

Bridging Gaps: Optimizing Health Management for ADHD Clients and Providers

2024 International Conference on ADHD
Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD)
Friday, November 15, 2024

Presenters:

- 1. Dr. Maryna Mammoliti, MD, Psychiatrist**
- 2. Adam Ly, MScOT, Registered Occupational Therapist**

Meet Dr. Maryna Mammoliti: Psychiatrist



Education:

- Honours Bachelor of Science (York University)
- Doctor Medicine (University of Ottawa)
- Psychiatry Residency (Western University)

Practice Areas:

- Adjunct Professor at Western University (Ontario, Canada)
- Locum Psychiatrist at Centre for Addiction and Mental Health (CAMH)
- Community Psychiatrist

Hobbies: Beach, family, travel, shopping

Meet Adam Ly:

Occupational Therapist



Education:

- Honors Bachelor of Health Science in Health Promotion (BHSc)
- Master of Science in Occupational Therapy (MScOT)
- Western University in London, Ontario, Canada

Practice Areas

- Outpatient private rehabilitation clinic
- Outpatient (primary) and community (as needed)
- Clinical work: Adults with brain injury, mental health, depression, anxiety, PTSD, ADHD, late-diagnosis adult autism, stress, etc. with a return-to-work focus.
- Teaching & education
- Auto accidents, workplace safety and insurance board, long term disability, and private clients

Adjunct Lecturer at University of Toronto in Department of Occupational Science & Occupational Therapy
Seasonal Lecturer at Western University



Learning Objectives

01

Understand how ADHD affects health management

02

Identify practical skills and solutions to help with health management skills

03

Apply Solutions for Overcoming Healthcare Barriers

04

Improving Management of Healthcare Conditions for Everyone



Understand How ADHD Affects Health Management





ADHD and Health Management

- Managing one's health requires executive function, including attention, time management, prioritization, planning, impulse control, following instructions and emotional regulation, working memory and task completion
- Navigating healthcare appointments starts with remembering to contact a healthcare provider, following all the booking instructions including forms and using complex virtual platforms, navigating clinic locations, driving, remembering information provided, and following care instructions, booking follow up and prescription management.
- Managing time to attend appointments or follow up regularly in itself can be a significant barrier and patients being discharged or lost to follow up, let alone actual treatment adherence.



ADHD and Health Management

Attention	<ul style="list-style-type: none">● booking instructions, procedure instructions, information about the diagnosis and treatment, consent, procedure preparation, medication information
Time management	<ul style="list-style-type: none">● Attending timed appointments and procedures and follow up management
Prioritization	<ul style="list-style-type: none">● Prioritizing medical care and appointment attendance
Planning	<ul style="list-style-type: none">● Follow up, treatment
Impulse Control	<ul style="list-style-type: none">● Emotional reactions in healthcare settings and managing frustration
Following Instructions	<ul style="list-style-type: none">● Following booking and treatment instructions
Task completion	<ul style="list-style-type: none">● Finishing labs, investigations and follow up



ADHD and Health Conditions

- ADHD patients had a significantly greater prevalence of ankylosing spondylitis, ulcerative colitis, , and autoimmune thyroid disease than the controls (Chen et al., 2017)
- Association between ADHD and allergic/autoimmune diseases (Chen et al., 2017)
- ADHD is associated with a wide variety of somatic conditions across the entire lifecourse. Specifically neurological disorders such as Parkinson's disease, dementia, sleep-related disorders and autoimmune disorders affecting the musculoskeletal, digestive, and endocrine system (fibromyalgia, lupus) (Libutzki et al., 2024)

