

A hand is shown in the upper right corner, placing a wooden block on top of a stack. The blocks are arranged in a staircase pattern, with each step being higher than the previous one. The background is a solid light blue color, and the surface the blocks are on is white and reflective.

Developmental Screening in Arizona

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I have no disclosures

Overview

- Developmental Milestones
- Screening Process and Tools
- AzAAP Developmental Screening Committee
- Review Arizona Screening Data





AAP Guideline History

- 2006 AAP Policy Statement
 - Discrete ages for testing
 - Valid and reliable screening tools
- National Screening Rates
 - 2002: 23%
 - 2009: 45%
 - 2016: 63%

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; Identifying Infants and Young Children With Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening. *Pediatrics* July 2006; 118 (1): 405–420.

Surveillance = Milestones

- CDC and AAP new guidelines
- Published February 2022
- Mixed reception



- Handout in packet

Jennifer M. Zubler, et al; Evidence-Informed Milestones for Developmental Surveillance Tools. *Pediatrics* March 2022; 149 (3): e2021052138. [10.1542/peds.2021-052138](https://doi.org/10.1542/peds.2021-052138)

CDC's Percentile-Based Guidelines

- In 2019, a team of subject matter experts began examining CDC milestones. (*Pre-pandemic*)
- Previous CDC milestone guidelines were based on **50th percentile**
- 50th percentile was thought to be limiting referrals
- Milestone guidelines were revised and based on **75th percentile** measurements



Process

TABLE 3

Social-Emotional Milestones With Supporting Normative Data, Evaluation Tools, and Published Clinical Opinion References

Social-Emotional Milestones	Age	CDC or New	Source		
			Normative Data ^a	Developmental Screening and Evaluation Tools ^b	Published Clinical Opinion ^c
Calms down when spoken to or picked up ^d	2 mo	New	Ertem et al (35)	—	ASHA (11), Bright Futures (36), Dosman et al (8), Sharp et al (37)
Looks at your face	2 mo	CDC	Ertem et al (35), Sheldrick and Perrin (38)	—	Bright Futures (36), Dosman et al (8), Scharf et al (18)
Seems happy to see you when you walk up to her	2 mo	New	Ertem et al (35), Sheldrick and Perrin (38), Thalagala (39)	—	—
Smiles when you talk to or smile at her	2 mo	CDC	Bhave et al (40), Ertem et al (35), Lejarraga et al (41), Thalagala (39)	ASQ-3 (22), PEDS-DM (25)	ASHA (11)
Smiles on his own to get your attention	4 mo	CDC	Ertem et al (35)	ASQ-3, PEDS-DM	Bright Futures (36)
Chuckles (not yet a full laugh) when you try to make her laugh	4 mo	New	Accardo and Capute (30), Bhave et al (40), Ertem et al (35), Sheldrick and Perrin (38)	ASQ-3, PEDS-DM	ASHA (11), Bellman et al (42), Bright Futures (36)

Process

TABLE 4

Language and Communication Milestones With Supporting Normative Data, Evaluation Tools, and Published Clinical Opinion References

Language/Communication Milestones	Age	CDC or New	Source		
			Normative Data ^a	Developmental Screening and Evaluation Tools ^b	Published Clinical Opinion ^c
Makes sounds other than crying	2 mo	CDC	Dosman et al (8), ^d Sheldrick and Perrin (38)	ASQ-3 (22), PEDS-DM (25)	Blackwell and Baker (53), Bright Futures (36), Gerber et al (20), Scharf et al (18)
Reacts to loud sounds ^e	2 mo	New	—	—	Accardo and Capute (30), ASHA (11), Bellman et al (42), Bright Futures (36)
Makes sounds like “oooo” and “aahh” (cooing)	4 mo	CDC	Accardo and Capute (30), Ertem et al (35)	ASQ-3	ASHA (11), Bright Futures (36), Dosman et al (8), Gerber et al (20), Scharf et al (18)
Makes sounds back when you talk to him	4 mo	New	Ertem et al (35), Den Ouden et al (54), Kumar et al (44)	ASQ-3	Bellman et al (42)
Turns head toward the sound of your voice	4 mo	CDC	Accardo and Capute (30), Bhave et al (40), Den Ouden et al (54), Sheldrick and Perrin (38)	—	Bellman et al (42), Dosman et al (8), Gerber et al (20), Johnson and Blasco (15), Scharf et al (18)

Overview of Changes

- Milestone guidelines were added for 15 and 30 months of age
- 94 milestones remained from original CDC guidelines
- 64 milestones were added
- 57 milestones were removed
- Average number of milestones per age group **decreased** from 22 to 13

<https://publications.aap.org/pediatrics/article/149/3/e2021052138/184748/Evidence-Informed-Milestones-for-Developmental>

2 Month Checklist

PREVIOUS

Social/Emotional

- Begins to smile at people
- Can briefly calm himself
(may bring hands to mouth and suck on hand)
- Tries to look at parent

Language/Communication

- Coos, makes gurgling sounds
- Turns head toward sounds

Cognitive (learning, thinking, problem-solving)

- Pays attention to faces
- Begins to follow things with eyes and recognize people at a distance
- Begins to act bored (cries, fussy) if activity doesn't change

Movement/Physical Development

- Can hold head up and begins to push up when lying on tummy
- Makes smoother movements with arms and legs

UPDATED

Social/Emotional Milestones

- Calms down when spoken to or picked up
- Looks at your face
- Seems happy to see you when you walk up to her
- Smiles when you talk to or smile at her

Language/Communication Milestones

- Makes sounds other than crying
- Reacts to loud sounds

Cognitive Milestones (learning, thinking, problem-solving)

