

## **Developmental Surveillance and Screening Practices By Pediatric Primary Care Providers**

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Developmental Surveillance and Screening Practices By Pediatric Primary Care Providers

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### **Abstract**

This study used a survey approach to investigate current developmental surveillance and developmental screening practices by pediatric primary care providers in a diverse New Jersey county. A total of 217 providers were contacted with a final sample size of 57 pediatric primary care respondents from 13 different municipalities. Most providers (73.7%) began developmental surveillance at the first non-hospital health supervision visit, usually at ages three to five days of life. About half (51.8%) of responding providers did surveillance and/or screening at all health encounters, while the remaining providers (48.2%) did surveillance and/or screening at only well child visits. The majority (63.6%) of providers report using a formal tool for developmental screening. There was variation in the particular developmental tool used for screening which included the use of both standardized formal and non-standardized, informal tools. Disparities in practice were associated with the patient's type of insurance, age at surveillance and/or screening initiation, and the time frame of surveillance and screening. Implications for early intervention practice are discussed.

**Keywords: developmental surveillance, developmental screening, developmental monitoring, developmental risk, developmental delay, pediatric primary care**

## Introduction

The Centers for Disease Control and Prevention [CDC] (2014) states that by parent report only two out of ten young children receive Bright Futures<sup>®</sup>/American Academy of Pediatrics<sup>®</sup> (AAP) recommended developmental screening during routine health supervision visits to their pediatrician. Early identification of developmental delay and providing effective interventions may improve outcomes for very young children and families (Oono, Honey, McConachie, 2013; Rose, Herzig, & Hussey-Gardner, 2014; Spittle, Orton, Anderson, Boyd, & Doyle, 2012). Despite this established benefit, developmental monitoring is not routinely delivered by all pediatric primary care providers.

Inadequate developmental surveillance and screening practices impede timely identification and referral of children with developmental delays. Despite the fact that excellent, well-tested, and low-cost developmental screening tools exist, some pediatric primary care providers do not use formal screening tools to ascertain developmental status, but rather, they rely fully on clinical judgment. Providers using clinical judgment alone miss 45% of children who are eligible for early intervention services (AAP, 2006; Glascoe, 2005; Mackrides & Ryherd, 2011). Early intervention providers rely, at least in part, on pediatric primary care providers to refer young children and families for evaluation and services.

## Background

Developmental surveillance is “the process of recognizing children who may be at risk for developmental delays” (AAP, 2006, p. 406). The AAP recommends developmental surveillance to identify developmental risk factors at every health supervision visit excluding those health supervision visits where developmental screening with a formal tool is routinely recommended (Bright Futures/AAP, 2014). Developmental surveillance is highly dependent on

individual practitioner preference and performance. Use of developmental milestones checklists that are not evidence-based may miss certain children with delays or unnecessarily alarm parents. Routine recommended developmental screening, which does not begin until nine months of age, potentially delays the identification of young infants already evidencing early developmental problems. AAP's essential components of developmental surveillance include: eliciting and responding to parent concerns, developmental history, informed developmental observation, review of risk factors and protective factors, and appropriate documentation (AAP, 2006).

Developmental screening is “the use of standardized tools to identify and refine” recognized developmental risk (AAP, 2006, p. 406). Developmental screening using a validated tool is recommended by the AAP during health supervision visits at ages nine months, 18 months, and 30 months. Autism screening is recommended at ages 18 months and 24 months. Formal developmental screening is also recommended at any visit where a concern is identified. The AAP suggests more intensive developmental monitoring and evaluation for children with congenital heart disease and children with neuromotor delay (Lipkin, 2013).

Examples of commonly used developmental screening tools include: Ages and Stages Questionnaire – third edition [ASQ-3] (Brookes Publishing, n.d.), Parents Evaluation of Developmental Status ([PEDS] (Glascoe, 2003), and the Survey of Well-Being of Young Children [SWYC] (Floating Hospital for Children at Tufts Medical Center, n.d.). The Modified Checklist for Autism in Toddlers (MCHAT, n.d.) is the most widely used autism specific screening tool. For the purposes of the AAP guidelines, autism-specific screening is considered separately from general developmental screening.

