MedStar Health

It's how we treat people.

Adaptive Medicine Sunflower Pilot
Supporting Patients with Developmental Disabilities During Acute and Mental Health Emergencies

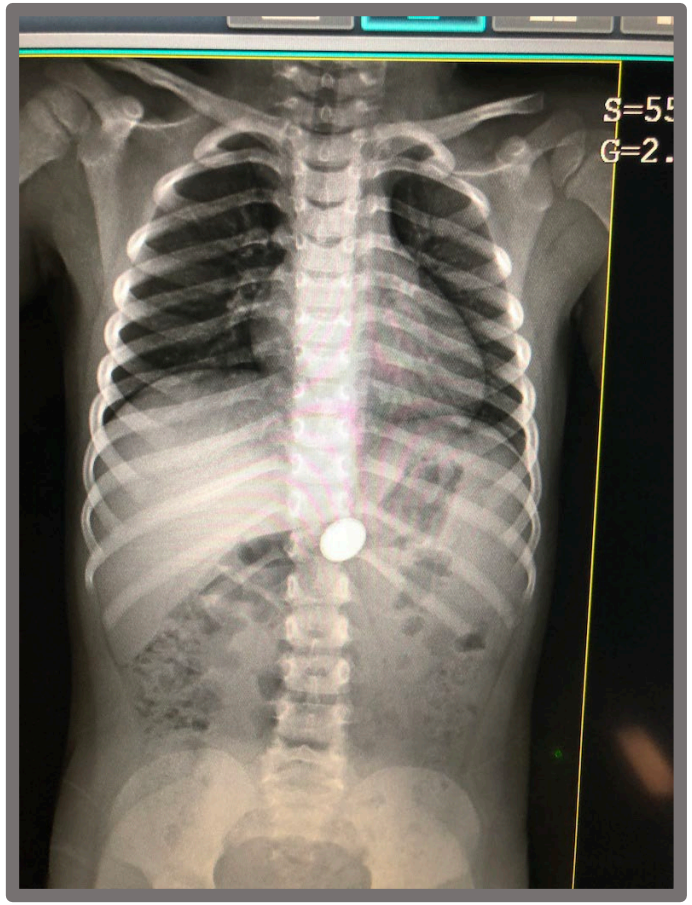
Whitney Deal, MD, FAAEM, CAS, Asst. Professor Georgetown University Dept. of Emergency Medicine
Featuring interviews with Earl Wynn, Protective Services Officer, and Laura Glowacki, Speech-Language Pathologist

