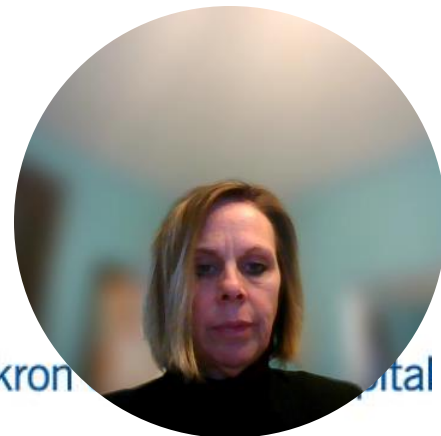


# Identifying the Need for Developmental Behavioral Pediatrics in Children: Recognizing Early Signs and Ensuring Timely Intervention



# No conflict of interest



# Objectives



## Understand the Developmental Screening Process

Using standardized screening tools to identify children who may benefit from a DBP evaluation.



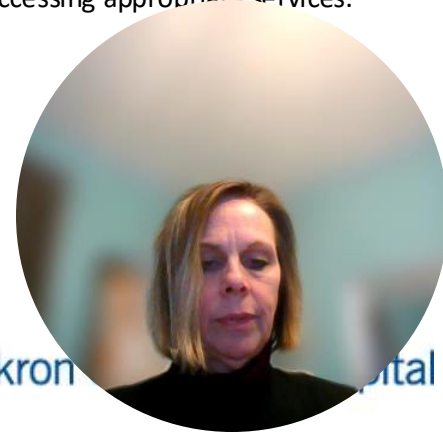
## Recognize Red Flags for Referral

Identify key developmental and behavioral concerns that indicate the need for further evaluation, including delays in speech, motor skills, social interaction, emotional regulation, and academic progress.



## Navigate the Referral Process and Collaborate with Specialists

Understand when and how to refer patients, what information is needed for an effective referral, and how to support families in accessing appropriate services.



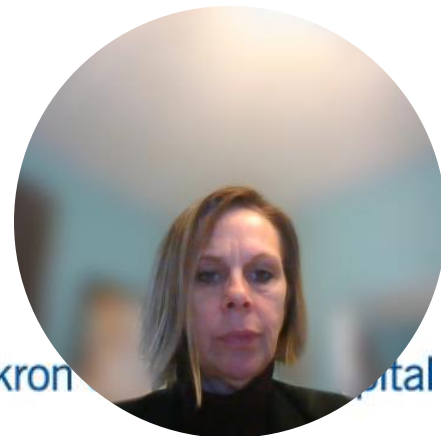
# Definition of Developmental Delay

- According to the American Academy of Pediatrics (AAP), a developmental delay occurs when a child doesn't reach expected developmental milestones in one or more areas, such as motor skills, speech, language, cognitive abilities, or social skills, compared to other children of the same age

American Academy  
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™



# Global Developmental Delay



GDD, as defined in the [DSM-5](#), refers to a significant delay in two or more areas of development, such as cognitive, motor, communication, social, and self-help skills.

The delay must be evident before the age of 5 years old.



# Developmental Dissociation

- One area of development significantly more delayed



## Developmental Deviation



Achieving  
developmental  
milestones unevenly  
in different areas

More atypical



# Risk Factors

Prenatal  
exposures

Birth  
complications

Perinatal  
complications

Medical  
conditions

Genetic  
conditions



# Risk Factors

ACE

Teen parents

Parent with  
unemployment/mental  
health issues

Parents with limited  
education/literacy



# Developmental Screeners

- There are several standardized screening tools that can be used to identify developmental delays in children. These tools are typically administered during routine pediatric visits or in specialized developmental evaluations.