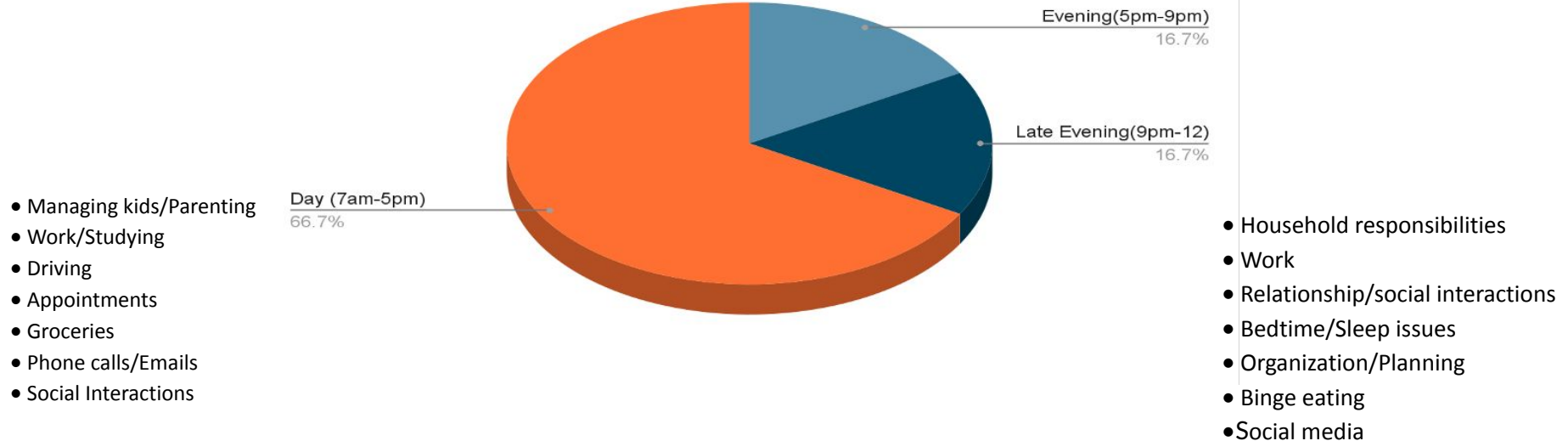


Cognitive Load - What is it?

- Cognitive Load Theory- John Sweller : explains learning process with 3 components: types of memory (working and long-term memory), the learning process and the forms of cognitive load that can affect our learning (Sweller, J. (2011).
-
- Cognitive load - mental effort required to process information; intrinsic cognitive load (complexity of the knowledge being acquired) and extraneous cognitive load (how information is presented) (Sweller, J. (2011)

The Daily Cognitive Demands of Managing Life

Daily Life Demands of an Average Adult





Breaking it Down - The Daily Cognitive Demand of an Average Physician's Appointment

1. Booking the appointment - phone number, contact the office, attention to instructions, doctor's name and reason for visit, waiting on hold, managing calendar to schedule, writing down the instructions
2. Getting to the appointment - remembering date, location/address, arranging transportation, parking lot navigation (cost/location), location in building/hospital, registering instructions
3. Appointment- knowing medical history and past events/treatment, medications - past and current, explaining concerns, paying attention to instructions and information provided
4. Follow up - medication compliance, pharmacy visit, following on tests and re-scheduling



Breaking it Down - The Daily Cognitive Demand of Managing ADHD

1. Medication compliance and side effect management/monitoring
2. Constant self monitoring of interrupting, social skills, time management, emotions
3. Remembering skills and applying skills and compensatory strategies
4. Managing other people's response to ADHD
5. Medical and therapy appointments - scheduling, attending, registering what is taught and using skills taught
6. Follow up - medication compliance, pharmacy visit, following on tests and re-scheduling follow up



Breaking it Down - The Daily Cognitive Demand of Managing Type 1 Diabetes

	Tasks:	Cognitive Load:
1. Monitoring Glucose Levels	<ul style="list-style-type: none">● Check blood glucose levels● Interpret trends from glucose readings● Track patterns over time to prevent hyperglycemia (high) or hypoglycemia (low)	<ul style="list-style-type: none">● Recognizing abnormal trends and acting quickly.● Understanding how glucose trends respond to different foods, activities, or stress
2. Carbohydrate Counting & Meal Planning	<ul style="list-style-type: none">● Calculate the number of carbohydrates in meals and snacks.● Estimate the correct insulin dose● Consider the glycemic index (GI) of foods	<ul style="list-style-type: none">● Consistently estimating carbohydrate content can be mentally exhausting● Mistakes or misjudgments can result in glucose swings, adding stress and complexity