- Watches you as you move
- Looks at a toy for several seconds

Movement/Physical Development Milestones


- Holds head up when on tummy
- Moves both arms and both legs
- Opens hands briefly




4 Month Checklist

PREVIOUS




Social/Emotional

- Smiles spontaneously, especially at people
- Likes to play with people and might cry when playing stops
-  Copies some movements and facial expressions, like smiling or frowning




Language/Communication

-  Begins to babble
- Babbles with expression and copies sounds he hears
- Cries in different ways to show hunger, pain, or being tired

Cognitive (learning, thinking, problem-solving)



-  Lets you know if she is happy or sad
-  Responds to affection
- Reaches for toy with one hand
- Uses hands and eyes together, such as seeing a toy and reaching for it
-  Follows moving things with eyes from side to side
- Watches faces closely
- Recognizes familiar people and things at a distance

Movement/Physical Development



-  Holds head steady, unsupported
-  Pushes down on legs when feet are on a hard surface
-  May be able to roll over from tummy to back
- Can hold a toy and shake it and swing at dangling toys
- Brings hands to mouth
- When lying on stomach, pushes up to elbows

UPDATED

Social/Emotional Milestones

-  Smiles on his own to get your attention
-  Chuckles (not yet a full laugh) when you try to make her laugh
- Looks at you, moves, or makes sounds to get or keep your attention

Language/Communication Milestones

-  Makes sounds like "oooo", "aahh" (cooing)
-  Makes sounds back when you talk to him
- Turns head towards the sound of your voice

Cognitive Milestones (learning, thinking, problem-solving)

- If hungry, opens mouth when she sees breast or bottle
- Looks at his hands with interest



Movement/Physical Development Milestones

- Holds head steady without support when you are holding her
- Holds a toy when you put it in his hand
- Uses her arm to swing at toys
- Brings hands to mouth
- Pushes up onto elbows/forearms when on tummy



6 Month Checklist

PREVIOUS

Social/Emotional

- Knows familiar faces and begins to know if someone is a stranger
-  Likes to play with others, especially parents
-  Responds to other people's emotions and often seems happy
- Likes to look at self in a mirror





Language/Communication

- Responds to sounds by making sounds
- Strings vowels together when babbling ("ah," "eh," "oh") and likes taking turns with parent while making sounds
-  Responds to own name
- Makes sounds to show joy and displeasure
-  Begins to say consonant sounds (jabbering with "m," "b")

Cognitive (learning, thinking, problem-solving)

- Looks around at things nearby
- Brings things to mouth
- Shows curiosity about things and tries to get things that are out of reach
- Begins to pass things from one hand to the other

Movement/Physical Development

-  Rolls over in both directions (front to back, back to front)
-  Begins to sit without support
-  When standing, supports weight on legs and might bounce
-  Rocks back and forth, sometimes crawling backward before moving forward

UPDATED

Social/Emotional Milestones

- Knows familiar people
- Likes to look at himself in a mirror
- Laughs


Language/Communication Milestones

- Takes turns making sounds with you
- Blows "raspberries" (sticks tongue out and blows)
- Makes squealing noises

Cognitive Milestones (learning, thinking, problem-solving)

- Puts things in her mouth to explore them
- Reaches to grab a toy he wants
- Closes lips to show she doesn't want more food

Movement/Physical Development Milestones

-  Rolls from tummy to back
- Pushes up with straight arms when on tummy
- Leans on hands to support himself when sitting

Handouts

- [https://CDC
Handouts.cdc.gov/ncbddd/actearly/](https://CDC.Handouts.cdc.gov/ncbddd/actearly/)

- [CDC Handouts](#)

Checklists

- [2 months](#)
- [4 months](#)
- [6 months](#)
- [9 months](#)
- [1 year](#)
- [15 months](#)
- [18 months](#)
- [2 years](#)
- [30 months](#)
- [3 years](#)
- [4 years](#)
- [5 years](#)

Checklists with Tips in All Available Languages

- [English](#) 📄 [4 MB, 24 Pages, 508]
- [Spanish](#) 📄 [5.7 MB, 24 Pages, 508]
- [Arabic](#) 📄 [6 MB, 20 Pages, 508]
- [Brazilian Portuguese](#) 📄 [10 MB, 20 Pages, 508]
- [Farsi](#) 📄 [848 KB, 24 Pages, 508]
- [French](#) 📄 [6 MB, 24 Pages, 508]
- [Haitian Creole](#) 📄 [12 MB, 24 Pages, 508]
- [Hindi](#) 📄 [1.9 MB KB, 24 Pages, 508]
- [Korean](#) 📄 [7 MB, 24 Pages, Print Only]
- [Simplified Chinese](#) 📄 [7 MB, 24 Pages, Print Only]
- [Somali](#) 📄 [1.65 MB, 24 pages, 508]
- [Vietnamese](#) 📄 [4 MB, 24 Pages, Print Only]

Seu bebê aos 2 meses

Nome do bebê _____

Idade do bebê _____

Data de hoje _____

Os marcos do desenvolvimento são importantes! A maneira como seu bebê brinca, aprende, fala, age e se move oferece pistas importantes sobre seu desenvolvimento. Verifique os marcos do desenvolvimento que seu bebê atingiu aos 2 meses. Leve isso com você e converse com o médico do seu bebê em todas as consultas pediátricas sobre os marcos do desenvolvimento que seu bebê alcançou e o que esperar a seguir.