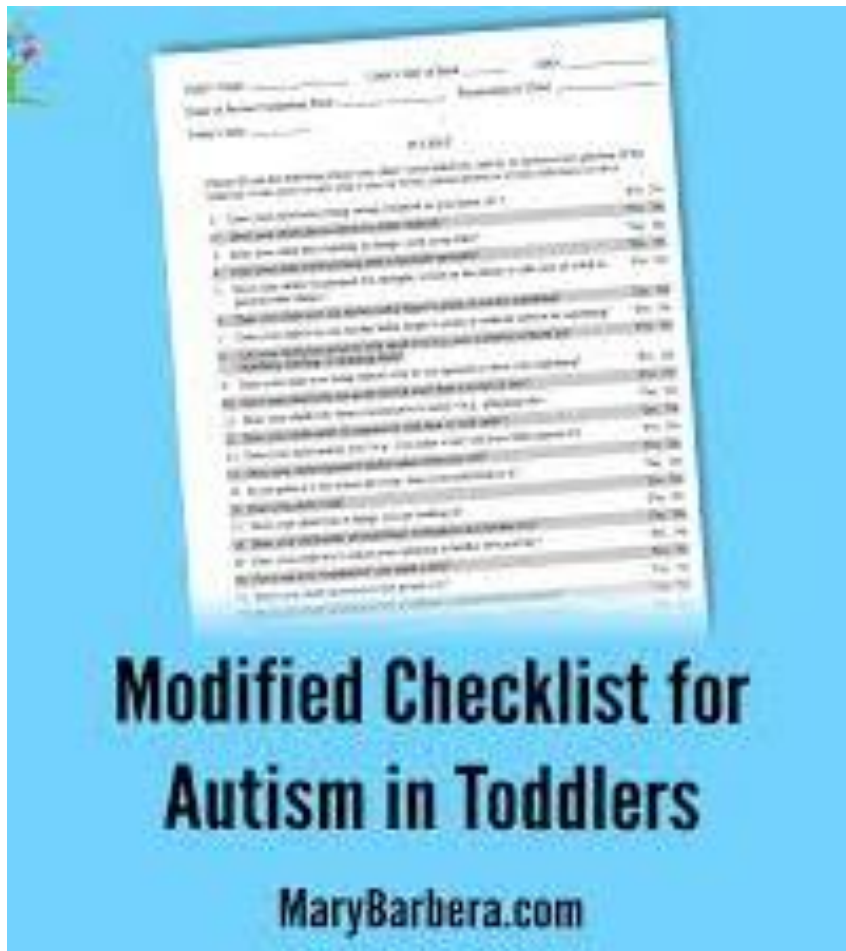


# Ages and Stages

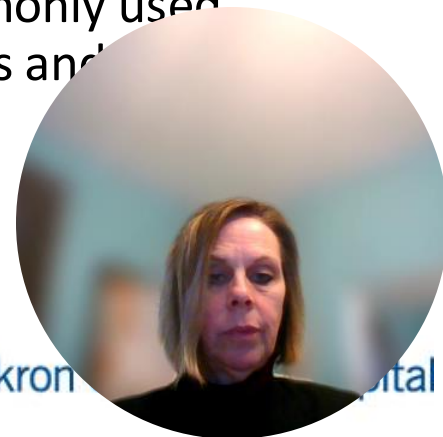
- **Age Range:** 1 month to 5½ years
- **Description:** The ASQ is a parent-completed questionnaire that screens for developmental delays in five domains: communication, gross motor, fine motor, problem-solving, and personal-social development.
- **Purpose:** It helps identify children who might need further assessment or intervention.
- **Frequency:** Typically given at well-child visits, especially around 9, 18, and 24 months.



# Modified Checklist for Autism in Toddlers (M-CHAT)



- **Age Range:** 16 to 30 months
- **Description:** M-CHAT is a parent-report tool designed to screen for signs of autism spectrum disorder (ASD). It consists of 23 yes/no questions that evaluate early behaviors associated with autism.
- **Purpose:** It helps identify children at risk for autism who may require further evaluation.
- **Frequency:** Commonly used around 18 months and 24 months.



## The Brigance Screens



**Age Range:** Birth to 7 years

**Description:** The Brigance Screening tool includes a series of tests to assess areas such as motor skills, language development, cognitive skills, and social-emotional development.

**Purpose:** It helps identify children who may benefit from early intervention services.

**Frequency:** The screenings are typically given during periodic developmental assessments during preschool years.



# Child Development Inventories (CDI)

- **Age Range:** 6 months to 6 years
- **Description:** The CDI is a parent questionnaire designed to assess a child's development in areas like language, motor skills, and social behaviors.
- **Purpose:** It can help identify developmental issues or concerns about milestones.
- **Frequency:** Administered at pediatric visits when there is concern about developmental progress.

S \_\_\_\_ SH \_\_\_\_ GM \_\_\_\_ FM \_\_\_\_ EL \_\_\_\_ LC \_\_\_\_ L \_\_\_\_ N \_\_\_\_ GD \_\_\_\_

**child development inventory**

1 41 81 121 161 201 241 281  
2 42 82 122 162 202 242 282  
3 43 83 123 163 203 243 283  
4 44 84 124 164 204 244 284  
5 45 85 125 165 205 245 285  
6 46 86 126 166 206 246 286  
7 47 87 127 167 207 247 287  
8 48 88 128 168 208 248 288  
9 49 89 129 169 209 249 289  
10 50 90 130 170 210 250 290

11 51 91 131 171 211 251 291  
12 52 92 132 172 212 252 292  
13 53 93 133 173 213 253 293  
14 54 94 134 174 214 254 294  
15 55 95 135 175 215 255 295  
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17 57 97 137 177 217 257 297  
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19 59 99 139 179 219 259 299  
20 60 100 140 180 220 260 300

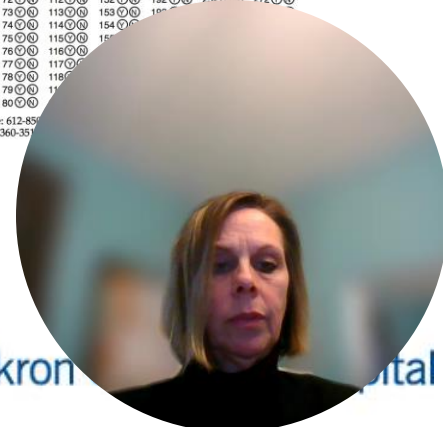
21 61 101 141 181 221 261  
22 62 102 142 182 222 262  
23 63 103 143 183 223 263  
24 64 104 144 184 224 264  
25 65 105 145 185 225 265  
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27 67 107 147 187 227 267  
28 68 108 148 188 228 268  
29 69 109 149 189 229 269  
30 70 110 150 190 230 270

31 71 111 151 191 231 271  
32 72 112 152 192 232 272  
33 73 113 153 193 233 273  
34 74 114 154 194 234 274  
35 75 115 155 195 235 275  
36 76 116 156 196 236 276  
37 77 117 157 197 237 277  
38 78 118 158 198 238 278  
39 79 119 159 199 239 279  
40 80 120 160 200 240 280

1. Please describe your child briefly: 2. What questions or concerns do you have about your child?

3. What are your child's strengths? 4. Comments?

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Box 19512 Mpls, MN 55419-9998 Fax: 360-355-1111



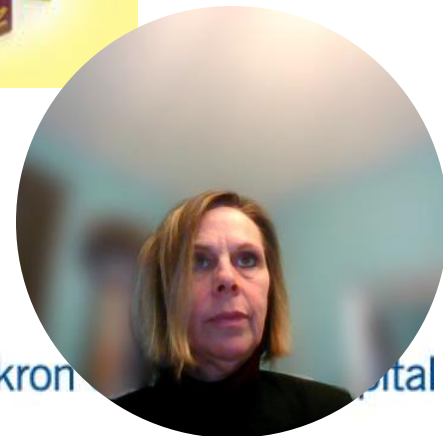
# Pediatric Symptom Checklist (PSC)

- **Age Range:** 4 to 18 years
- **Description:** The PSC is a screening tool for emotional and behavioral problems in children. It is completed by the parent and evaluates signs of emotional difficulties or behavioral concerns.
- **Purpose:** It identifies children who might benefit from further psychological or developmental assessment.
- **Frequency:** Administered during routine well-child visits, especially if behavioral or emotional concerns are present.