Developmental screening alone is insufficient to improve child outcomes. Developmental screening tools are not diagnostic. Rather, worrying screening results indicate the need for

additional action. Early intervention referral, and referral for advanced neurodevelopmental evaluation by a pediatric developmental specialist, should be enacted when a child's developmental screening results indicate any delays. In addition, a child should be referred for further evaluation any time a parent or provider has persistent concerns about development. The importance of additional action made necessary by persistent concerns underscores the requirement of appropriate documentation over time to ensure provider awareness and continuity of care. Developmental regression too, requires further investigation and/or referral by the primary care provider to determine cause and identify any serious conditions (e.g., Tay-Sachs disease, Rett Syndrome).

### **Purpose**

The purpose of this study was to assess current developmental surveillance and screening practices among pediatric primary care providers, to identify any gaps or deficiencies between practice and guidelines, and discuss recommendations for developmental surveillance and screening.

### **Setting**

Essex County is comprised of 22 municipalities including the largest city in New Jersey: Newark. Newark has a population of over 278,000 individuals. Like many center cities, Newark's demographics are diverse: 52.4% of the residents are African American/Black and 33.8% are Hispanic/Latino. Healthy Community Indicators reflecting the social, economic and environmental status of the community show Essex County, and Newark in particular, to have many challenges (CDC, 2013). Newark is a dangerous city for its residents with a murder rate placing it third in the country, behind only Detroit and New Orleans. Newark's violent crime index is 338% higher than the New Jersey average. Essex County residents report a statistically

significant higher number of physically unhealthy and mentally unhealthy days than the national benchmark. A significantly higher percentage of county residents lack healthcare coverage compared to the rest of New Jersey. Essex County children and adults use Emergency Department services for ambulatory care sensitive conditions at a significantly higher rate than children statewide.

The situation for Newark's children is especially challenging: 43.5% live in poverty, 73% are born to single mothers, and 40% are born to mothers who received late or no prenatal care (Association for Children of New Jersey [ACNJ], 2014). According to the Kids Count Data Center 91% of children did not receive a new parent home visit in New Jersey in 2011-2012. There were 4,353 children born in Newark (New Jersey Department of Health Center for Health Statistics, 2011). There are approximately 13,000 children ages birth through 36 months. According to New Jersey Early Intervention Services 2014 report there were 76 Newark children enrolled by age 12 months, 100 children enrolled by their second birthday, and 700 enrolled by their third birthday (State of New Jersey, There were 6,404 Newark children enrolled in public preschool in 2012-2013 (ACNJ, 2014). In 2011-2012, the Newark preschool enrollment included: 2,874 three year olds and 3,361 four year olds. Most of the children were in community classrooms (5,124) with 1,111 in district classrooms (ACNJ, 2013). Thus, Newark represents the extreme challenges facing urban centers in Essex County in contrast to its more suburban areas.

### **Method and Design**

A descriptive and cross-sectional survey design was used. A sample of convenience was drawn from pediatric primary care providers in Essex County, New Jersey. A preliminary scan of the providers in Essex County uncovered more than 400 pediatric providers. These included

various specialized fields and types of providers. A final list of 217 providers of pediatric primary care to survey was developed which included pediatricians, family physicians, nurse practitioners, and physician assistants. A sample size of 52 was calculated based on a 90% confidence level and an accepted margin of error of 10%.