O que a maioria dos bebês faz nessa idade:

Marcos Sociais/Emocionais

- Acalma-se quando falam com ele ou quando o pegam no colo
- Olha para o seu rosto
- Parece feliz em ver você quando caminha até ele
- Sorri quando você fala ou sorri para ele

Marcos de Linguagem/Comunicação

- Faz outros sons além de chorar
- Reage a sons altos

Marcos Cognitivos (aprender, pensar, resolver problemas)

- Observa conforme você se move
- Olha para um brinquedo por vários segundos

Marcos de Movimento/Desenvolvimento Físico

- Mantém a cabeça erguida quando está de bruços
- Move os dois braços e as duas pernas
- Abre as mãos brevemente

Outras coisas importantes para compartilhar com o médico...

- Quais são algumas das coisas que você e seu bebê fazem juntos?
- Quais são algumas das coisas que seu bebê gosta de fazer?
- Há algo que seu bebê faz ou deixa de fazer que o preocupa?
- Seu bebê perdeu alguma habilidade que já teve?
- Seu bebê tem alguma necessidade especial de saúde ou nasceu prematuro?

Você é quem conhece melhor o seu bebê. Não espere. Se o seu bebê não está atingindo um ou mais marcos do desenvolvimento, perdeu habilidades que já teve, ou você tem outras preocupações, aja cedo. Converse com o médico do seu bebê, compartilhe suas preocupações e pergunte sobre a triagem do desenvolvimento. Se você ou o médico ainda estiverem preocupados:

1. Peça um encaminhamento para um especialista que possa avaliar mais seu bebê; e
2. Ligue para o programa de intervenção precoce do seu estado ou território para descobrir se seu bebê pode obter serviços de ajuda. Saiba mais e encontre o número em [cdc.gov/FindEI](https://www.cdc.gov/FindEI).

Para saber mais sobre como ajudar seu bebê, acesse [cdc.gov/Concerned](https://www.cdc.gov/Concerned).

Centers for Disease Control App



CDC's *Milestone Tracker* App

- Learn more about the *Milestone Tracker* app – now available in [English](#) and [Spanish](#)
- Promote the *Milestone Tracker* app with a promotional toolkit [English](#) [3 MB, 17 Pages, 508], and [Spanish](#) [3 MB, 17 Pages, 508]
- [Download the *Milestone Tracker* app from the App Store](#)
- [Download the *Milestone Tracker* app from Google Play](#)

AAP Screening

- Screen all children for developmental delays
- Early identification improves outcomes
- Less than a quarter of children with developmental delays receive early intervention
- Milestone checklists engage parents and providers in discussing concerns



Jennifer M. Zubler, et al; Evidence-Informed Milestones for Developmental Surveillance Tools. *Pediatrics* March 2022; 149 (3): e2021052138. [10.1542/peds.2021-052138](https://doi.org/10.1542/peds.2021-052138)

Developmental Screening

- Specific ages (9, 18, 24 months)
- Validated tools
- Populations (dual-language learners, Native populations, children with disabilities)
- [Screening Tool Information](#)
- Resource: DHHS Office of Planning Research and Evaluation
- <https://eclkc.ohs.acf.hhs.gov/child-screening-assessment/article/understanding-choosing-assessments-developmental-screeners-young-children-ages-3-5-profiles-selected>

Sensitivity and Specificity: Ages and Stages

- **Sensitivity: How accurately does the developmental screener correctly identify children at risk for developmental delays?**
- 83-86%
- **Specificity. How accurately does the developmental screener correctly identify children who are not at risk for developmental delays?**
- 86-92%

Sensitivity and Specificity: PEDS

- **Sensitivity: How accurately does the developmental screener correctly identify children at risk for developmental delays?**
- 83-86%
- **Specificity. How accurately does the developmental screener correctly identify children who are not at risk for developmental delays?**
- 86-92%

AzAAP Developmental Screening Team

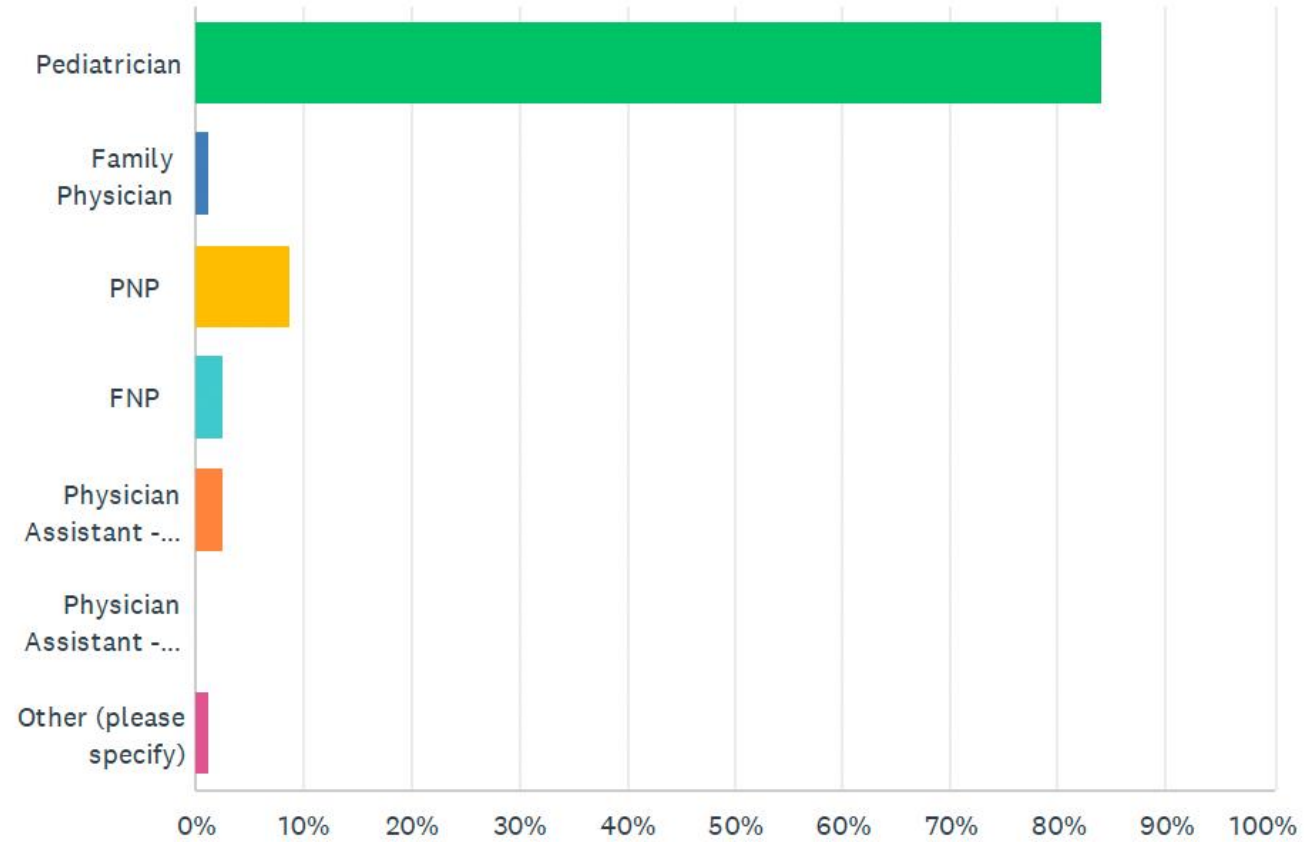
- Catherine Riley MD (lead)
- Sydney Rice, MD
- Dawn Sorenson, MD
- Steven Spiess, MD
- Amy McAuley, MD
- Melanie Martin Senior Manager of Early Brain and Child Development Program

