication from the family that there was concern
Denominator Exclusions	None
Numerator	Patients who received a referral for follow-up care by the screening clinician within 7 calendar days of receiving a positive developmental screening result
Numerator Exclusions	Not applicable
Denominator Exceptions	Patients who have already received or are receiving therapy, intervention, or education that would also be applicable for developmental delay follow-up care.
Measure Population	Not applicable
Measure Population Exclusions	Not applicable
Measure Observations	Not applicable
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and gender.

Table of Contents

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Population criteria

- **Initial Population =**
 - AND: Intersection of:
 - "Patient Characteristic: birth date (start datetime >= 6 month(s))" starts before start of "Measurement Period"
 - "Patient Characteristic: birth date (stop datetime <= 36 month(s))" starts before end of "Measurement Period"
 - Intersection of:
 - Union of:

- "Encounter, Performed: Face-to-Face Interaction"
 - Union of:
 - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
 - Union of:
 - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
- Intersection of:
 - Union of:
 - "Diagnostic Study, Performed: Ages and Stages Questionnaire (ASQ), 2 months - 5 years (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Battelle Developmental Inventory Screening Tool (BDI-ST), birth - 95 months (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Bayley Infant Neuro-developmental Screen (BINS), 3 months - 2 years (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Brigance Screens-II, birth - 90 months (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Child Development Inventory (CDI), 18 months - 6 years (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Child Development Review-Parent Questionnaire (CDR-PQ), 18 months - 5 years (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Infant Development Inventory, birth - 18 months (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Parents' Evaluation of Developmental Status (PEDS), birth - 8 years (result = 1)"
 - Union of:
 - "Communication: From Patient to Provider: indication from the family that there was concern about child's development"

● **Denominator =**

- AND: Initial Population
- AND: Intersection of:
 - "Patient Characteristic: birth date (start datetime >= 6 month(s))" starts before start of "Measurement Period"
 - "Patient Characteristic: birth date (stop datetime <= 36 month(s))" starts before end of "Measurement Period"
 - Intersection of:
 - Union of:
 - "Encounter, Performed: Face-to-Face Interaction"
 - Union of:
 - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
 - Union of:
 - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
 - Intersection of:
 - Union of:
 - "Diagnostic Study, Performed: Ages and Stages Questionnaire (ASQ), 2 months - 5 years (result = 1)"
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 - "Diagnostic Study, Performed: Infant Development Inventory, birth - 18 months (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Parents' Evaluation of Developmental Status (PEDS), birth - 8 years (result = 1)"
 - Union of:
 - "Communication: From Patient to Provider: indication from the family that there was concern about child's development"

● **Denominator Exclusions =**

● **Numerator =**

- AND: Intersection of:
 - Union of:

- "Encounter, Recommended: Part C, Early Intervention Program (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Referral for Follow-up Testing (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Home Visiting for 0-5 (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Physical Therapist (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Occupational Therapist (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Speech/Language Pathologist (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Medical Home Clinician Internal (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Specialty Clinician External (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Early Head Start (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Network Care Manager (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Family-to-family Support (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Hearing and Vision Specialists (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"
- Union of:
 - "Encounter, Recommended: Mental Health Specialist (start datetime <= 7 day(s))" starts after end of "Diagnostic Study, Performed: Positive Developmental Screening Result"

- **Numerator Exclusions =**

- **Denominator Exceptions =**

- OR: Union of:
 - Intersection of:
 - "Patient Characteristic: birth date (start datetime >= 6 month(s))" starts before start of "Measurement Period"
 - "Patient Characteristic: birth date (stop datetime <= 36 month(s))" starts before end of "Measurement Period"
 - Intersection of:
 - Union of:
 - "Encounter, Performed: Face-to-Face Interaction"
 - Union of:
 - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
 - Union of:
 - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
 - Intersection of:
 - Union of:
 - "Diagnostic Study, Performed: Ages and Stages Questionnaire (ASQ), 2 months - 5 years (result = 1)"
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 - Union of:
 - "Diagnostic Study, Performed: Bayley Infant Neuro-developmental Screen (BINS), 3 months - 2 years (result = 1)"
 - Union of:
 - "Diagnostic Study, Performed: Brigance Screens-II, birth - 90 months (result = 1)"
 - Union of:

- "Encounter, Recommended: Referral for Follow-up Testing" using "Referral for Follow-up Testing User Defined QDM Value Set (1.1.1.1)"
- "Encounter, Recommended: Specialty Clinician External" using "Specialty Clinician External User Defined QDM Value Set (1.1.1.1)"
- "Encounter, Recommended: Speech/Language Pathologist" using "Speech/Language Pathologist User Defined QDM Value Set (1.1.1.1)"
- "Patient Characteristic: birth date" using "birth date LOINC Value Set (2.16.840.1.113883.3.560.100.4)"

Supplemental Data Elements

- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity CDCREC Value Set (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer" using "Payer SOP Value Set (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race CDCREC Value Set (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: ONC Administrative Sex" using "ONC Administrative Sex AdministrativeSex Value Set (2.16.840.1.113762.1.4.1)"

Measure Set	Not applicable
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