# Denver Developmental Screening Test II (DDST-II)

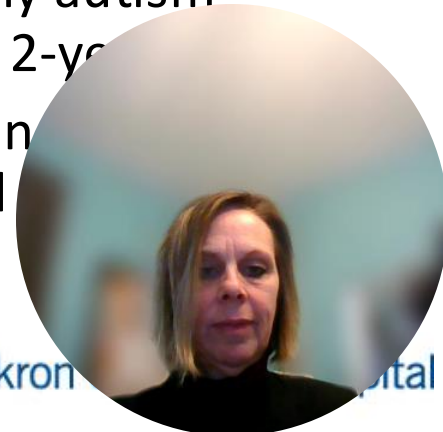
- **Age Range:** Birth to 6 years
- **Description:** The DDST-II evaluates a child's development in four areas: personal-social, fine motor-adaptive, language, and gross motor skills.
- **Purpose:** It is used for early identification of developmental delays and is often used by healthcare providers.
- **Frequency:** It is often used at early visits, such as the 9, 18, and 30-month checkups.



# Screening Tool for Autism in Two-Year-Olds (STAT)



- **Age Range:** 24 months
- **Description:** The STAT is a structured screening tool to assess the risk of autism in two-year-olds. It involves a series of play-based activities and tasks to evaluate social and communication skills.
- **Purpose:** It is specifically designed for early autism screening at the 2-year well-child visit.
- **Frequency:** Given at the 2-year well-child visit if autism is suspected.



# Vanderbilts For ADHD

The number of symptoms required for an ADHD diagnosis (by age group) are as follows:

■ **Six or more symptoms** of inattention and/or hyperactivity-impulsivity for children up to age 16 years, **OR**

■ **Five or more symptoms** of inattention and/or hyperactivity-impulsivity for adolescents ages 17 and older and adults

**RSCHD Vanderbilt Assessment Scale - TEACHER Informant**

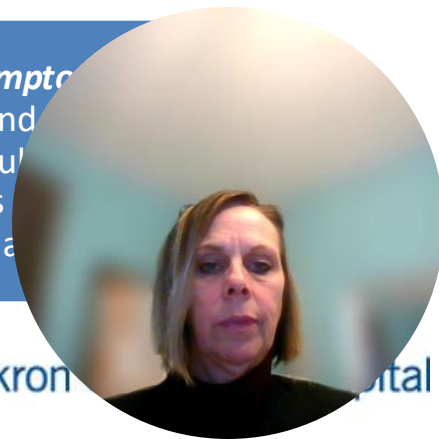
Teacher's Name: \_\_\_\_\_ Child's Name: \_\_\_\_\_ Child's Age: \_\_\_\_\_

Instructions: Each rating should be completed in the context of what is appropriate for the age group that you are rating and should reflect how often the behavior occurs in the typical year. Please indicate the number of weeks in which you have seen each behavior in the past year.

For this evaluation, please use the following scale: ☐ Not at all, ☐ Sometimes, ☐ Often, ☐ Very Often

Symptoms	Not at all	Sometimes	Often	Very Often
1. Fails to give attention to details or makes careless mistakes in schoolwork	0	1	2	3
2. Has difficulty sustaining attention in tasks or activities	0	1	2	3
3. Does not seem to listen when spoken to directly	0	1	2	3
4. Does not follow through on instructions and fails to finish schoolwork, chores or duties	0	1	2	3
5. Has difficulty organizing tasks and activities	0	1	2	3
6. Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort	0	1	2	3
7. Loses things frequently (e.g., books, pencils, papers, assignments, etc.)	0	1	2	3
8. Is easily distracted by extraneous stimuli	0	1	2	3
9. Is forgetful in daily activities	0	1	2	3
10. Fidgets with hands or feet or squirms in seat	0	1	2	3
11. Leaves seat in classroom or in other situations in which remaining seated is expected	0	1	2	3
12. Runs and/or climbs excessively in situations in which it is inappropriate to do so	0	1	2	3
13. Has difficulty playing or engaging in leisure activities quietly	0	1	2	3
14. Is "on the go" or often acts as if "driven by a motor"	0	1	2	3
15. Talks excessively	0	1	2	3
16. Blurts out answers before questions have been completed	0	1	2	3
17. Has difficulty waiting his turn	0	1	2	3
18. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
19. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
20. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
21. Talks excessively	0	1	2	3
22. Blurts out answers before questions have been completed	0	1	2	3
23. Has difficulty waiting his turn	0	1	2	3
24. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
25. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
26. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
27. Talks excessively	0	1	2	3
28. Blurts out answers before questions have been completed	0	1	2	3
29. Has difficulty waiting his turn	0	1	2	3
30. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
31. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
32. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
33. Talks excessively	0	1	2	3
34. Blurts out answers before questions have been completed	0	1	2	3
35. Has difficulty waiting his turn	0	1	2	3
36. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
37. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
38. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
39. Talks excessively	0	1	2	3
40. Blurts out answers before questions have been completed	0	1	2	3
41. Has difficulty waiting his turn	0	1	2	3
42. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
43. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
44. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
45. Talks excessively	0	1	2	3
46. Blurts out answers before questions have been completed	0	1	2	3
47. Has difficulty waiting his turn	0	1	2	3
48. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
49. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
50. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
51. Talks excessively	0	1	2	3
52. Blurts out answers before questions have been completed	0	1	2	3
53. Has difficulty waiting his turn	0	1	2	3
54. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
55. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
56. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
57. Talks excessively	0	1	2	3
58. Blurts out answers before questions have been completed	0	1	2	3
59. Has difficulty waiting his turn	0	1	2	3
60. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
61. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
62. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
63. Talks excessively	0	1	2	3
64. Blurts out answers before questions have been completed	0	1	2	3
65. Has difficulty waiting his turn	0	1	2	3
66. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
67. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
68. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
69. Talks excessively	0	1	2	3
70. Blurts out answers before questions have been completed	0	1	2	3
71. Has difficulty waiting his turn	0	1	2	3
72. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
73. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
74. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
75. Talks excessively	0	1	2	3
76. Blurts out answers before questions have been completed	0	1	2	3
77. Has difficulty waiting his turn	0	1	2	3
78. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
79. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
80. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
81. Talks excessively	0	1	2	3
82. Blurts out answers before questions have been completed	0	1	2	3
83. Has difficulty waiting his turn	0	1	2	3
84. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
85. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
86. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
87. Talks excessively	0	1	2	3
88. Blurts out answers before questions have been completed	0	1	2	3
89. Has difficulty waiting his turn	0	1	2	3
90. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
91. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
92. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
93. Talks excessively	0	1	2	3
94. Blurts out answers before questions have been completed	0	1	2	3
95. Has difficulty waiting his turn	0	1	2	3
96. Interrupts or intrudes on others (e.g., cuts into conversations)	0	1	2	3
97. Excessive talking or chatter in situations in which quietness is expected	0	1	2	3
98. Is "always on the go" or often acts as if "driven by a motor"	0	1	2	3
99. Talks excessively	0	1	2	3
100. Blurts out answers before questions have been completed	0	1	2	3