Breaking it Down - The Daily Cognitive Demand of Managing Type 1 Diabetes

	Tasks:	Cognitive Load:
3. Insulin Dosing Decisions	<ul style="list-style-type: none">• Administer insulin doses• Adjust basal (long-acting) and bolus (mealtime) insulin doses based on food, activity, or illness.• Calculate correction doses if glucose levels are too high	<ul style="list-style-type: none">• Requires precise calculations to avoid over- or under-dosing.• Insulin has delayed effects, so predicting its impact adds complexity
4. Exercise and Physical Activity Adjustments	<ul style="list-style-type: none">• Adjust insulin and food intake before, during, and after exercise.• Monitor blood glucose during activity to prevent exercise-induced lows	<ul style="list-style-type: none">• Exercise affects blood glucose unpredictably, depending on intensity and duration• Anticipating glucose drops during or hours after activity can be challenging



Breaking it Down - The Daily Cognitive Demand of Managing Type 1 Diabetes

	Tasks:	Cognitive Load:
5. Managing Stress, Illness, and Sleep Patterns	<ul style="list-style-type: none">● Adapt insulin dosing during illness (which can raise blood glucose).● Manage glucose changes caused by stress or poor sleep.	<ul style="list-style-type: none">● Requires real-time adjustments based on unpredictable events.● Adds emotional strain that complicates decision-making.
6. Preventing and Managing Hypoglycemia and Hyperglycemia	<ul style="list-style-type: none">● Detect signs of low/high blood glucose (e.g., dizziness, sweating)● Monitor recovery.	<ul style="list-style-type: none">● Hypoglycemia/hyperglycemia management requires rapid action under stress.● Fear of future lows can lead to overcompensation, increasing glucose variability.



Breaking it Down - The Daily Cognitive Demand of Managing Type 1 Diabetes

	Tasks:	Cognitive Load:
7. Long-Term Planning and Decision-Making	<ul style="list-style-type: none">● Schedule regular appointments with healthcare providers.● Monitor A1C levels (average glucose over 3 months).● Make adjustments for life changes (travel, job shifts, or school)	<ul style="list-style-type: none">● Requires planning months in advance and tracking long-term patterns.● Emotional stress from trying to meet long-term health goals can increase the mental load.
8. Technology and Device Management	<ul style="list-style-type: none">● Use and maintain devices such as CGMs, insulin pumps, or smart pens.● Stay updated with technology improvements and integrate new tools.● Manage battery levels, app	<ul style="list-style-type: none">● Learning to use and trust new technology takes time and effort.● Technical failures add additional mental stress.

Identify Practical Skills and
Solutions to Help with
Health Management Skills





Individual and Environment

- STEP 1: **AWARENESS** of **ADHD** and its **IMPACT** on healthcare management
- STEP 2: Identifying **Individual Needs**
- STEP 3: Discussion of **Individual Needs with Individual Providers/Clinics**
- STEP 5: Support networks **individually and systemically**
- STEP 4: **Systemic changes** to raise awareness and provide supports



Beware of ADHD Burnout!

People with ADHD try to **hide or “mask”** their ADHD behaviours and challenges to try and **fit in** with everyone else