*Thank
you!*

**To the many of you who fill out countless surveys,
particularly the 81 who filled out this one.**

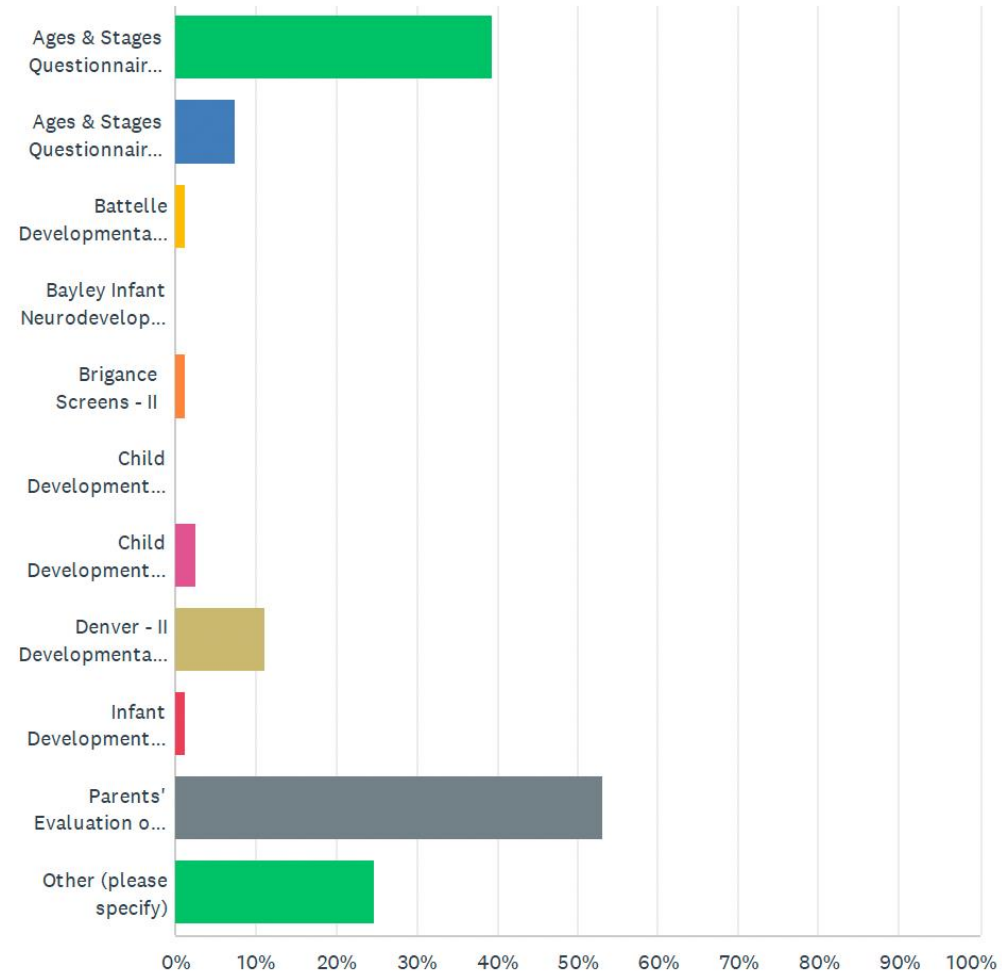
Q1 Are you a:

Answered: 81 Skipped: 0



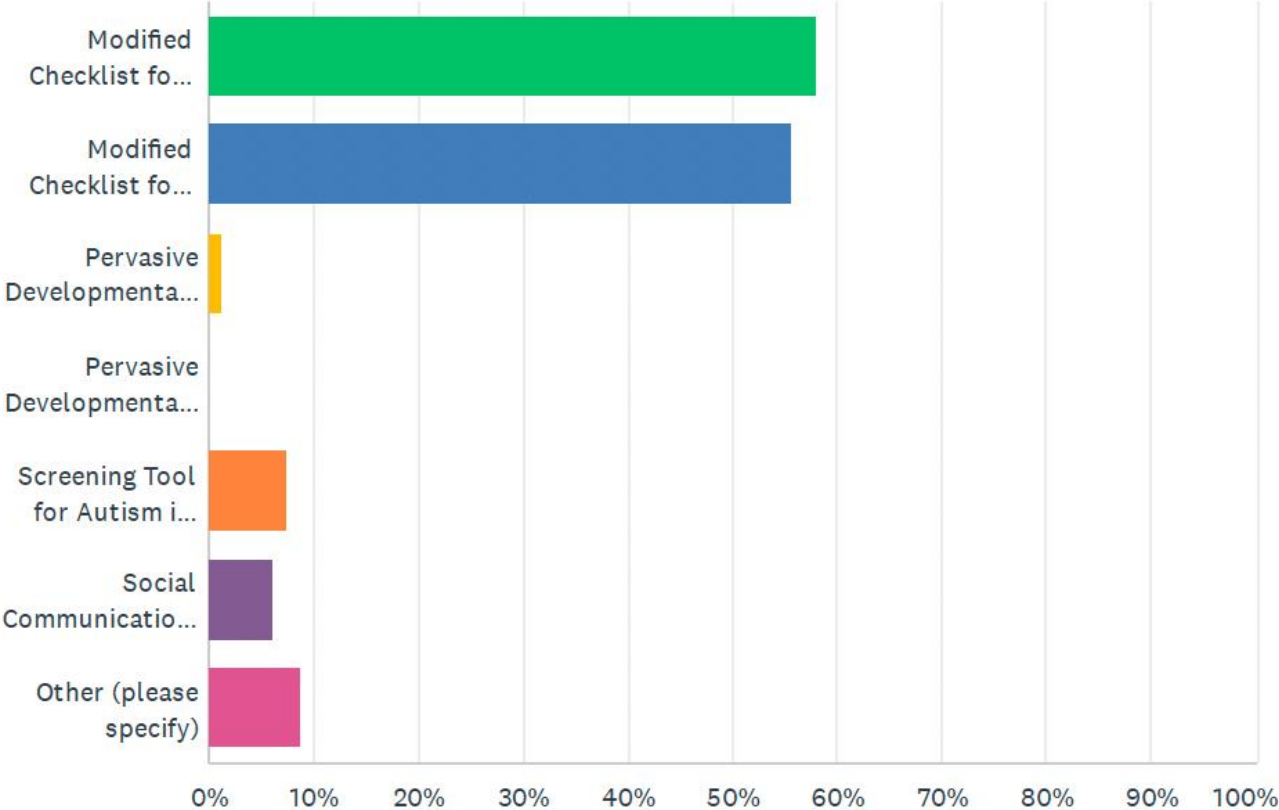
Q2 What standardized developmental screening tools do you use? (Check all that apply)

Answered: 81 Skipped: 0



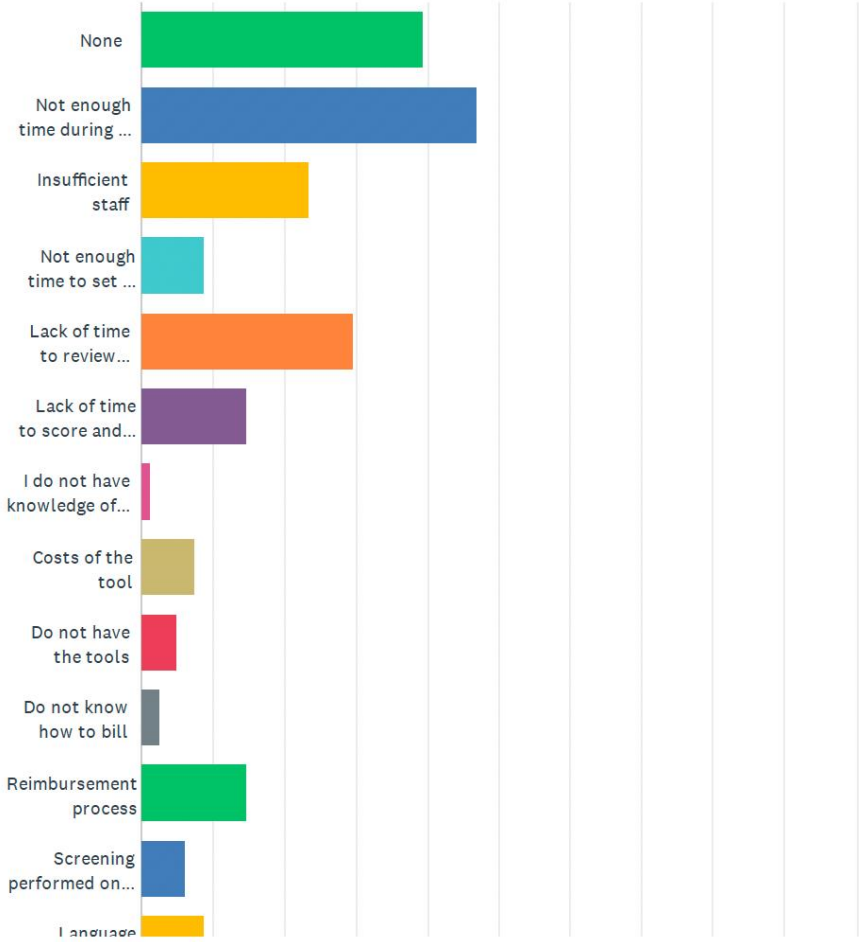
Q4 What standardized autism screening tools do you use? (Check all that apply)