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# Anxiety Screeners

Preschool  
Anxiety Scale

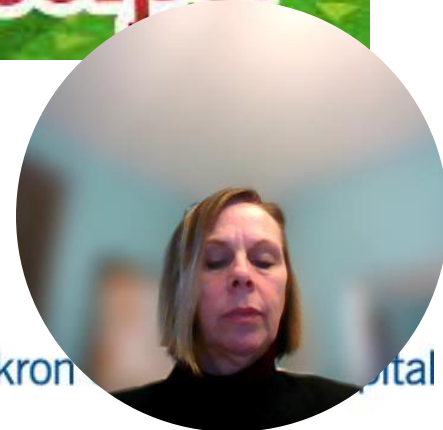
SCARED-  
parent and  
child

GAD-7

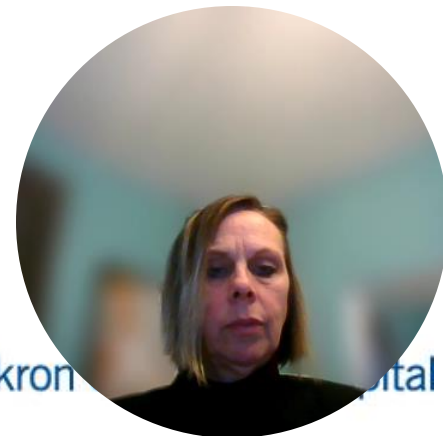
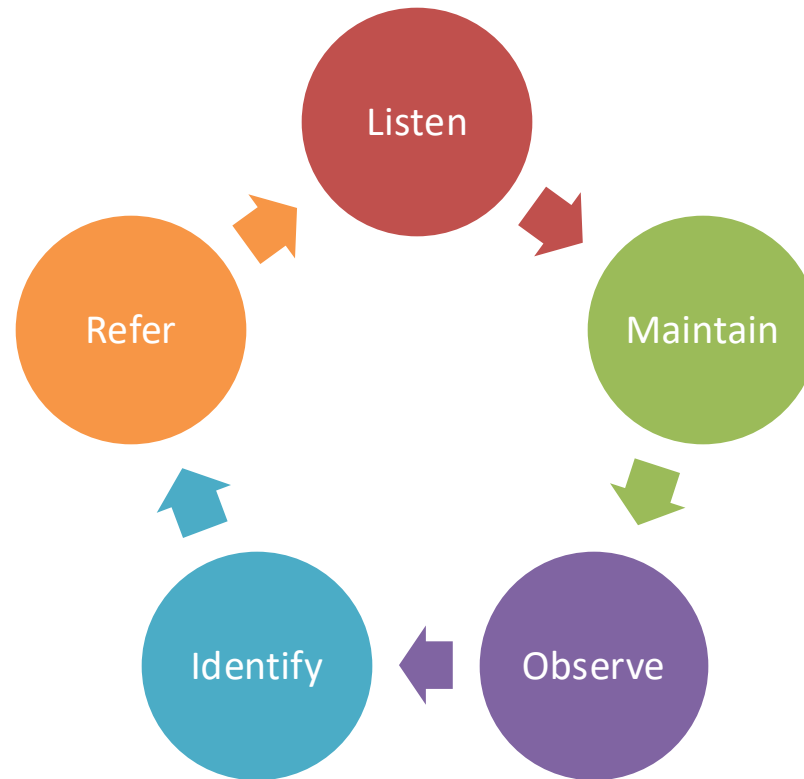


# Pitfalls to Developmental Screenings

- Overreliance on screening tools
- False positives/false negatives
- Cultural/Linguistic Bias
- Lack of follow up
- Subjectivity