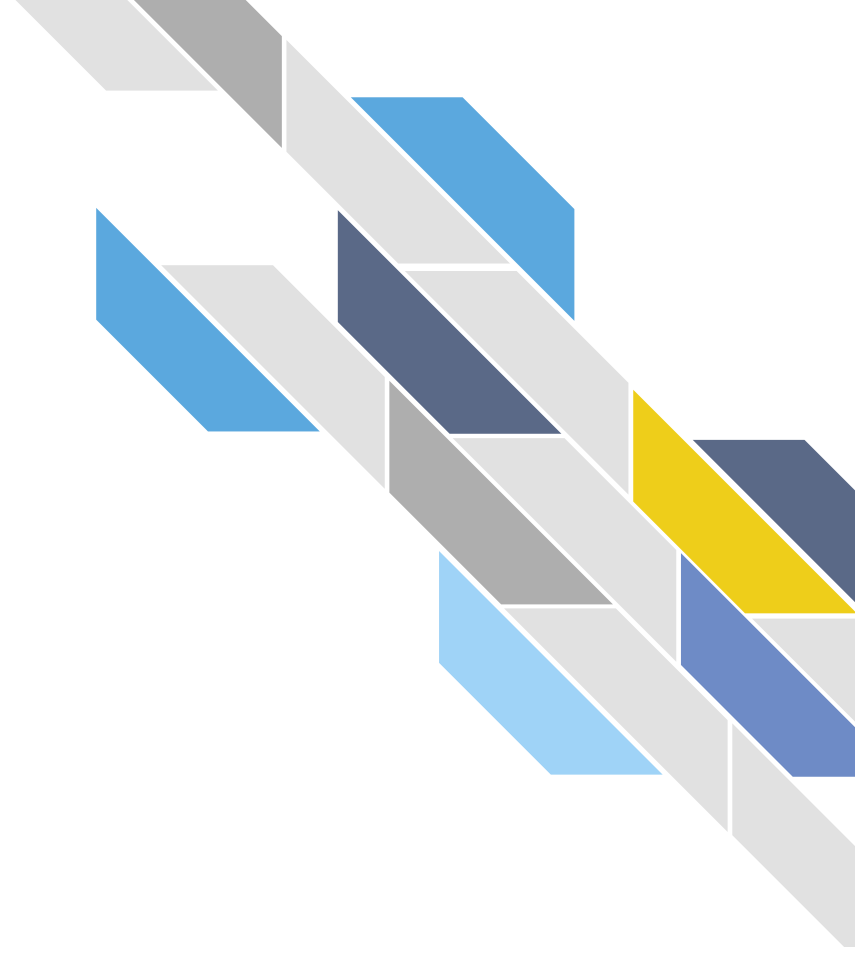
Examples (Cuncic, 2022):

- Excessively writing things down to help with memory difficulties
- Staying too quiet and being overly careful about what you say to avoid talking too much or interrupting people
- Suppressing stimming or hyperactive behaviours
- **Listening carefully and focusing too hard** when someone is talking to not miss anything they say
- **Obsessively making to do lists** and organizing systems
- **Developing perfectionistic tendencies**

Toglia & Foster, 2021:

- **Excessive use of strategies = increased effort** and resources. **Inefficient.**
- **Too few strategies = Increased demand** to keep track of information

Apply Solutions for Overcoming Health Care Barriers





Practical Solutions - Different Approaches

Skills

Strengths

Simplification

Technology

Support Systems

Collaboration

Accommodations

Therapy/Coaching



Skills

1. Communication skills

- Assertiveness for self-advocacy/Education of providers involved
- Active listening

2. Time Management Skills

3. Motivation strategies

- Pairing it with something enjoyable
- Breaking it down
- Starting small and momentum



Skills

1. Organization skills

- Organizing information
- Organizing time/complex routines

2. Emotional Regulation Skills

3. Interpersonal Skills

- Problem solving
- Advocacy

Technology - Apps

- Apps, assistive devices, and other technologies to help with reminders, tracking, storage, and communication.



Pill Reminder - All in One 12+

Medication Reminders, Tracker

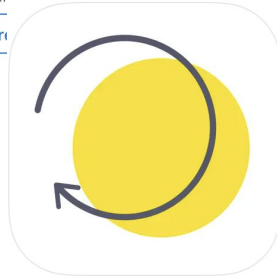
[Sergio Licea](#)

Designed for iPad

★★★★★ 4.6 • 1.5K Ratings

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Routine Planner, Habit Tracker

