UVM Project ECHO
Current Topics in School Nursing

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Didactic presentation is recorded. Registered participants will receive the link.

University of Vermont
Larner College of Medicine

Project ECHO

Session Agenda

- Welcome
- Objectives
- Didactic Presentation (30 min)
  - Q&A
- Case presentation(s)
  - Clarifying questions
  - Discussion
- Closing Announcements
  - Topic and cases for next session
  - Feedback and evaluation

ECHO Model: All Teach, All Learn

Cohort-based learning on ZOOM

- Have your camera on as much as possible, especially when joining the meeting and during discussions
- Questions and comments are welcome – use the “raise hand” feature or put them in the chat
- This is not a webinar! Participation is key

Case-based learning

- 1-2 participant cases each session using provided template
- Contact Kathy Mariani to present a case
  Katherine.Mariani@uvmhealth.org

Series Objectives

Learning objectives for this ECHO series include the ability to:

1. Describe the relationship between school attendance and health, and evidence-based strategies to prevent and respond to chronic absenteeism, including the role that nurses play in collaboration with teachers, administration and families
2. Discuss current trends in oral health and school-based practices to address common dental issues
3. Apply strategies to support neurodiverse students
4. Describe best practices in managing pediatric migraine
5. Define ‘immunocompromise’ and identify management tips for various conditions

CMIE Disclosures

The Robert Larner College of Medicine at The University of Vermont is accredited by the American Nurses Credentialing Center (ANCC), the Accreditation Council for Pharmacy Education (ACPE), and the Accreditation Council for Continuing Medical Education (ACCME), to provide continuing medical education for the healthcare team.

This program has been reviewed and is acceptable for up to **1.5 Nursing Contact Hours**.

Participants should claim only the credit commensurate with the extent of their participation in the activity.

CMIE Disclosures

Interest Disclosures: As an organization accredited by the ACCME to sponsor continuing medical education activities, UVMCMIE is required to disclose any real or apparent conflicts of interest (COI) that any speakers may have related to the content of their presentations.

Meeting Disclaimer: Regarding materials and information received during this educational event, the views, statements, and recommendations expressed during this activity represent those of the authors and speakers and do not necessarily represent the views of the University of Vermont.

- I have no relevant disclosures

ADHD- Clinical Pearls for School Nurses

Michael Hoffnung, DO

Assistant Professor of Psychiatry, University of Vermont Larner College of Medicine

Attending Child and Adolescent Psychiatrist: UVMMC Autism Assessment Program, Pediatric Psychiatry Clinic, and CVMC Primary Care Mental Health Integration Service

11-13-2024

Session Objectives

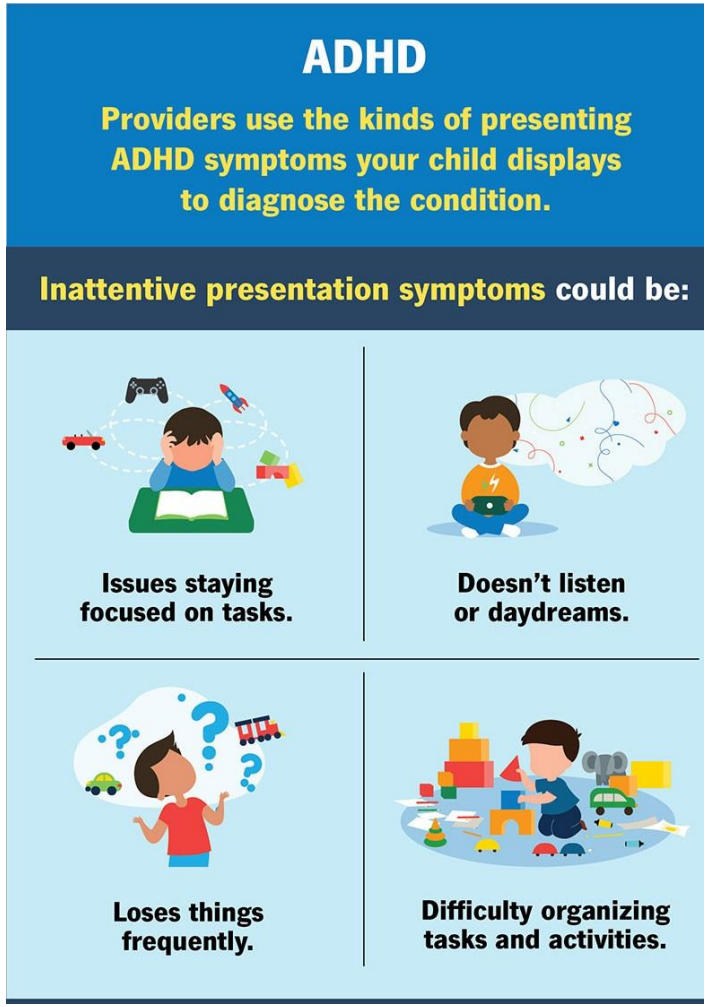
Learning objectives for this ECHO session include the ability to:

- **Know DSM-5 TR diagnostic criteria for Attention Deficit and Hyperactivity Disorder (ADHD)**
- **Identify common screening tools used in school setting**
- **Name common ADHD treatments**
- **Identify other conditions that might be relevant to the differential diagnosis**
- **Know common medications used to treat ADHD, and relevant side effects**

ADHD- Why is it important

- Prevalence Range varies widely, Meta Analysis in 2015 put it at 7.2% of children and adolescents (and 2.5% of adults- I mention adults because we should always be thinking about the Family!)
- Median age of diagnosis, 7 years old
- Functional impact: classroom behavior, academic success, relationships with peers and family

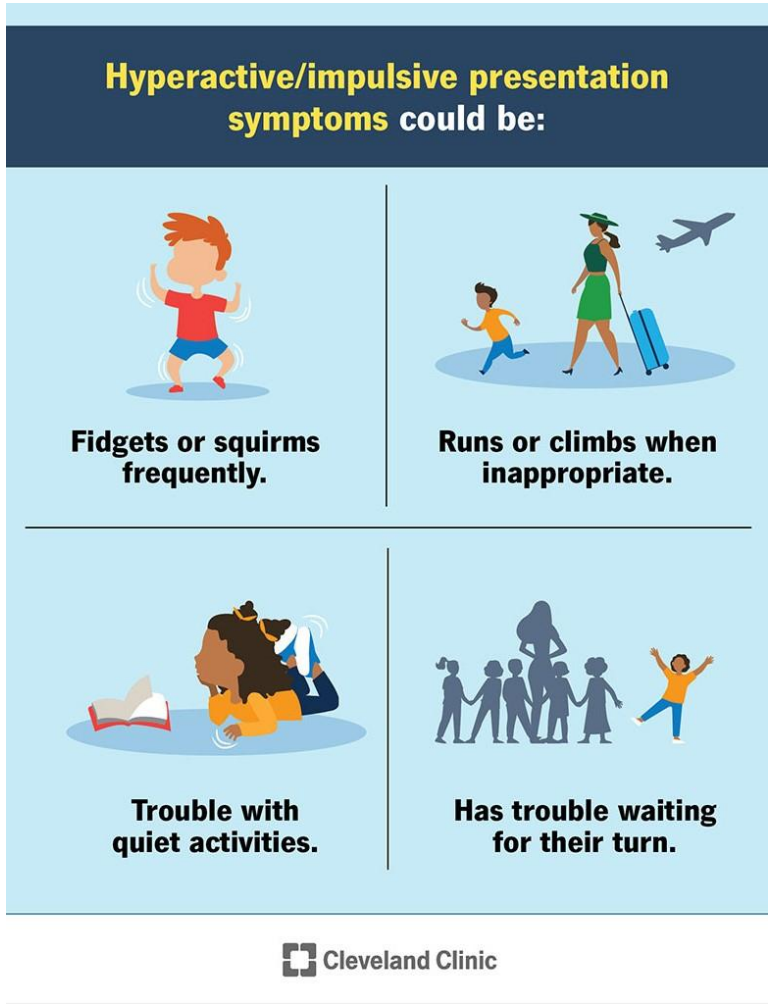
ADHD- Diagnostic Criteria



In School Setting: Flags include- difficulty attending; difficulty with multi-step instruction, frequent careless mistakes, easily distracted.

*Note if absenteeism is an issue for a child, ADHD- especially inattentive subtype should be on your differential!

ADHD- Diagnostic Criteria



In school: leaves seat, always needs to be moving, frequent calling out or disruption, “always on the go”, seems to act before thinking.