# Approach to Surveillance



# Protective/resilience factors

Strong  
connections

Active  
caregiver-child  
engagement

Opportunities  
to interact with  
other children

Opportunities  
for autonomy

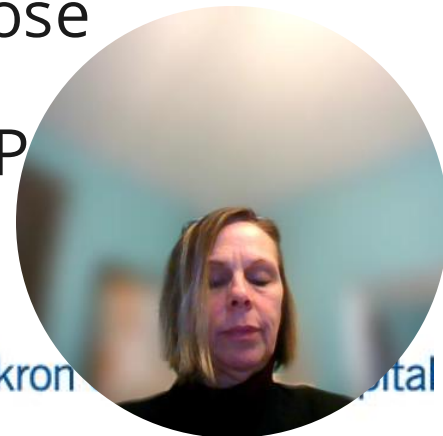


# So, when do you refer



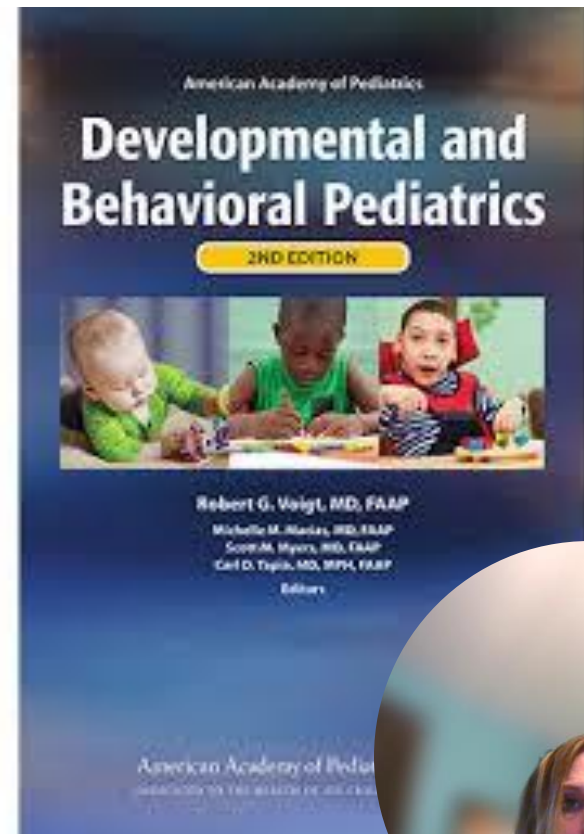
# Official AAP Definition

- Developmental-behavioral pediatrics (DBP) is a board-certified, medical subspecialty that cares for children with complex and severe DBP problems by recognizing the multifaceted influences on the development and behavior of children and addressing them through systems-based practice and a neurodevelopmental, strength-based approach that optimizes functioning. Developmental behavioral providers care for children from birth through young adulthood along a continuum including those suspected of, at risk for, or known to have developmental and behavioral disorders. (P April, 2022, Volume 149, Issue 4)



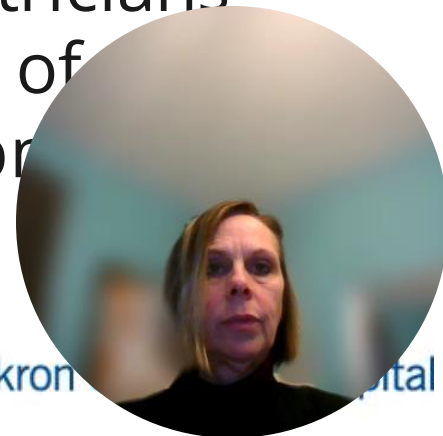
# What is Developmental Behavioral Pediatrics?

- Definition: A subspecialty of pediatrics focused on the development and behavior of children.
- Importance: Helps identify and manage developmental and behavioral issues early.



## Referring to DBP

- “It would be an impossible task for DBPs or other subspecialists to care for all children with DBP problems, given the high prevalence and the limited numbers of board-certified DBPs practicing nationally. DBPs, therefore, are needed when children have problems of greater severity or complexity, such as multiple co-occurring problems and disorders ; general pediatricians need to be able to care for the majority of children with mild or moderate developmental and behavioral concerns”

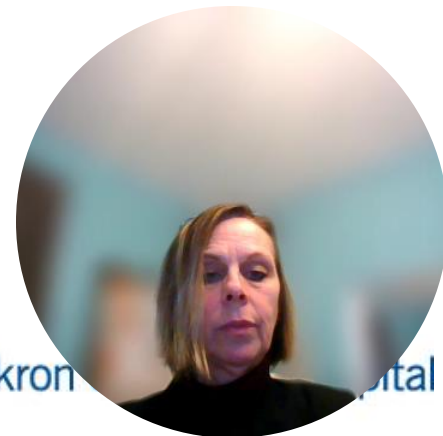
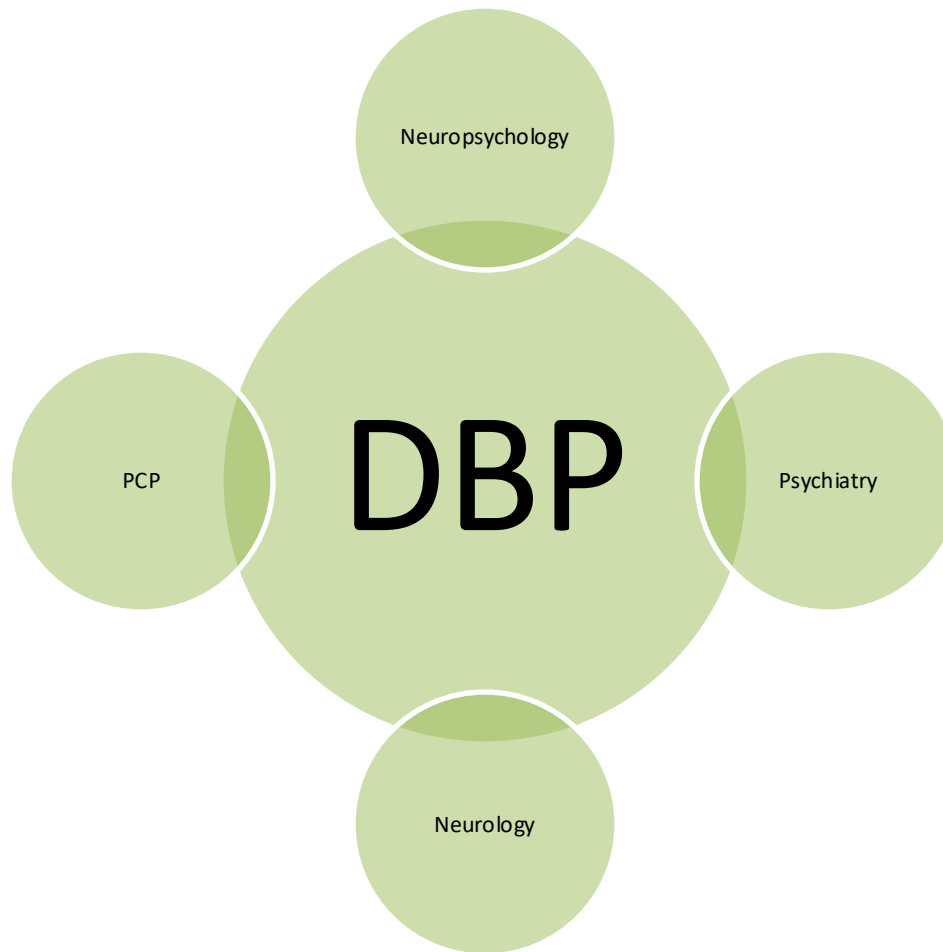


# Different Roles of DBP providers

- Due to long wait lists, DBPs' role may be restricted to establishing a diagnosis and plan for intervention; at other centers, it may involve providing longitudinal, coordinated care. DBPs can determine a developmental-behavioral diagnosis; direct the etiological evaluation; provide counseling to children and families; prescribe psychotropic medications to address behavior, emotional and regulatory problems; and offer recommendations for intervention in children with neurodevelopmental disorders including ASD, intellectual disability, and learning disabilities.