### **Survey Development**

Survey items were derived from an algorithm for developmental surveillance and developmental screening posited by the American Academy of Pediatrics, Council on Children with Disabilities (AAP, 2006), guidelines suggested by Bright Futures Guidelines for Health Supervision, review of the existing literature on surveillance and screening practices, and the expertise of pediatric primary care providers, including two study team members certified as pediatric nurse practitioners whose expertise also guided the survey development process. The survey was tested for content validity by three independent, practicing pediatric primary care providers. Revisions to initial survey were made based on their comments. The final survey consisted of 15 items which included questions on demographic information of the practice and the population served, surveillance and screening practices, barriers to surveillance and screening, and reimbursement for performing surveillance and screening (Appendix A, <http://links.lww.com/IYC/A6>). Institutional Review Board (IRB) approval was obtained.

### **Recruitment Strategy and Sample Size**

To draw from the population of all pediatric primary care providers in Essex County, SK&A, a healthcare marketing company, provided contact information for all physicians, nurse practitioners (NP), and physician assistants (PA) in New Jersey filtered by “Pediatric” or “Family Practice” and conjugated with “Essex County.” Four hundred providers were identified. The number of providers was overestimated because “pediatric” and “family practice” filters

were only effectively applied to primary care physicians. The lists for NPs and PAs were adjusted to only include pediatric/family practice. The final total yielded 288 providers. Two hundred and seventeen providers received the survey. Circumstances for exclusion from the list included: wrong telephone number listed, a pediatrician in subspecialty care, family physician not seeing children, retirement, maternity leave, vacation, and simple refusal to participate.

Providers were contacted to confirm that services were provided to children less than four years of age within the practice site. Providers contacted were made aware of the nature of the study and the incentive available for participation. The incentives were a School of Nursing pen inscribed with the message “Ask. Screen. Intervene” and a \$10 Dunkin’ Donuts gift card. Practices were assured that the names of individual providers and practices would not be recorded for the study and that precise address information would be used only to allow mailing of the incentive. Those who indicated that they were willing to receive the survey were asked to provide a fax number. Potential respondents were then faxed a packet with a University cover sheet, title of the study, an explicit note about the incentive, return fax information, and an IRB-approved consent letter followed by the survey itself. Practices with several applicable providers were faxed all at once. Survey return times varied from a few days to a month or more. Once the list was entirely faxed over a period of three months, a second round of faxes was sent to all non-responders who had previously provided a fax number, but had not responded by that time. The cover sheet was revised to indicate that it was a “second invitation” and information about the incentive was highlighted. Survey returns from this round were typically received within a week, but were accepted for up to two months. Incentives were then mailed to all responders with a signed thank you letter.

## Results

### Description of Respondents and their Practice Sites

Fifty-seven surveys were returned for a response rate of 26.3%. This exceeded the minimum projected rate of return for adequate power. The respondents were as follows: pediatricians ( $n = 45$ ), pediatric nurse practitioners ( $n = 6$ ), family physicians ( $n = 5$ ), and family nurse practitioner ( $n = 1$ ). Surveys were received from practice sites located in 13 different cities in Essex County, New Jersey. The cities with the highest number of responses were Newark (15) and Millburn (13), a suburban community.

Thirty-one providers (56.1%) reported that the population they served was diverse: inclusive of Asian, Black, Hispanic, and Caucasian children. Twelve providers (21.1%) saw predominately children of African American or Black descent. Seven providers (12.3%) cared for predominately children of Hispanic descent including those who were Spanish speaking. Six providers (10.52%) saw a predominately non-minority population.

Most of the respondents identified their practice setting as private (89.5%,  $n = 51$ ). Providers described the insurance patients had as: mostly private (37.5%), mostly public (23.2%), or a mix of private and public (38.6%). Over half (55.4%) of providers billed for surveillance and screening; the rest did not specifically bill for surveillance and screening.

Practice volume, defined as children under age five presenting for health supervision visits, ranged from less than 50 to over 200 children seen each month. Twelve providers reported being part of a practice that saw 200 or more children per month for health supervision visits.

### **Developmental Surveillance and Developmental Screening Practices**

Developmental surveillance and screening was performed by a variety of individuals including physician (51), parent (10), advanced practice nurse (9), physician assistant (3), medical assistant (9), and nurse (1). One pediatrician noted that developmental surveillance and screening was performed by a psychologist and another pediatrician reported that surveillance and screening was done by medical residents.