For Structured Time Management

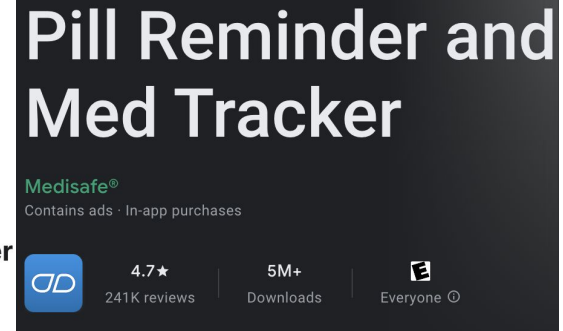
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Technology - Breaking It Down

Goblin Tools



Magic ToDo

Formalizer

Judge

Professor

Estimator

Compiler

Chef

 Patreon



About

Magic ToDo

Help ?

Breaking things down so you don't

Add new item...



☰ ☐ Make a doctor's appointment



☰ ☐ Determine the type of appointment needed



☰ ☐ Identify the preferred doctor or medical office



☰ ☐ Check the doctor's availability



☰ ☐ Gather personal information (e.g., insurance details, medical history)



☰ ☐ Contact the doctor's office (via phone, online, or app)





Technology - Breaking It Down

ChatGPT 4o ▾

Can you help me break down into steps to make an appointment with my doctor?



Certainly! Making an appointment with your doctor is straightforward, but it helps to break it down into simple steps. Here's a step-by-step guide to help you through the process:

Step-by-Step Guide to Make an Appointment with Your Doctor

1. Find Contact Information:

- Locate your doctor's phone number or website. This information is often on your clinic's website, a previous bill, or your insurance provider's website.

2. Check Your Availability:

- Look at your calendar and decide on a few possible dates and times that work for you. It's good to have multiple options in case your preferred time slots are unavailable.