# Professional Overlaps



## Key Areas of Focus



Autism Spectrum Disorder

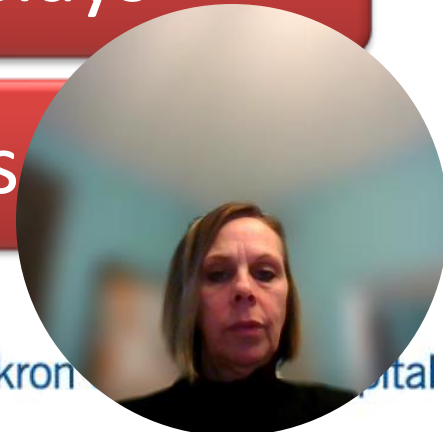
ADHD

Learning Disabilities

Intellectual Disabilities

Developmental Delays

Behavior Concerns



# Additional Diagnoses

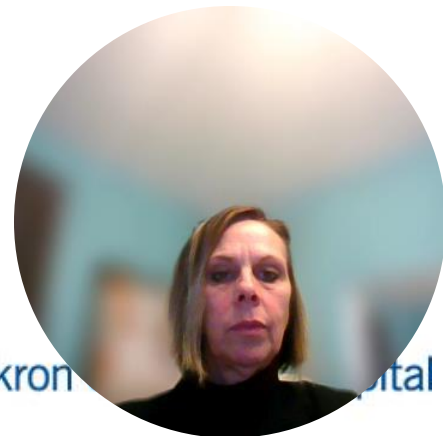
Genetic Disorders

Feeding Disorders

Anxiety

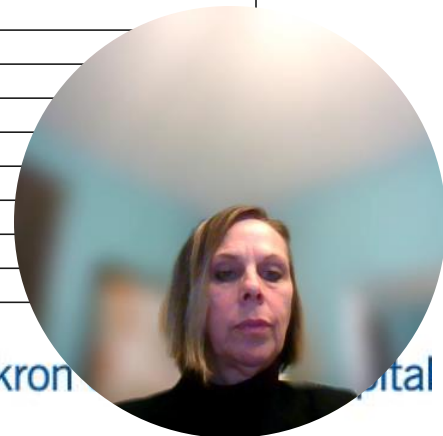
Sleep Difficulties

- Vary substantially between hospital systems



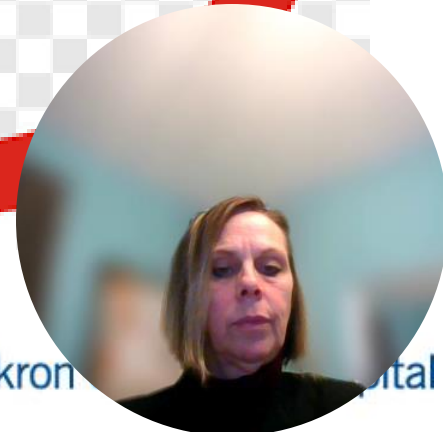
# Reasons for Referrals

Aggression
Attention-deficit/hyperactivity disorder
Adoption and foster care
Anxiety and depression
Autism spectrum disorder
Cerebral palsy
Developmental delay
Enuresis and encopresis
Feeding and eating problems
Fetal alcohol spectrum disorders
Gender identity and sexuality
Genetic disorders with associated DBP problems
Hearing impairment
Intellectual disability
Learning problems
Medically complex patients with DBP problems
Motor delay
Obsessive-compulsive and related disorders
Oppositional behaviors and other disruptive behavior disorders
Parent-child interaction problems
Parent guidance for children in distress
Preterm infants at risk for DBP problems
School problems
Sleep problems
Speech and language disorders
Spina bifida
Temperamental variation
Tourette's and other tic disorders
Trauma
Visual impairment



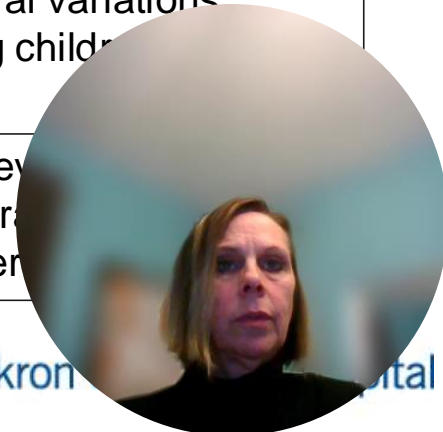
# NOT DBP appropriate

- Suicidal Ideation
- Arson
- Animal cruelty
- Bipolar/Mood disorder



# The American Board of Pediatrics Entrustable Professional Activities for Developmental-Behavioral Pediatrics

EPA	Description
EPA-1	Effectively advocate for children and families affected by developmental and behavioral disorders.
EPA-2	Effectively communicate with families, schools, and community organizations to facilitate their understanding of children's developmental-behavioral diagnoses and to promote their engagement in clinical decision making and treatment.
EPA-3	Perform comprehensive histories and physical and neurodevelopmental examinations to make accurate diagnoses for patients presenting with developmental-behavioral concerns from infancy through young adulthood.
EPA-4	Recognize and longitudinally manage behavioral variations, problems, and disorders in typically developing children and children with developmental disorders.
EPA-5	Recommend appropriate medical workup and evaluate medical, therapeutic, educational, and behavioral outcomes for children with developmental-behavioral disorders.