ADHD- DSM Criteria-General Rules

- Requires persistent pattern **inconsistent with developmental level** interfering with functioning impacting **two or more** settings (school, home, social, work)
- Several symptoms must be present prior to age 12
- Symptoms not better explained by another disorder such as mood, anxiety, substance use
- 2 subtypes plus combined; each requires 6 or more out of 9 symptom types(5 for ages 17+)

ADHD- DSM Criteria- Inattention

a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).

b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).

c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).

d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).

e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).

f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).

g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).

h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).

i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).

ADHD-Hyperactive/Impulsive

a. Often fidgets with or taps hands or feet or squirms in seat.

b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).

c. Often runs about or climbs in situations where it is inappropriate. (**Note:** In adolescents or adults, may be limited to feeling restless.)

d. Often unable to play or engage in leisure activities quietly.

e. Is often "on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).

f. Often talks excessively.

g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).

h. Often has difficulty waiting his or her turn (e.g., while waiting in line).

i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

ADHD-Diagnosis-Rating scales

https://projectteachny.org/child-rating-scales/

Source for freely available screening tools for many mental health conditions

With impairment in multiple contexts required for diagnosis- **information from school will often be important**

What scales are you all familiar with/using?

Some commonly used ADHD Scales: Vanderbilt (see next slide), SNAP-IV, Connors, ASEBA/CBCL

ADHD- Diagnosis- Rating scales-Vanderbilt

Vanderbilt ADHD Follow-Up Teacher Rating Scale

Child's Name: _____ **Teacher's Name:** _____ **Today's Date:** _____

School: _____ **Grade:** _____ **Time of Day you Work with Child:** _____

Directions: Each rating should be considered in the context of what is appropriate for the age of the child you are rating and should reflect that child's behavior since the last time you rated his/her behavior. **Number of weeks on which you are rating his/her behaviors:** _____

Teacher's Fax Number: _____

Is this evaluation based on a time when the child ☐ was on medication ☐ was not on medication ☐ not sure

Behavior:	Never	Occasionally	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 to 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 (not due to oppositional behavior or failure to understand)	0	1	2	3
5. Has difficulty organizing tasks and activities	0	1	2	3
6. Avoids, dislikes, or does not want to start tasks that require sustained mental effort	0	1	2	3
7. Loses things necessary for tasks or activities (school assignments, pencils, books)	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 when remaining seated is expected	0	1	2	3
12. Runs about or climbs too much when remaining seated is expected	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 in line	0	1	2	3
18. Interrupts or intrudes in on others (e.g., butts into conversations or games)	0	1	2	3

Q:s 1-9 inattentive;
Q:s 10-18 hyperactive/impulsive
2 or 3 on 6/9 of each subtype is diagnostic threshold IF impairment across setting is present

19. Loses temper	0	1	2	3
20. Actively defies or refuses to comply with adult's requests or rules	0	1	2	3
21. Is angry or resentful	0	1	2	3
22. Is spiteful and vindictive	0	1	2	3
23. Bullies, threatens, or intimidates others	0	1	2	3
24. Initiates physical fights	0	1	2	3
25. Lies to obtain goods for favors or to avoid obligations (i.e, "cons" others)	0	1	2	3
26. Is physically cruel to people	0	1	2	3
27. Has stolen items of nontrivial value	0	1	2	3
28. Deliberately destroys others' property	0	1	2	3

Academic & Social Performance	Excellent	Above Average	Average	Somewhat of A Problem	Problematic
1. Reading	1	2	3	4	5
2. Writing	1	2	3	4	5
3. Mathematics	1	2	3	4	5
4. Relationship with peers	1	2	3	4	5
5. Following directions	1	2	3	4	5
6. Disrupting class	1	2	3	4	5
7. Assignment completion	1	2	3	4	5
8. Organizational skills	1	2	3	4	5

Q:s 19-28 are oppositional defiance criteria 2 or 3 in 4/8 of the questions is suggestive of possible ODD

ADHD- First Line Treatments

Under Age 6: Parent Training in Behavior management/Behavioral Classroom interventions

6 and 12: Medication Plus Parent Training in Behavior Management

Ages 12+: Medication plus other support (School accommodations etc.)