Answered: 81 Skipped: 0



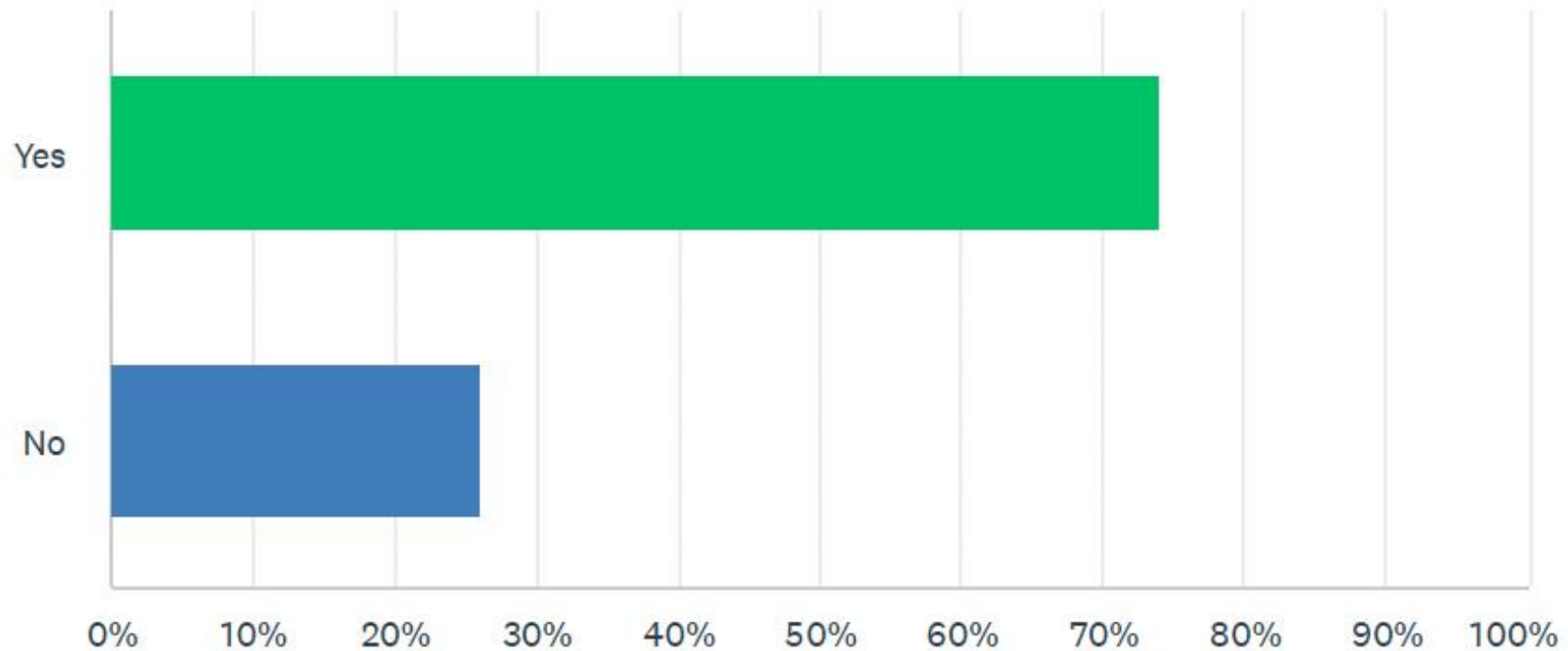
Q6 Which factors do you feel prevent you from performing routine screening using a standardized tool consistently? (Check all that apply)

Answered: 81 Skipped: 0



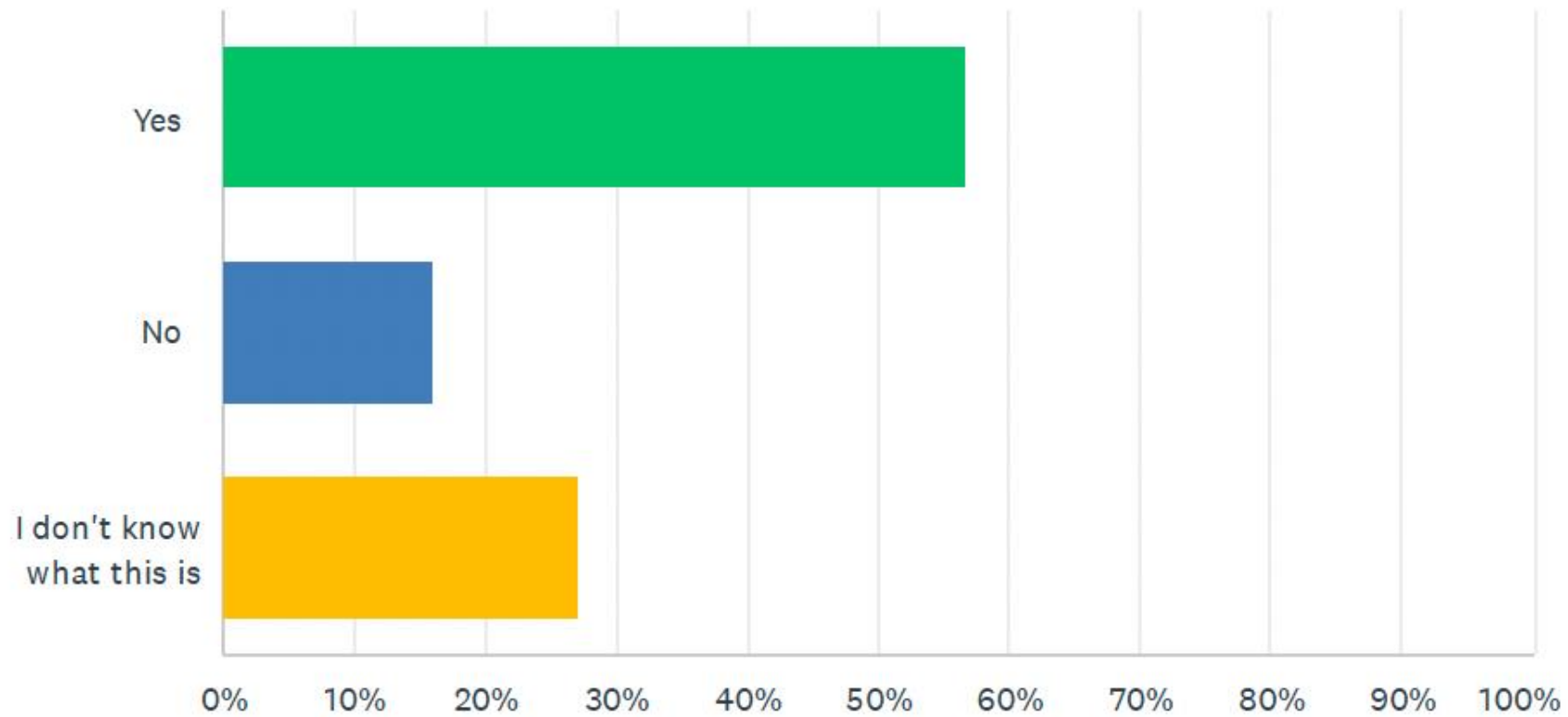
Q7 Do you bill for developmental/autism screening?