# Multidisciplinary Clinics

Myelo

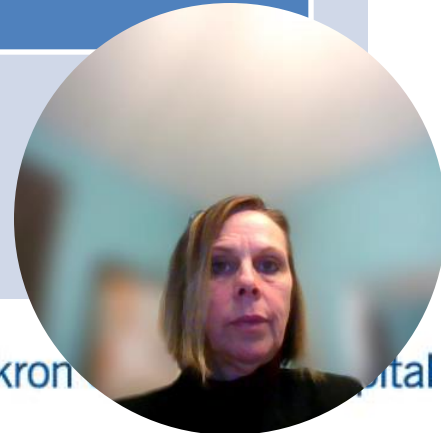
Downs Syndrome

Neurofibromatosis

Autism Diagnostic  
Center

NICU

LYFT



# What referral looks like

Scheduler: Did the patient/parent mention, or is the patient being referred for any of the reasons listed in menu?

NO - NONE OF THE ABOVE

In which specialty does the patient need scheduled?

Scheduler: If the patient is being scheduled for a follow up appointment and is not sure who they need to see, you must check the PAST... [see more](#)

DEVELOPMENTAL NEUROLOGY NEUROSURGERY PATIENT DOESN'T KNOW PHYSIATRY

DEVELOPMENTAL

Scheduler: Did you schedule from an order?

YES NO

Yes

What is the reason for the patient's appointment? Select from drop down menu.

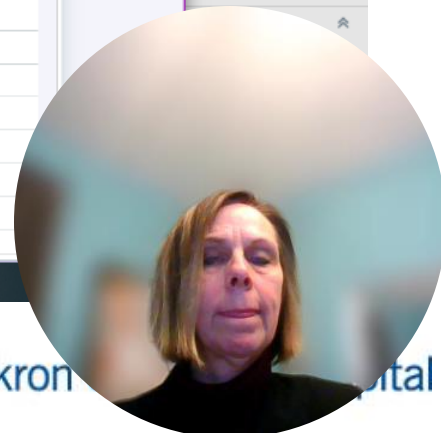
Select an entry

Answer	Number
ABNORMAL EYE MOVEMENTS / OTHER ABNORMAL OR INVOLUNTARY MOVEMENTS	1
ABNORMAL MRI / ABNORMAL IMAGING	2
AUTISM	3
ADD / ADHD	4
BELL'S PALSY	5
BRACHIAL PLEXUS / ERB'S PALSY	6
CAFE AU LAIT	7
CEREBRAL PALSY	8
CHIARI MALFORMATION	9
CHRONIC PAIN ISSUES / NEURALGIA / NERVE PAIN	10
CONCUSSION / POST-CONCUSSION SYNDROME / TBI / TRAUMATIC BRAIN INJURY	11
CONTRACTURE / TORTICOLLIS	12
DEVELOPMENTAL DELAYS / OTHER LEARNING DISABILITY / BEHAVIOR CONCERNS	13
DOWN SYNDROME	14
DYSLEXIA	15
EEG	16
FAILURE TO THRIVE / FTT / FEEDING ISSUES	17

Discard Tree

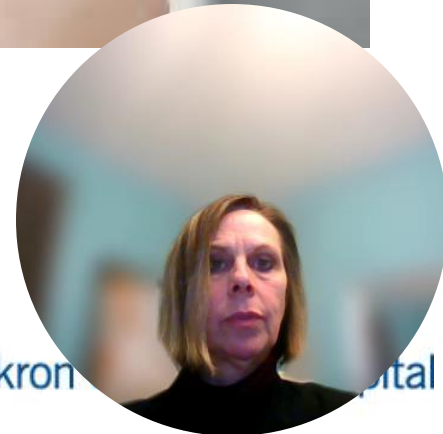
Combine departments

Clear Patient Options Maximize Shortcuts



# Then what happens....

- Appointment center will try two times to call the number on file before the referral will be deferred for one year. If the family calls back in at any time during the year, they can schedule a nurse intake. If the patient is NEW to DBP, they will automatically be filtered to nurse intake so we can best help the family determine next steps. These can be a phone call or video appt.



## What happens during nurse triage



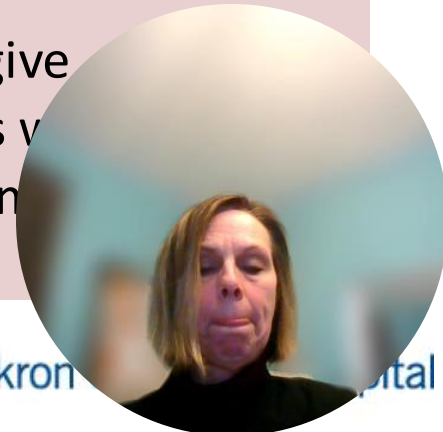
Nurse will discuss guardian concerns and enter a note into the chart



Nurse will explain what is needed for the appointment with DBP provider

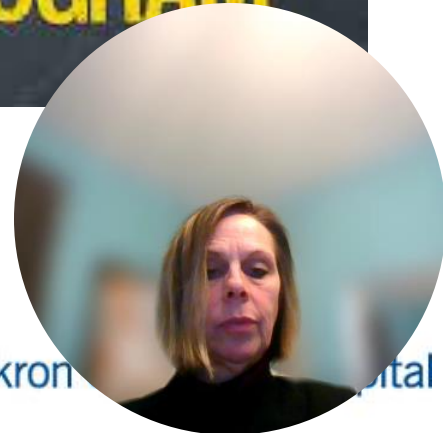


Nurse will give suggestions v  
for appointment



# Pilot Program

- Five ACHP Providers educated on administering RITA-T, DSM 5 criteria for autism and ADOS
- Order for DBP will be entered as it is now
- Families will be contacted and offered to have ADOS evaluation at nearby ACHP office



# Initial DBP appointment

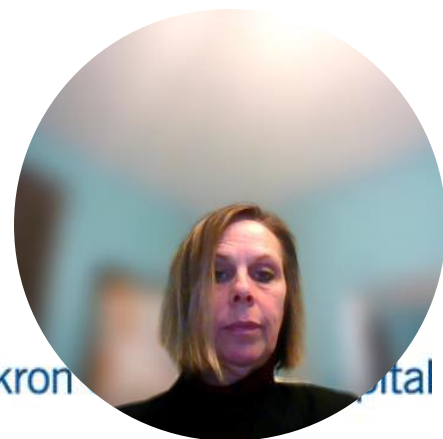
- gather a detailed history, conduct a physical exam, and observe your child's behavior to assess developmental and behavioral concerns, ultimately leading to a treatment plan, which may include medication, therapies and/or school interventions or further testing
- Review previous evaluations from other specialists, school and therapists