Developmental surveillance included the following areas: eliciting and attending to parental concerns (98.2%), maintaining a developmental history (94.7%), and performing a physical, social, emotional, behavioral, and developmental exam (86.0%). Most providers (73.7%) began developmental surveillance at the first non-hospital health supervision visit usually at ages three to five days of life. About half (51.8%) of responding providers did surveillance and/or screening at all health encounters, while the remaining providers (48.2%) did surveillance and/or screening at only well child visits.

The majority (63.6%) of providers used a formal tool for developmental screening. Forty providers (70.2%) reported performing formal developmental screening at nine months of age; 75.4% screened at 18 months of age, and 50.9% screened at 30 months of age (Table 1). This indicates that approximately 25-50% of children covered by this survey are not receiving AAP recommended developmental screening at the appropriate age points.

Although the study targeted providers within a relatively circumscribed geographical area, variance was seen in the types of ‘screening’ tools; some used tools that are not standardized and some used autism or ADHD screening tools (Table 2). Nineteen providers reported using MCHAT (16) or CHAT (2) or another autism screening tool (1) as part of their developmental

screening practice. Fifteen providers reported using the Denver Developmental Screening Test (version not specified) for screening. Seven providers reported using the Ages and Stages questionnaire for screening. Three providers reported using the Patient Health Questionnaire (PHQ-9). Three providers used the Vanderbilt for ADHD screening. Two providers reported using a checklist, but not a particular tool, for screening. One provider used “AAP guidelines” and another used “Bright Futures” for developmental screening. The Clinical Linguistic and Auditory Milestone Scale (CLAMS), the CSBS DP Infant Toddler Checklist, and the Survey of Young Children (SWYC) were each used by single providers. Multiple providers reported using more than one tool. Of note, one provider reported not using any screening tool because it was not part of the electronic medical record platform in use at their practice site while another provider had recently segued from using the ‘Denver’ (version not specified) to the SWYC after a professional learning activity. Links providing additional information about ‘screening’ tools may be found in Table 3 and at:

[https://www.acf.hhs.gov/sites/default/files/ecd/screening\\_compendium\\_march2014.pdf](https://www.acf.hhs.gov/sites/default/files/ecd/screening_compendium_march2014.pdf).

Nine out of ten pediatric primary care providers regularly monitored physical (98.2%), behavioral (96.5%), and cognitive (91.2%) domains of development during their developmental surveillance. Eight out of ten providers monitored social (87.7%), mental (86.0%), and emotional (80.7%) domains. Only 36.8% of providers routinely assessed for socioeconomic developmental risk factors during developmental surveillance.

Providers report taking the following action(s) when they suspect a child is at risk for developmental delay: 94.7% make neurodevelopmental evaluation referral, 94.7% provide early intervention referral, 78.9% schedule a follow-up visit sooner than typical, and 78.9% provide parent education. Two pediatricians noted that they individualized their actions based on a

child's unique circumstances. Referrals to speech and audiology, feeding and swallowing therapy, early childhood education, child study team, social work, psychology, physical therapy, and occupational therapy were also reported.

### **Discussion**

The AAP's recommended developmental screening is an important aspect of pediatric health supervision that is not routinely applied in all practice settings or at each suggested age point. In this study, providers completing developmental screening, at AAP recommended age points, varied from approximately 50-75%. The recommended age point where the least developmental screening occurred is at age 30 months.

Approximately 60% of Essex County providers reported using a formal developmental screening tool. A variety of screening tools were used with some providers reporting the use of informal tools rather than more effective, validated instruments. The use of informal tools by some providers suggests that additional training is needed. The use of formal standardized tools achieves greater identification of children with developmental delay. Almost all providers refer children to early intervention services at the point when developmental risk or delay(s) is identified. Radecki, Sand-Loud, O'Connor, Sharp, & Olson (2011) conducted a self-reported survey to compare national random samples of non-retired, United States-based, American Academy of Pediatric members in 2002 and 2009 to determine the use of one or more developmental standardized screening tools for children from birth to 35 months. Developmental standardized screening tool use increased from 23% to 47.7%. This trend over time supports the value of continued additional training efforts for pediatric primary care providers and their office personnel.