ADHD- First Line Treatments

- Under Age 6: Parent Training in Behavior management/Behavioral Classroom interventions
- 6 and 12: Medication Plus Parent Training in Behavior Management
- Ages 12+: Medication plus other support (School accommodations etc.)
- Other considerations: Exercise, mindfulness, positive community involvement…

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ADHD- Pharmacologic Interventions

A plug for medications: effect size is a statistical concept use to measure effect of medication on given variables- the effect sizes for medication in ADHD, particularly stimulants is in the 0.9-1.1 which is considered large- and is the best in all of psychiatry (compare to medication for depression with effect sizes around 0.3)

For stimulants especially, you can usually tell pretty quickly (within days) whether they are effective and tolerable

ADHD- Pharmacologic Interventions

FDA Approved medications:

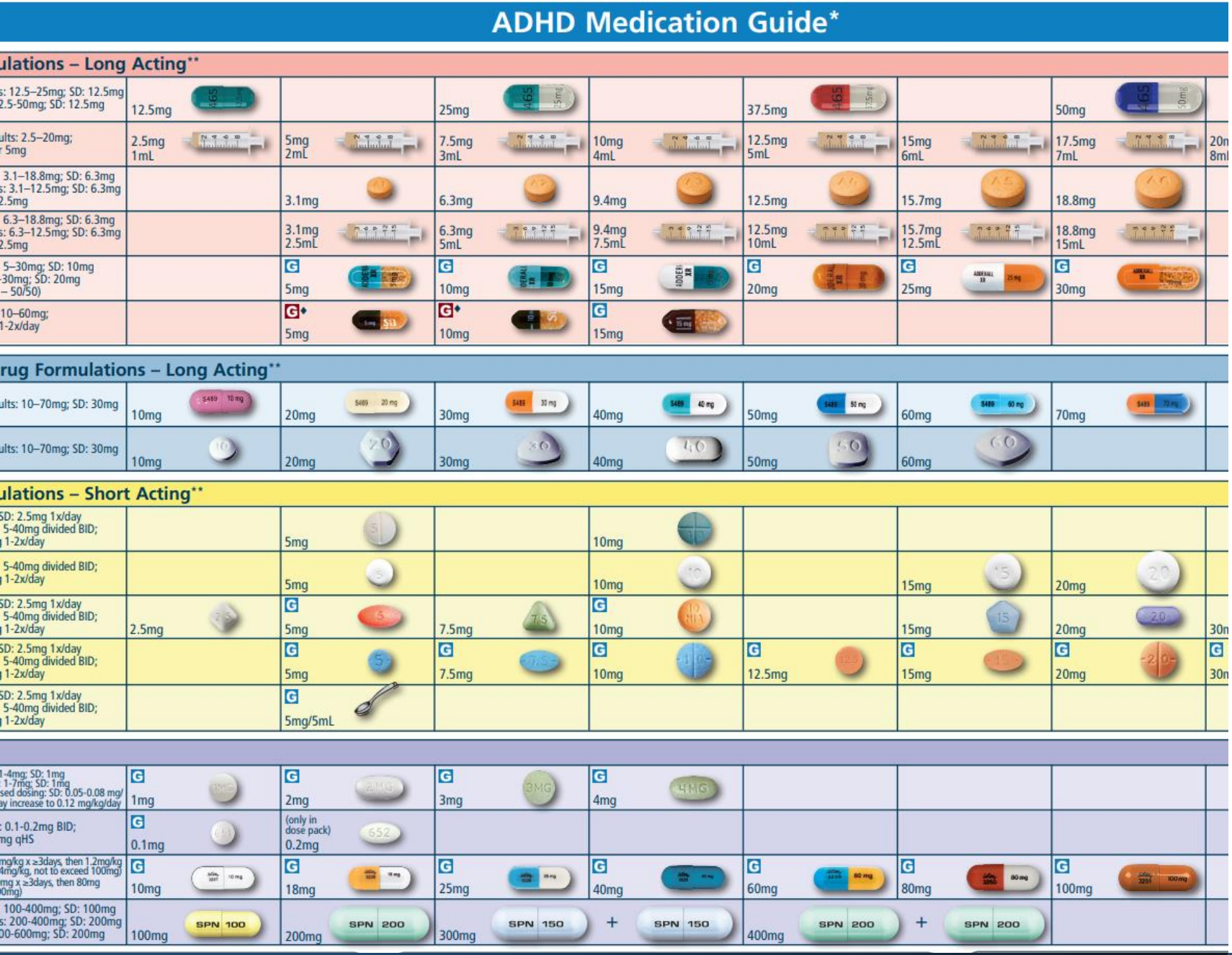
Stimulant Medications: 2 Basic Classes: Methylphenidate Derivatives (e.g. Ritalin, Metadate, Focalin (dexmethylphenidate), Concerta)