# While you wait.....



# START



# Support Services



Infant Therapy for global developmental delays

Help Me Grow

Speech, PT or OT

Developmental preschool

Educational evaluation



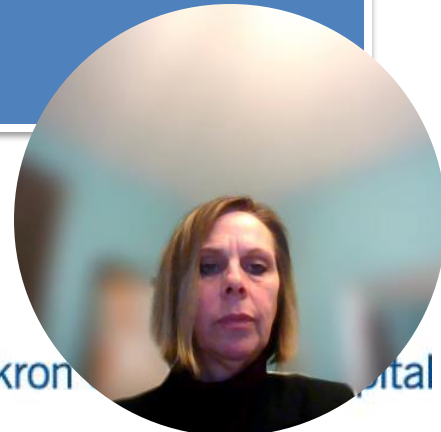
# Additional Support



Triple P

Behavioral Therapy

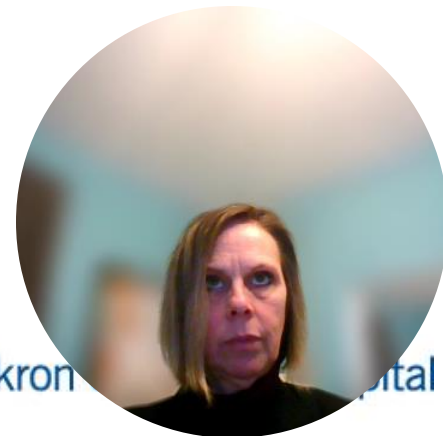
Counseling



# ADHD Medication



- Stimulants  
Methylphenidates  
Amphetamine Salts  
-IR-under 6 yo, XR-6 and older
- Non-stimulants  
Alpha Agonists-  
Clonidine/Kapvay/Onyda,  
Guanfacine/Intuniv  
Strattera  
Qelbree



# Anxiety Medication



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Buspar

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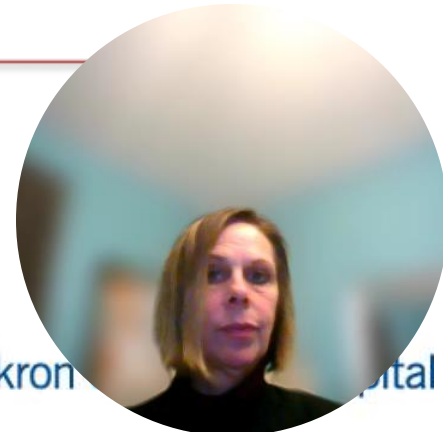
Zoloft

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Prozac

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Lexapro



# Sleep

- \*Encourage good sleep hygiene
- \*daytime exercise
- \*limit screen time
- \*draw ferritin if picky eater-want it over 50
- \*trial melatonin in small amounts-1 mg every week or so but don't exceed 6 mg
- \*Clonidine, Atarax, Trazodone
- \*Sleep Clinic



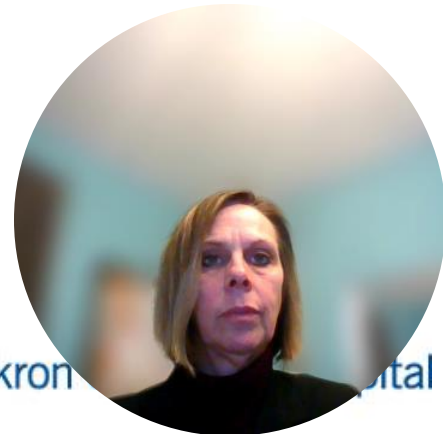
# Online Resources

## ADHD

- CHADD
- ADDitude
- National Institute of Mental Health
- Understood.org
- AACAP

## Autism

- Autism Speaks
- Autism Society of Great Akron
- OCALI
- Milestones



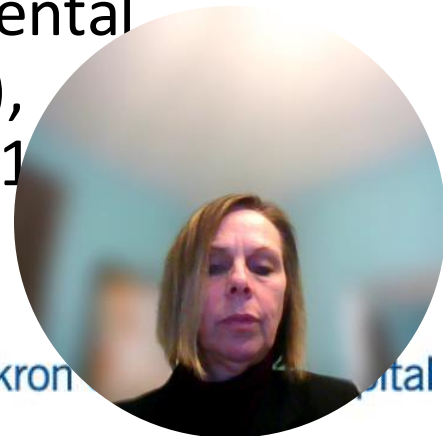
# E-consult

- a secure online communication between a primary care physician (PCP) and a specialist healthcare provider. It allows for real-time exchange of medical information and expert advice without the need for an in-person visit.



# References

- Weitzman, C. C., Baum, R. A., Fussell, J., Korb, D., Leslie, L. K., Spinks-Franklin, A. I. A., & Voigt, R. G. (2022). Defining developmental-behavioral pediatrics. *Pediatrics*, 149(4). <https://doi.org/10.1542/peds.2021-054771>
- Lipkin, P. H., Macias, M. M., Council on Children with Disabilities, & Section on Developmental and Behavioral Pediatrics. (2020). Promoting Optimal Development: Identifying Infants and Young Children With Developmental Disorders Through Developmental Surveillance and Screening. *Pediatrics*, 145(1), e20193469. <https://doi.org/10.1542/peds.20193469>



# References

- Baum RA, Berman BD, Fussell JJ, Patel R, Roizen NJ, Voigt RG, Leslie LK. Child Health Needs and the Developmental–Behavioral Pediatrics Workforce Supply: 2020–2040. *Pediatrics*. 2024 Feb 1; [Supplement Article].



# Great Resource!!!

Cohen Children's Medical Center ADHD Medication  
Guide

[adhd\\_med\\_guide\\_082824\\_1203.pdf](#)