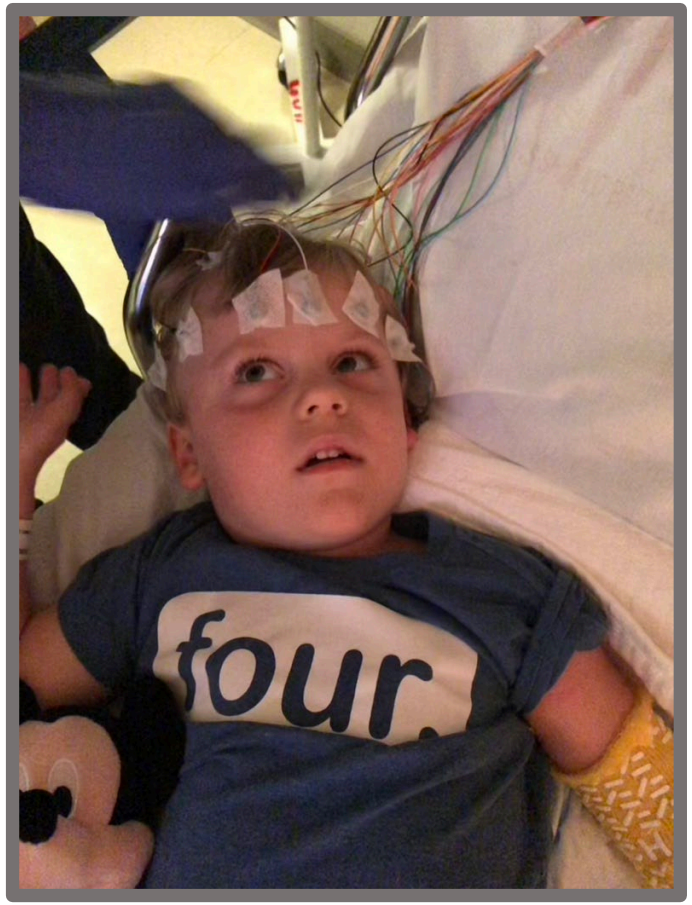
Learning Objectives

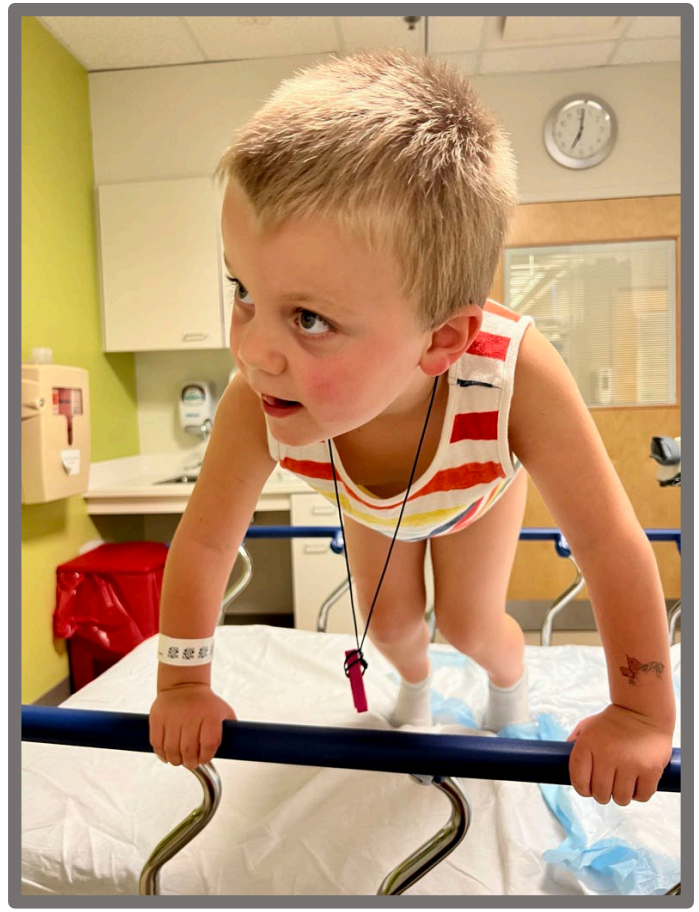
By the conclusion of this presentation, participants will be able to:

1. **Apply the SCREAM acronym** to recognize atypical presentations of emergencies in patients with disabilities.
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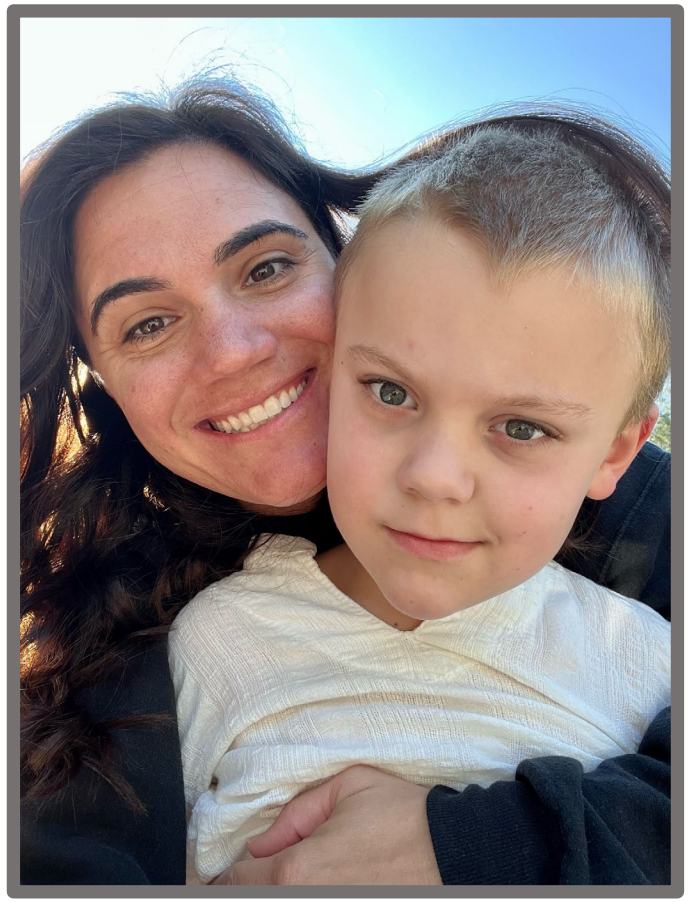
Emergency visits for a 6-year-old with developmental disabilities and limited verbal communication







Meet my son, Milo.