To put our data in a larger context, Bethell, Reuland, Schor, Abrahms, & Halfon (2011) analyzed the 2007 National Survey of Children's Health Data, reporting that for children ages 10 months to 71 months, the national prevalence of standardized parent completed developmental screening was 19.5% and range from a low of 10.7% in Pennsylvania to a high of 47% in North Carolina. New Jersey had a rate of 12.7%. Developmental screening rates were highest for very young children 12 months of age or under (26.7%), for Black children (24.4%), and for children with public health insurance (23.6%). We speculate that our survey results reflect the trend over time of increased use of validated screening tools by pediatric providers.

Our provider-reported developmental screening rate was higher than CDC findings noted previously, where only 20% of parents recall their young child receiving Bright Futures'/American Academy of Pediatrics' (AAP) recommended developmental screening during routine health supervision visits to their pediatrician. This discrepancy between provider-reported and parent-reported developmental screening needs further investigation.

### **Disparities in Surveillance and Screening Practices**

Although most participating providers reported conducting developmental surveillance and screening, some disparities were noted. These disparities in developmental monitoring practices were associated with the patient population's type of insurance. Surveillance and screening were performed more frequently on patients with private insurance as reported by 21 providers (37.5%,  $n = 56$ ) when compared with 13 providers (23.2%,  $n=56$ ) that served patients who had mostly public health insurance. Twenty-two providers reported that their patient population was a mix of public and private insurance. The disparity was noted when surveillance and screening started in terms of the patient's age and whether they were performed at well visit's only or at each visit. The rates were consistently higher for the 14 providers (34.1%,  $n =$

41) serving patients with private insurance versus the 11 providers (26.8%,  $n=41$ ) serving patients with public insurance at 3-5 days after birth to 75% and 25% respectively at two months age. In addition, 10 providers (36%,  $n = 28$ ) performed surveillance and screening at all encounters on privately insured patients compared with seven providers (25%,  $n = 28$ ) who served children with mostly public insurance. Furthermore, the disparity also extended to evaluations, referrals, and follow up visits. Nineteen providers (36%,  $n = 53$ ) reported referring privately insured patients for neurodevelopmental evaluations compared with 13 providers (25%,  $n = 53$ ) with patients who had mostly public insurance; referral for early intervention occurred more often by the 21 providers (40%,  $n = 53$ ) with serving mostly privately insured children versus 13 providers (24.5%,  $n = 53$ ) with mostly public insured patients; 18 providers (41%,  $n = 44$ ) reported scheduling privately insured patients for earlier follow-up visits as compared with 12 providers (27%,  $n = 44$ ) with public insurance if flagged after initial surveillance.

### **Recommendations**

Recommendations for developmental surveillance and developmental screening have been well publicized by Bright Futures and the American Academy of Pediatrics (AAP) since at least, 2006. In spite of these recommendations, variations in surveillance and screening practices were documented in this study of one diverse county in New Jersey. We believe that this variation likely demonstrates a knowledge translation deficit. It is important to consider what the downstream effects of implementing a surveillance/screening program might be if not conducted appropriately. While we were reassured that developmental risk or delay(s) were referred to early intervention, providers need to be more knowledgeable about the use of validated screening instruments. Effective use of such instruments may reduce the cost associated with inappropriate

referrals and may decrease the level of parental concern. The use of standardized tools may also lead to earlier identification and intervention for young children with developmental concerns.