Answered: 81 Skipped: 0



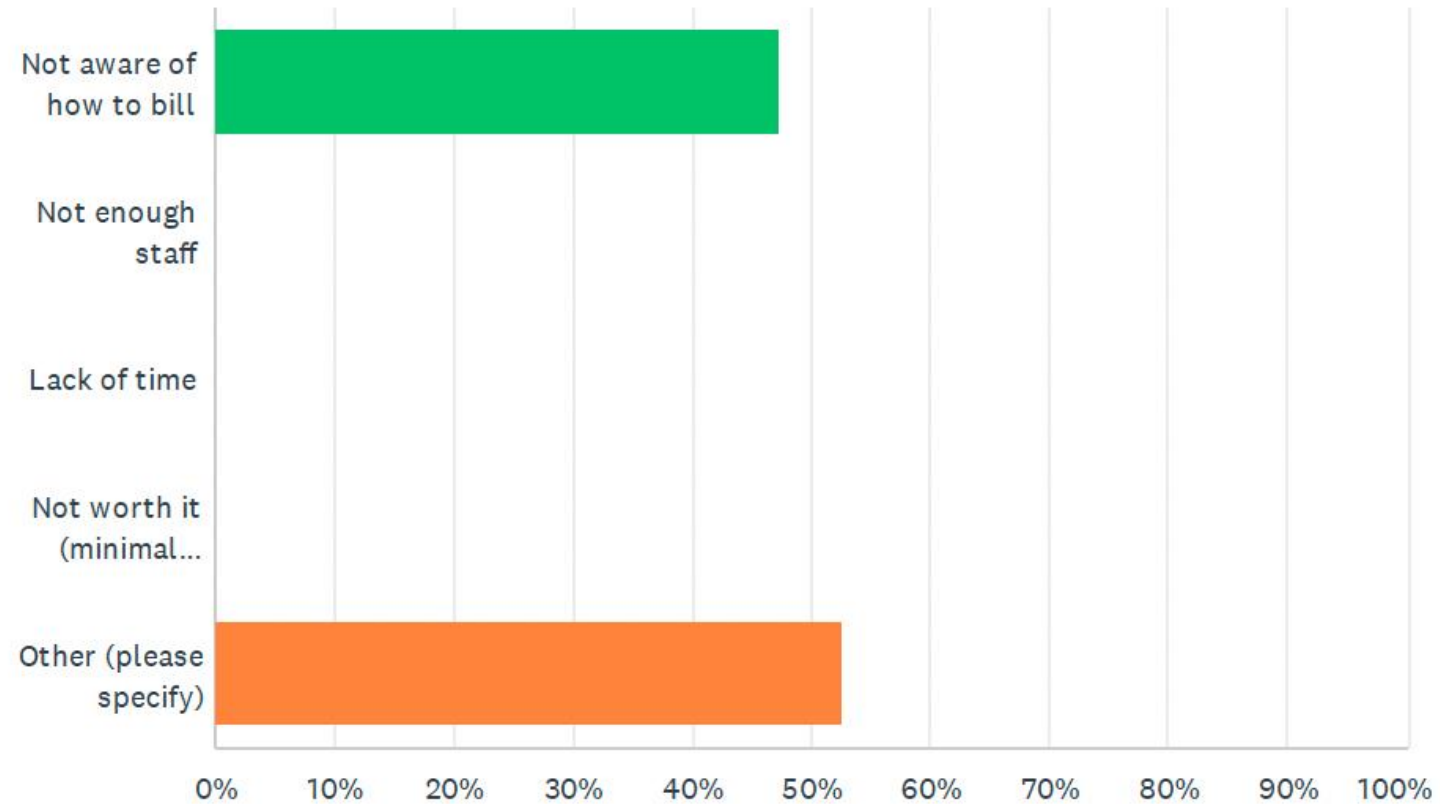
Q8 Do you use the EP modifier after billing (96110) for screenings?