- Milo has a genetic diagnosis called STXBP1
  - Global Developmental Delay
  - Epilepsy
  - Movement disorder
- He is non-speaking, using AAC
- PICA, elopement, sensory seeking

STXBP1 disorders

SCREAM: Recognizing Atypical Emergency Presentations

of patients with Intellectual and Developmental Disability

S	C	R	E	A	M
					
Sleep pattern	**Communication**	**Rage**	**Enuresis**	**Abnormal Vital signs**	**Motor Skills**

Presume a medical or psychiatric cause until proven otherwise.

Evidence from autistic populations demonstrates serious acute-care disparities.

3×

More likely to be admitted from the ED

2.3×

Higher cost of care

3×

Higher mortality post ED discharge

20 YEARS

Some people with disabilities die up to 20 years earlier than people without disabilities, in part because of avoidable health inequities and barriers to care

World Health Organization. Disability. Published March 7, 2023.

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For patients with developmental disabilities, a change in behavior may be the clearest sign of pain, illness, or distress

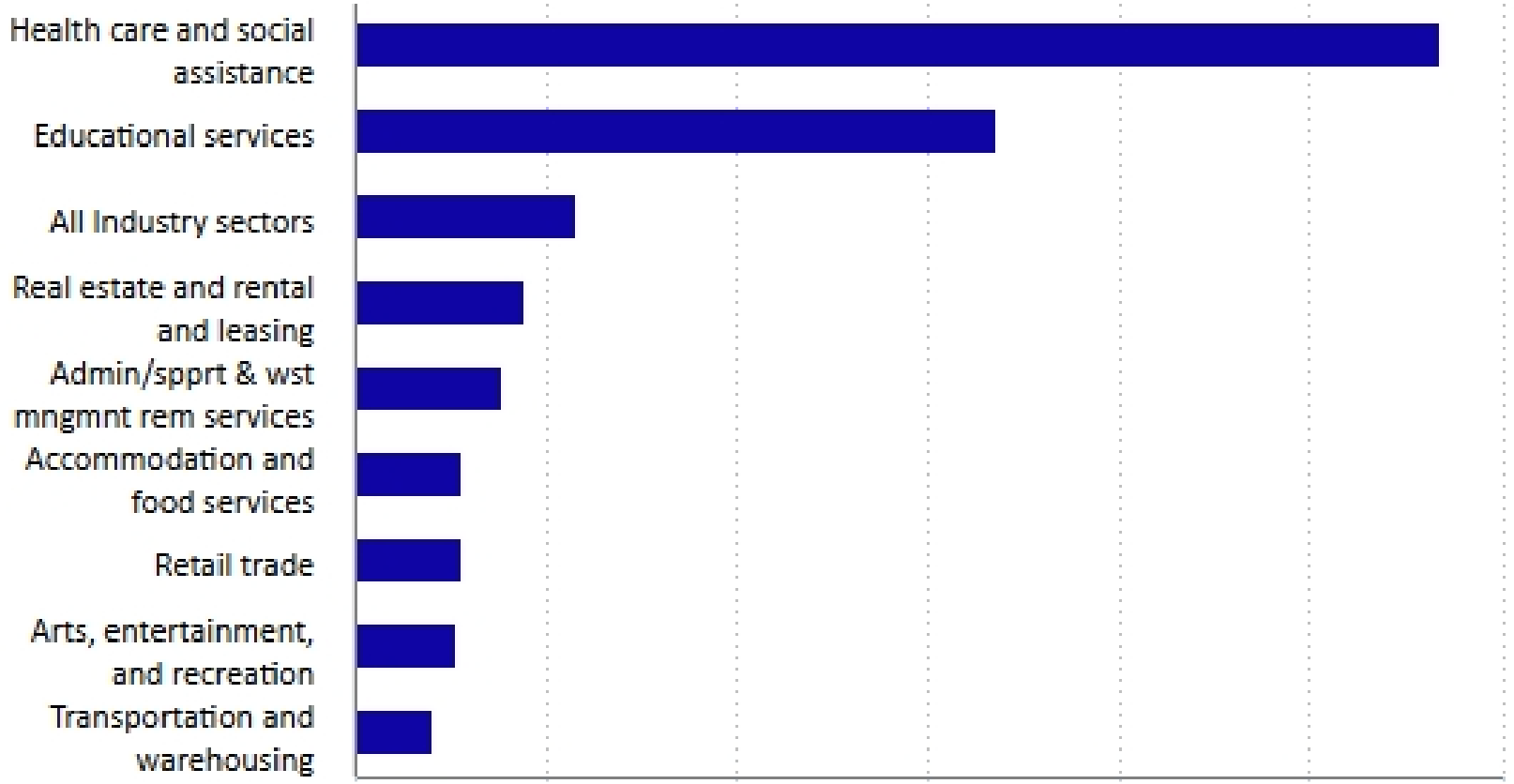


There is zero tolerance for violence in the ED.

"According to a January 2024 poll of ACEP members, 91% of emergency physicians said that they, or a colleague, were a victim of violence in the past year."



Chart 1. Annualized incidence rate of DART cases per 10,000 full-time workers due to intentional injury by other person, by selected industry sectors, private industry, All U.S., 2021-2022



In pediatric mental-health EMS encounters, autism was associated with **3.3× higher odds of parenteral sedation**, and intellectual disability with **3.6× higher odds**, compared with patients without those diagnoses.

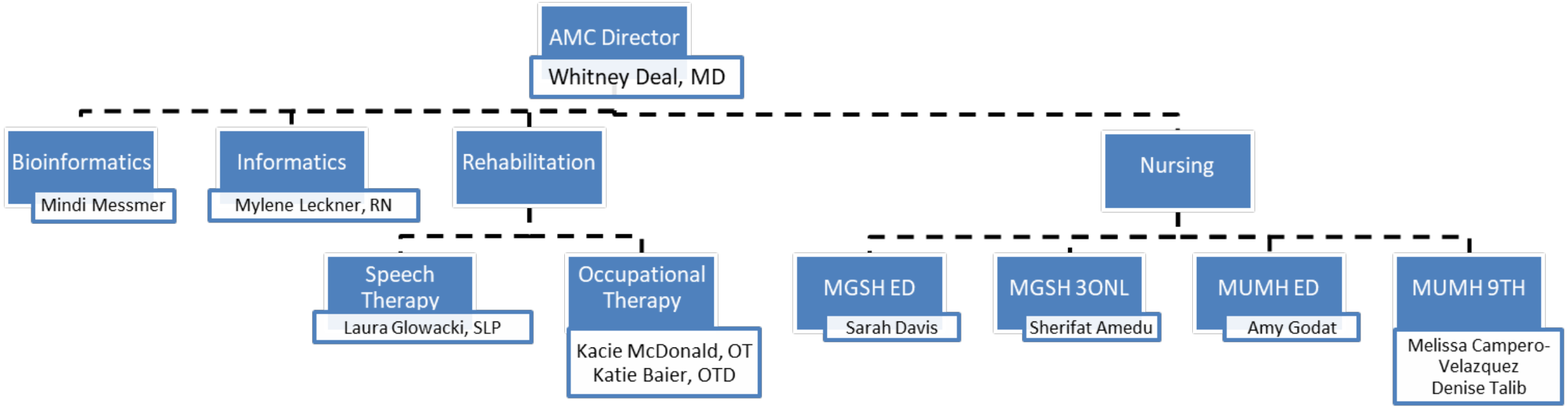
Bourke EM, et al. *Ann Emerg Med*. 2023;82(5):546-557.

April 25th, 2024

Introducing: Adaptive Medicine Sunflower pilot

How can we redesign acute care so that patients with disabilities do not have to adapt to the system alone?