3. Prepare Information:

ChatGPT

Technology - Personal Assistants



Apple - Siri



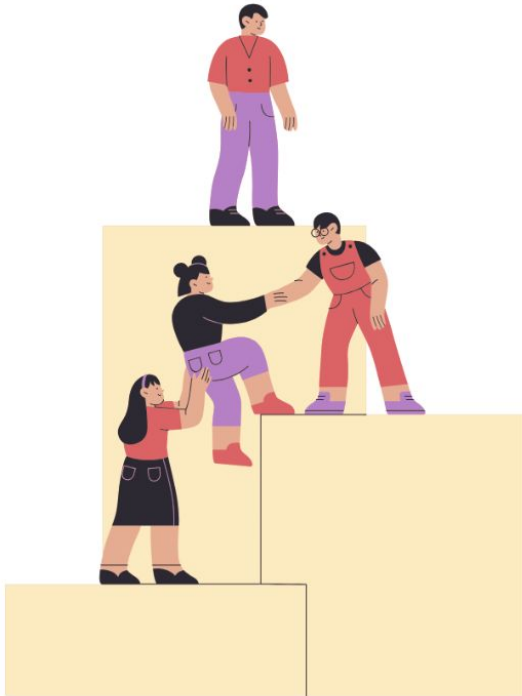
Google Home



Amazon Alexa



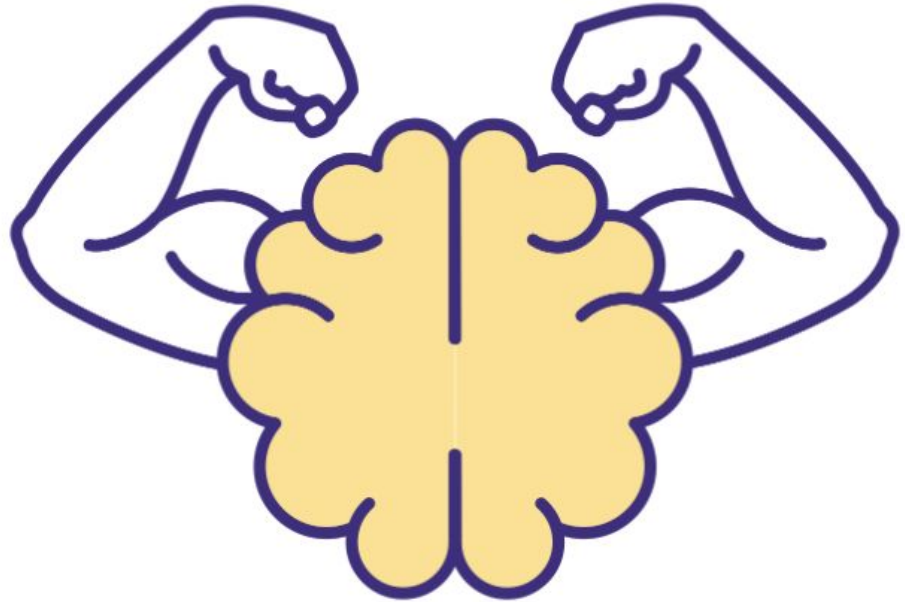
Collaboration, Support Systems



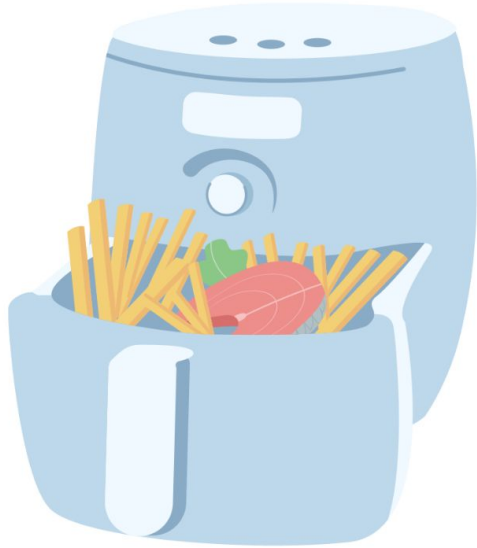
- **Accountability partner**
- **Collaboration with a friend or loved one**
- **Collaborating with healthcare provider** to determine best ways to follow care plans
 - Written summaries
 - Email action plans
 - Cueing to use apps or tools to remember
- **Virtual assistants**

Strengths

- Using **creativity**
- **High energy** levels
- Use **visuals**
- **Curiosity**
- Leveraging **hyperfocus**



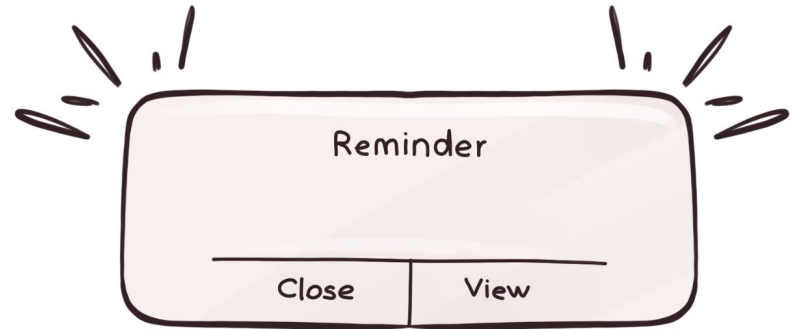
Simplification

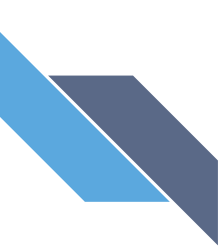


- **Simplifying medication regimen**
 - Once daily dosing, combination pills (Whelton et al., 2017)
- **Easy healthy meals**
 - Frozen healthy foods, one pot/sheet pan recipes, air fryer, slow cookers, easy assembling foods, pre-cut foods, grocery delivery
- **Pill organizer**
- **Consolidation of apps and lists (all-in-one)**
- **Artificial Intelligence that summarizes, transcribes, identify main points**

Accommodations

- Asking healthcare providers to provide accommodations such as:
 - Automatic prescription refills
 - Longer appointment times
 - Text and email reminders
 - Written summaries
 - Health records access
 - Simple language
 - Sensory supports / changes





Sample Care Plan

Improving Management for Healthcare Solutions for Everyone





Individual and Environment

- STEP 1: **AWARENESS** of **ADHD** and its **IMPACT** on healthcare management
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