Proper and timely identification of developmental delays and referral is an essential component to increasing the quality of life of children with developmental challenges. Due to the vast implications of delaying intervention, providers need to be knowledgeable of best practice. Curriculum for all pediatric primary care providers needs to be inclusive of developmental surveillance and screening requirements. Documentation of knowledge of recommendations and use of validated tools needs to become a consideration for licensing. Incorporating developmental surveillance prompts into the electronic health record (EHR) may improve developmental monitoring.

Opportunities for early intervention providers to support developmental surveillance and developmental screening practices in pediatric primary care abound. Recognition that developmental surveillance and screening as practiced by primary care providers is not universally optimal points to a need to engage other health professionals, early educators, and parents in recognizing developmental delay. Simple written provision of feedback related to early intervention referral outcomes may reinforce the importance of developmental monitoring. Continued education of pediatricians and other pediatric primary care professionals and personnel staff about recommended surveillance and screening practices remains important. It should also be noted that sometimes personnel without strong child development knowledge may have responsibility for developmental monitoring. This fact may highlight the need for providing training to multiple disciplines and not only physician providers. Research to further elucidate the benefits of early intervention services on child and family outcomes as well as the

dissemination of such is another tactic to encourage recommended developmental monitoring practices in pediatric primary care.

Lower socioeconomic status and developmental risk are linked. As previously noted, only 36.8% of primary care providers routinely assessed for socioeconomic developmental risk factors. The extreme contrast between affluent and poor areas of Essex County contributes to making Newark and surrounding towns more social and economically disadvantaged with increasing family exposure to stressful life events. AAP has supported the policy that in addition to developmental screening, pediatric practices should use standardized instruments to assess aspects of the family and the community that may increase children's risk for toxic stress (Garner & Shonkoff, 2012). Risk factors of toxic stress in children include neighborhood crime and violence, poverty, interpersonal violence in the home, parental depression, or substance use (Johnson, Riley, Granger & Riis, 2013). There is evidence that the accumulation of multiple stressful events and environments can negatively impact mental health wellness of children (Robert Wood Johnson Foundation, 2014).

Not all pediatric primary care providers monitor for social and/or emotional risk. Social and emotional screening of young children should be considered as a component of health supervision practice routines. For instance, an instrument to evaluate risk of adverse childhood experiences (ACE) can assist in providing information that can guide strategies for primary prevention in a pediatric practice that services low income families living in high crime environments. In a study by Burke, Hellman, Scott, Weems & Carrion (2011), learning and behavioral problems were associated with children who had experienced four adverse childhood experiences. The 7-item Child ACE tool can provide evidence of early risk exposure and developmental delays (Marie-Mitchell & O'Connor, 2013) and early referral.

## **Limitations**

The major limitation to improved understanding of provider practices for developmental surveillance remains identifying and addressing the knowledge deficit regarding best practices. While this study captured valuable information on current practice, it did not identify providers' knowledge of best practice. Whether pediatric primary care providers subscribe to AAP definitions of developmental surveillance versus developmental screening was not assessed. Provider rationale for incorporating current practice, including selection of developmental screening tools, and level of developmental expertise of the personnel, other than identified pediatric primary care providers, providing developmental surveillance and screening, and reasons why these individuals were selected was not explored.

The authors recognize that parental perspective is an important part of developmental surveillance and acknowledge that this study did not address parental characteristics that may have contributed to current practice, including English language proficiency, knowledge deficit, health literacy, and socio-economic status. The survey also did not address what sort of professional services a particular practice setting may or may not have available on-site or elsewhere. Availability of on-site inter-professional services (e.g., dietician, health educator, social worker) may contribute to referral practice patterns.

## **Conclusion**

This study highlights a general overview of developmental surveillance and developmental screening practices in a large diverse county in New Jersey. Disparities exist between the higher income and lower incomes communities. Pediatric developmental monitoring practices may be optimally instituted through the use standardized instruments and further

education directly addressing practitioner uptake of recommended, evidence-based practices.