The Team


AMC Director
Whitney Deal, MD
Bioinformatics
Mindi Messmer
Informatics
Mylene Leckner, RN
Rehabilitation
Nursing
Speech Therapy
Laura Glowacki, SLP
Occupational Therapy
Kacie McDonald, OT
Katie Baier, OTD
MGSH ED
Sarah Davis
MGSH 3ONL
Sherifat Amedu
MUMH ED
Amy Godat
MUMH 9TH
Melissa Campero-Velazquez
Denise Talib

Patient Identification

The Sunflower

Not every disability is visible – some are hidden

The Hidden Disabilities Sunflower will let us know that you may need some additional support

Living with a hidden disability can make daily life more demanding for many people, but it can be difficult for others to identify, acknowledge or understand the challenges you face.

The Hidden Disabilities Sunflower makes you visible

It is a discreet sign to indicate to people around you including staff, colleagues and health professionals that you have a hidden disability and may need additional support, help or a little more time.

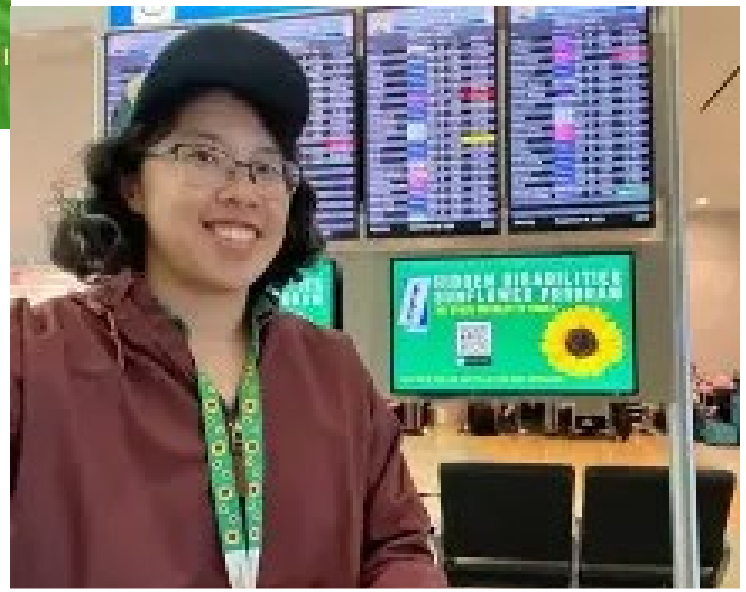
How can wearing the Sunflower benefit you?

- People around you may ask what they can do to assist you
- You or your carer can use your Sunflower to tell us about the additional help you may need

We are proud to support the Hidden Disabilities Sunflower. Our staff are trained to identify the Sunflower and may ask what we can do to assist you.

For more information, please visit **hiddendisabilitiesstore.com/us**





Patient Identification- the sunflower





SUNFLOWER CARE GUIDE

Quick cues to support communication, comfort, and safe care

HOW I COMMUNICATE

My preferred name: _____

My support person & phone #:

_____ _(____)_____

I tend to be:

☐ Verbal ☐ Limited verbal ☐ Nonverbal
☐ Visually Impaired ☐ Hearing Impaired

I do best with:

☐ One-step directions
☐ Visuals
☐ Help from my caregiver
☐ AAC
☐ Other: _____

I need ☐ 0-10 **seconds to understand.**
☐ 10-20
☐ 20+

MY NORMAL

On a good day:

I LIKE	I DON'T LIKE
☐ Sound_____	☐ Sound _____
☐ Light _____	☐ Light _____
☐ Touch _____	☐ Touch _____
☐ Smell_____	☐ Smell_____
☐ Taste _____	☐ Taste _____

Stimming:

_____
_____
_____

Motivators:

☐ Favorite Song:_____
☐ Favorite Food:_____
☐ Other:_____

STRESS

Early distress signs:

☐ Rocking ☐ Moaning ☐ Yelling
☐ Stressful stimming:
_____
_____
_____
_____
☐ Other: _____
_____

Triggers:

☐ Disrupted routine
☐ Sounds _____
☐ Light _____
☐ Touch _____
☐ Smells _____
☐ Tastes _____
☐ Other: _____

CALMING & COPING

I am calmed by:

☐ Being alone
☐ Having physical space
☐ Cart resources (list below)
_____
_____
☐ Other: *(i.e. my radio, my favorite stuffed anim*
_____
_____

Helpful phrases:_____
_____
_____

Please minimize:

☐ Noise ☐ Lights ☐ Touch ☐ Wait-time
☐ Transitions ☐ Procedures
☐ Other: _____





Preparing Equipment
Sunflower Resource Carts

Bring Sensory + Communication Supports to the Bedside

A prepared care environment reduces the burden on families and staff to improvise in real time.