Answered: 81 Skipped: 0



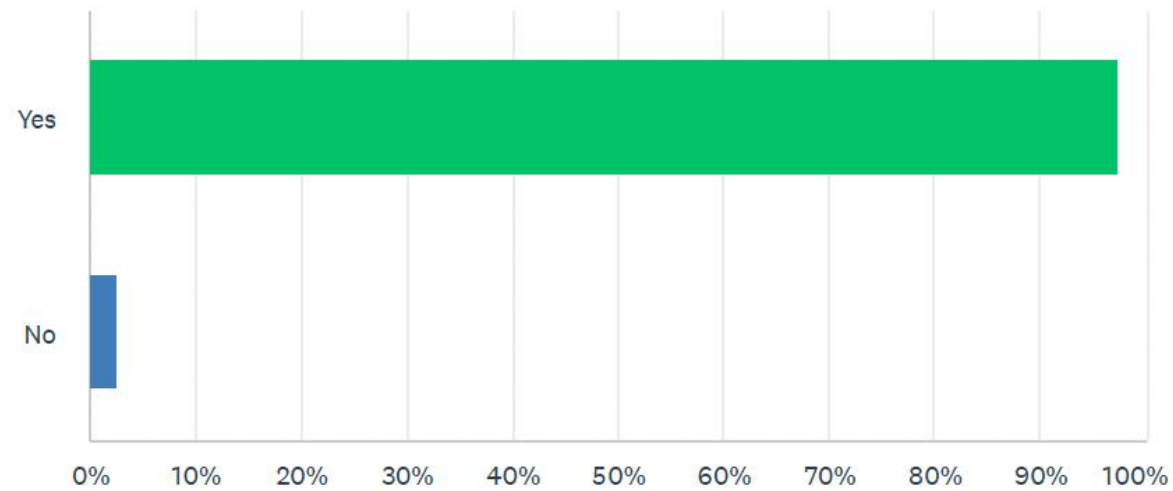
Q9 Why do you not bill (use 96110) for screening? (Check all that apply)

Answered: 38 Skipped: 43



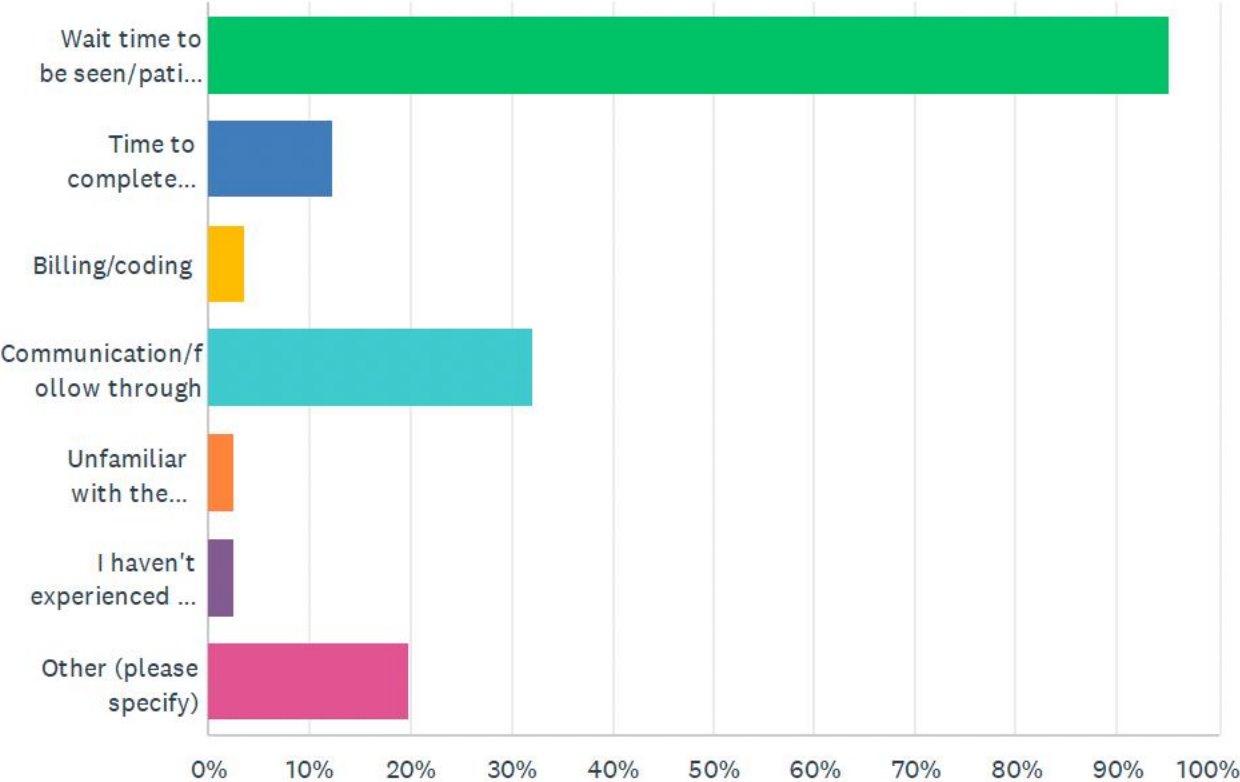
Q20 When making referrals for services once concerns have been identified, have you ever referred a patient to a developmental pediatrician?

Answered: 81 Skipped: 0



Q21 What, if any, challenges have you encountered when making referrals to a developmental pediatrician? (Select all that apply)

Answered: 81 Skipped: 0



Summary

- Surveillance: New CDC Milestones
 - 75th percentile (don't wait to refer)
- Screening:
 - Billing
- Evaluation
 - Early Access to Care
 - DBP Fellowship in Tucson
 - UA Nurse Practitioner Autism Certification