Amphetamine Derivatives: (Adderall, Vyvanse)

Non-Stimulant Medications:

Alpha Agonists: clonidine and guanfacine ER (IR not FDA approved but helpful for kids who cannot swallow pills and need crushing)

Norepinephrine Reuptake Inhibitors (NRI): atomoxetine (Strattera) and viloxazine (Qelbree)



ADHD-Pharmacologic Interventions-Medication Guide

https://www.adhdmedicationguide.com/

ADHD-Med-Card-May2024.pdf

(https://projectteachny.org/app/uploads/2024/05/ADHD-Med-Card-May2024.pdf)

Clinical Pearls

Stimulants: common side effects: appetite suppression (monitor weight) activation (including insomnia), irritability, mild increase in BP possible, monitoring may be recommended at higher doses

Dosing strategies: **BID or TID dosing-**

- sometimes even “Long Acting” medications are not in fact long acting in certain students
- On the other hand, if you have a child who hates coming to the office for medications, ask about a longer acting option

Treat to response: Underdosing is common!

Clinical Pearls

If concern for impulsivity/aggression, insomnia anxiety manifesting as irritability, mood lability- consider alpha agonist.

If concern for anxiety/depression consider NRI

Medications can be used in combination

Consider alternative differential diagnosis- e.g. anxiety/mood; learning disability

Selected References

- DSM-5 TR: American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders (5th ed., text rev.)
- aacap.org/App_Themes/AACAP/docs/resource_centers/resources/med_guides/ADHD_Medication_Guide-web.pdf
- Thomas R, Sanders S, Doust J, et al: Prevalence of attention-deficit/hyperactivity disorder: a systematic review and meta-analysis. Pediatrics 135(4):e994–1001, 2015
- Wolraich et al: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents, *Pediatrics* (2019) 144 (4): e20192528.
- https://www.adxs.org/en/page/240/effect-size-of-different-forms-of-adhd-treatment
- The World Federation of ADHD International Consensus Statement: 208 Evidence-based Conclusions about the Disorder, Neurosci Biobehav Rev. 2021 Feb 4;128:789–818. doi: 10.1016/j.neubiorev.2021.01.022

Helpful Websites

Project TEACH New York State Child Psychiatry-Primary Care Resource program with great database of rating scales and other information.

https://projectteachny.org/

VTCPAP | Home Vermont Child Psychiatry Access Program

https://www.vtcpap.com/

Both to my knowledge available to Primary Care Providers, but helpful resources for PCPs and Parents to be aware of.

Case Presentation

Bringing Knowledge to Action through interactive, case-based discussions

Participant presents the case and poses the question(s) for the group

↓

Clarifying questions about the case from group to case presenter

↓

Ideas, suggestions, recommendations from participants

↓

Ideas, suggestions, recommendations from ECHO faculty team

↓

Full group discussion

↓

Summary and wrap-up by facilitator

Case Presentation

DO <u>NOT</u> INCLUDE:

Names, Address, DOB, Phone/Fax #, Email address, Social Security #, Medical Record #

Consider the level of detail necessary. Go with less when possible.

The discussion and materials included in this conference are confidential and privileged pursuant to 26VSA Section 1441-1443. This material is intended for use in improving patient care. It is privileged and strictly confidential and is to be used only for the evaluation and improvement of patient care.

Case

SCHEDULE	
Oct 9	**Every Day Counts: School Attendance and the School Nurse**, *Heidi Schumacher, MD, FAAP and Tia Brumsted, MSW, LICSW, NCSSW*
Nov 13	**ADHD: Clinical Pearls for School Nurses**, *Michael Hoffnung, MD*
Dec 11	**Oral Health in the School Setting**, *Katie Merrick, DDS*
Jan 8	**Neurodiversity and Autism, Learning and Unlearning**, *Jeremiah Dickerson, MD and Molly Bumpas, SLP*
Feb 12	**Pediatric Migraine**, *Adam Sprouse-Blum, MD*
Mar 12	**Care of the Immunocompromised Student**, *William Raszka, MD*

Closing Announcements

- Slides are posted at www.vtahec.org
- Recording of didactic portion will be sent by email to the full cohort
  - **All recordings are for the use of registered participants only**
- Please complete the evaluation survey
- CMIE information and session QR code auto-send after evaluation
- Please contact us with any questions, concerns, or suggestions:
  - Katherine.Mariani@uvmhealth.org
  - Patti.Smith-Urie@uvm.edu