Types of developmental surveillance and screening instruments should be selected based on the location and environmental dynamics of the community to ensure that the impacts of low socioeconomic status, high risk stress neighborhoods are considered. Applying appropriate standardized instruments and providing meaningful family education and guidance based on the family's community is warranted. Early intervention professionals continue to have an important role in promoting awareness, disseminating evidence-based practices, and educating health care professionals to improve developmental monitoring and referral for young children and families.

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Table 1

*Recommended Developmental Screening Practice versus Actual Developmental Screening Practice*

<u>Recommendation</u> (AAP, 2014)	<u>Actual Practice In Essex County, New Jersey</u>	
Ages for Routine Developmental Screening and/or Autism Screening	N of Pediatric Primary Care Providers Who Report Screening at Recommended Age Points	% of Pediatric Primary Care Providers Who Report Screening at Recommended Age Points
9 Months (Development)	40	70.20%
18 Months (Development and Autism)	43	75.40%
24 Months (Autism)	40	70.20%
30 Months (Development)	29	50.90%

Table 2

*Screening Tools Used in Essex County NJ Practices*

<u>General Developmental</u>			<u>Autism*</u>			<u>ADHD/Language Delay</u>		
Tool Name	N of Providers	%	Tool Name	N of Providers	%	Tool Name	N of Providers	%
Denver	15	27	MCHAT	16	28	Vanderbilt	3	5
Ages & Stages PHQ9	7	12	CHAT	2	4			
Bright Futures	3	5	Other	1	2	CLAMS	1	2
CSBS DP Infant Toddler Checklist	1	2						
SWYC	1	2						
Other Checklist	1	2						
AAP Guidelines	1	2						
<i>Subtotal using any tool in category</i>	<i>30</i>	<i>54</i>		<i>19</i>	<i>34</i>		<i>4</i>	<i>7</i>
None of the above	26	46	None of the above	37	66	None of the above	52	93
TOTAL	56	100%		56	100%		56	100%

*Note.* These screening tools were used in combination with other tools.

Table 3

*Developmental Screening Tools Used by Pediatric Primary Care Providers*

<u>Instrument Name</u>	<u>Primary 'Screening' Purpose</u>	<u>Additional Information</u>
Modified Checklist for Autism in Toddlers (MCHAT)	Autism	<a href="https://www.m-chat.org/">https://www.m-chat.org/</a>
Checklist for Autism in Toddlers (CHAT)	Autism	<a href="http://www.helpautismnow.com/CHAT_Checklist_English.pdf">http://www.helpautismnow.com/CHAT_Checklist_English.pdf</a>
Denver Developmental Screening Test (DDST)	Development	<a href="http://denverii.com">http://denverii.com</a>
Ages and Stages Patient Health Questionnaire (PHQ-9)	Development	<a href="http://agesandstages.com/">http://agesandstages.com/</a>
Vanderbilt Assessment Scales	Depression	<a href="http://www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf">http://www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf</a>
Clinical Linguistic and Auditory Milestones Scale (CLAMS)	Attention Deficit Hyperactivity Disorder	<a href="http://www.nichq.org/childrens-health/adhd/resources/vanderbilt-assessment-scales">http://www.nichq.org/childrens-health/adhd/resources/vanderbilt-assessment-scales</a>
CSBS DP Infant Toddler Checklist	Linguistic and Auditory Milestones	<a href="http://medicine.missouri.edu/childhealth/uploads/CLAMS-scale.pdf">http://medicine.missouri.edu/childhealth/uploads/CLAMS-scale.pdf</a>
Survey of Well-being of Young Children (SWYC)	Communication Delays	<a href="http://www.brookespublishing.com/resource-center/screening-and-assessment/csbs/csbs-dp/">http://www.brookespublishing.com/resource-center/screening-and-assessment/csbs/csbs-dp/</a>
	Developmental Milestones, Behavioral/emotional Development, Family Risk	<a href="http://www.theswyc.org/">http://www.theswyc.org/</a>

Factors, Autism-  
specific Screening