1	**Sensory supports**	Weighted items, headphones, lap pads, timers, familiar objects, and low-stimulation options.
2	**Communication supports**	AAC access, visual choices, first/then supports, simple written prompts, and caregiver-informed strategies.
3	**Safety supports**	Protective padding, clear role assignment, reduced crowding, and a plan for predictable transitions.

Design principle: supports should be immediately available — not dependent on a specialist being physically present.

Sunflower Resource Carts







Featured Interview : Laura Glowacki, Speech-Language Pathologist

Staff Education

Every touch point matters






SECURITY





Alternative measures to calm the agitated patient with ASD and/or IDD in the emergency department

De-escalate using the least restrictive approach

Create a Supportive Space

Connect with Effective Communication

Encourage Positive Actions

Prioritize Safety





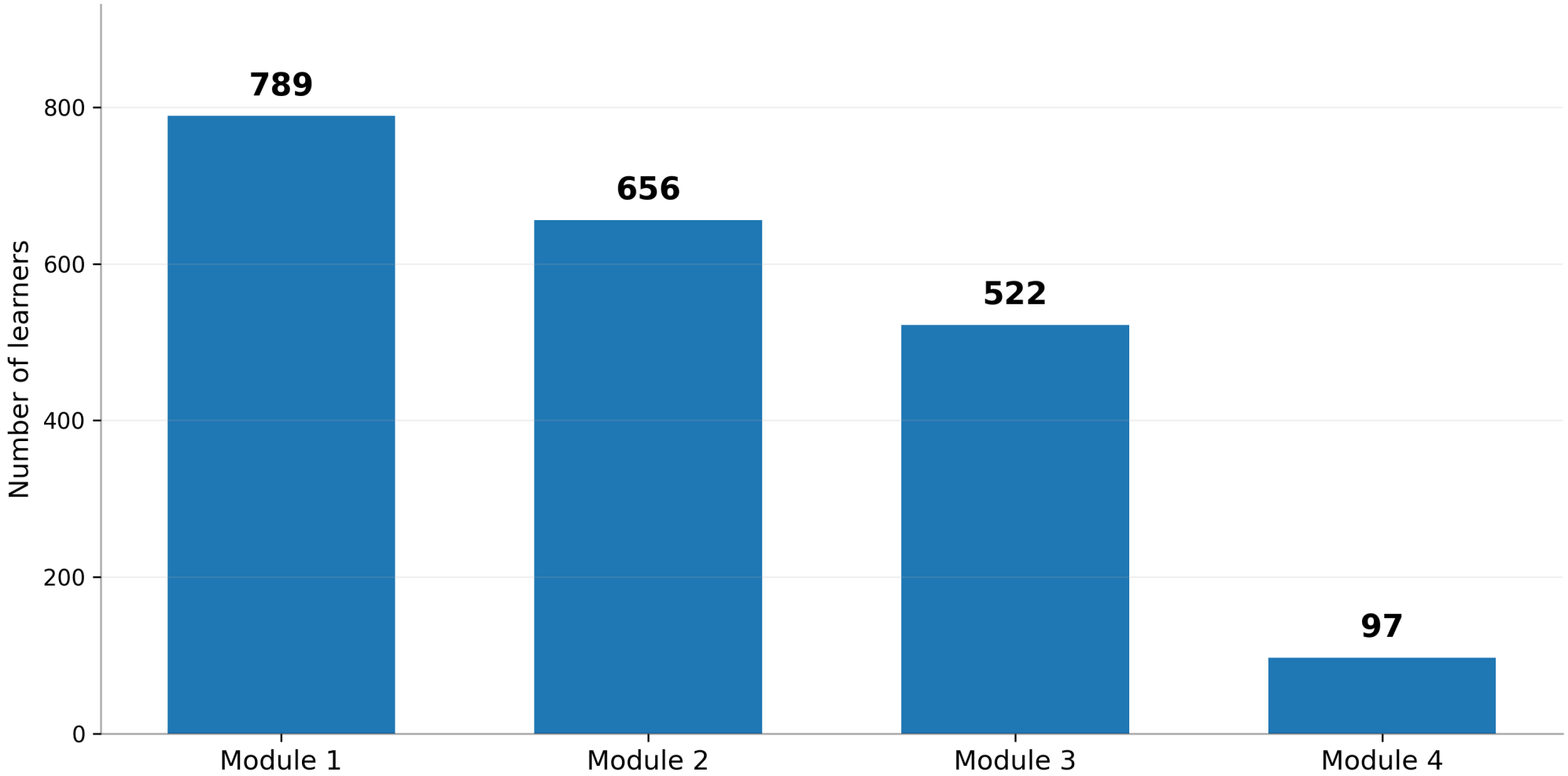






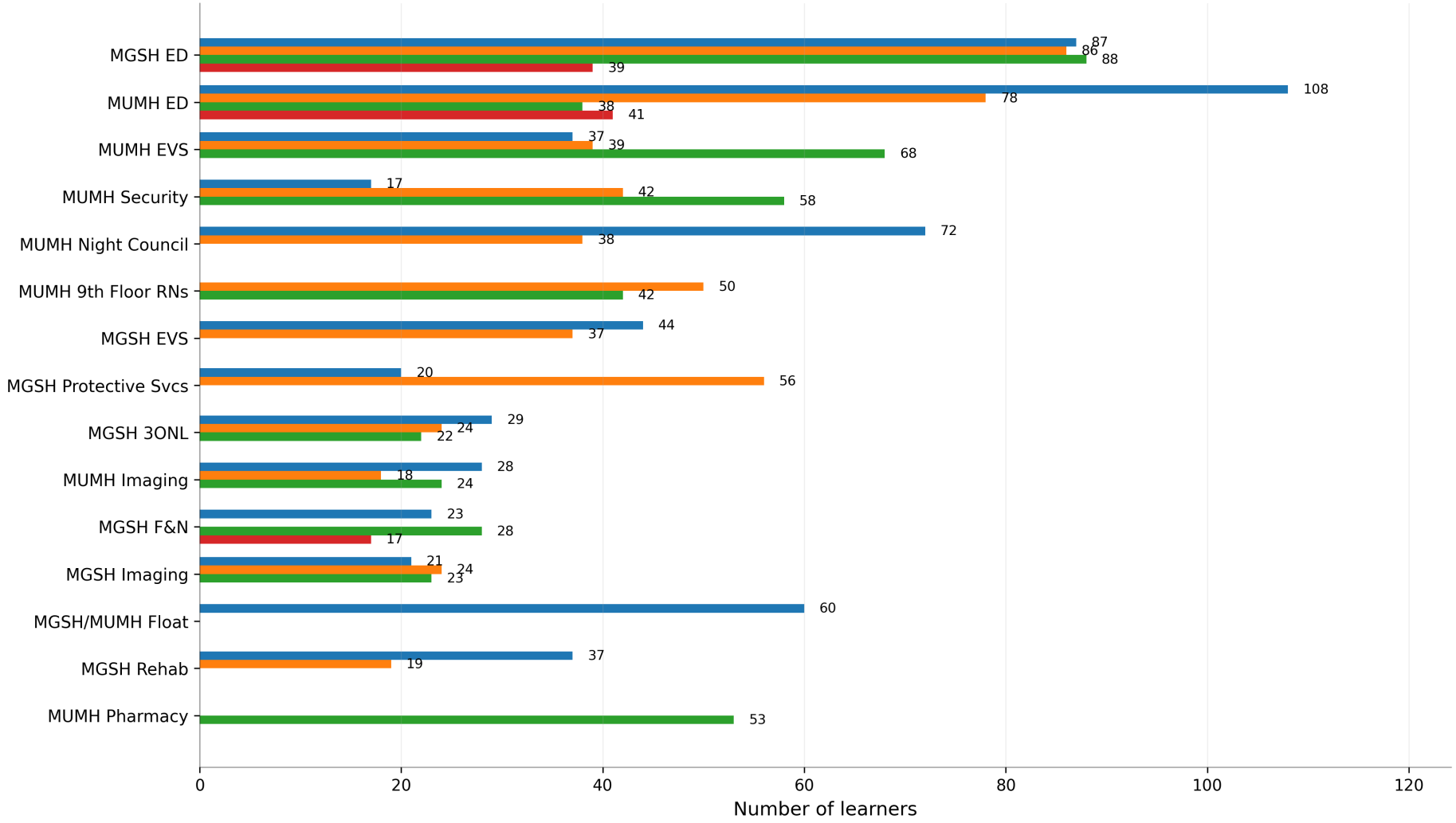

Adaptive Medicine Staff Education

Staff educated per module



Adaptive Medicine Staff Education by Department

Learners completing each module • Top 15 departments



Code Green Sunflower: Coordinated crisis response

- Active threat to self or others
- Patient identified as Sunflower / adaptive needs
- Requires coordinated, specialized response









Code Green Sunflower

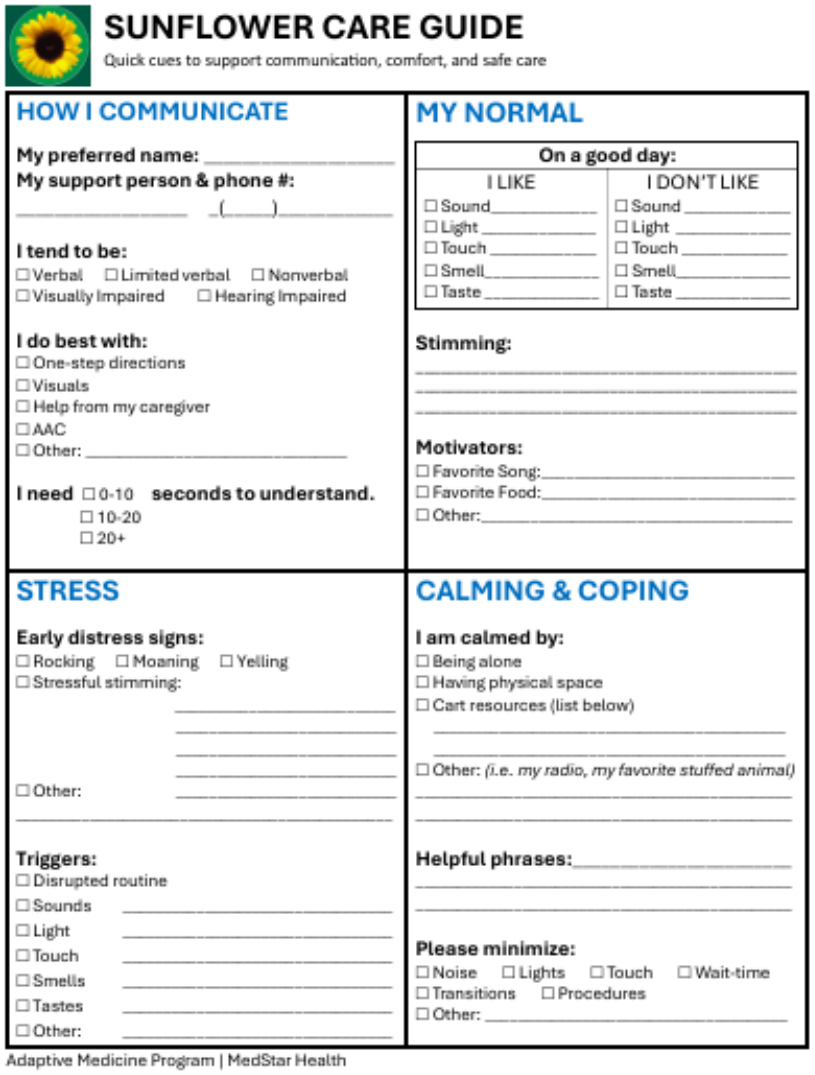
Call **Code Green Sunflower**

Slow it down. Spread out. Lower the room.

Assign 4 roles

1) Sensory Lead
2) Communicator
3) Informer
4) Medicator

Featured Interview : Earl Wynn, Protective Services Officer



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_____

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Adaptive Medicine Program | MedStar Health

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Pilot Outcomes

Measure what matters

Preliminary Outcomes

Early signals suggest both patient-level and system-level benefit.

Sedating medication use

Downward trend among autistic patients included in pilot measurement.

Length of stay

Early data demonstrate decreased length of stay.

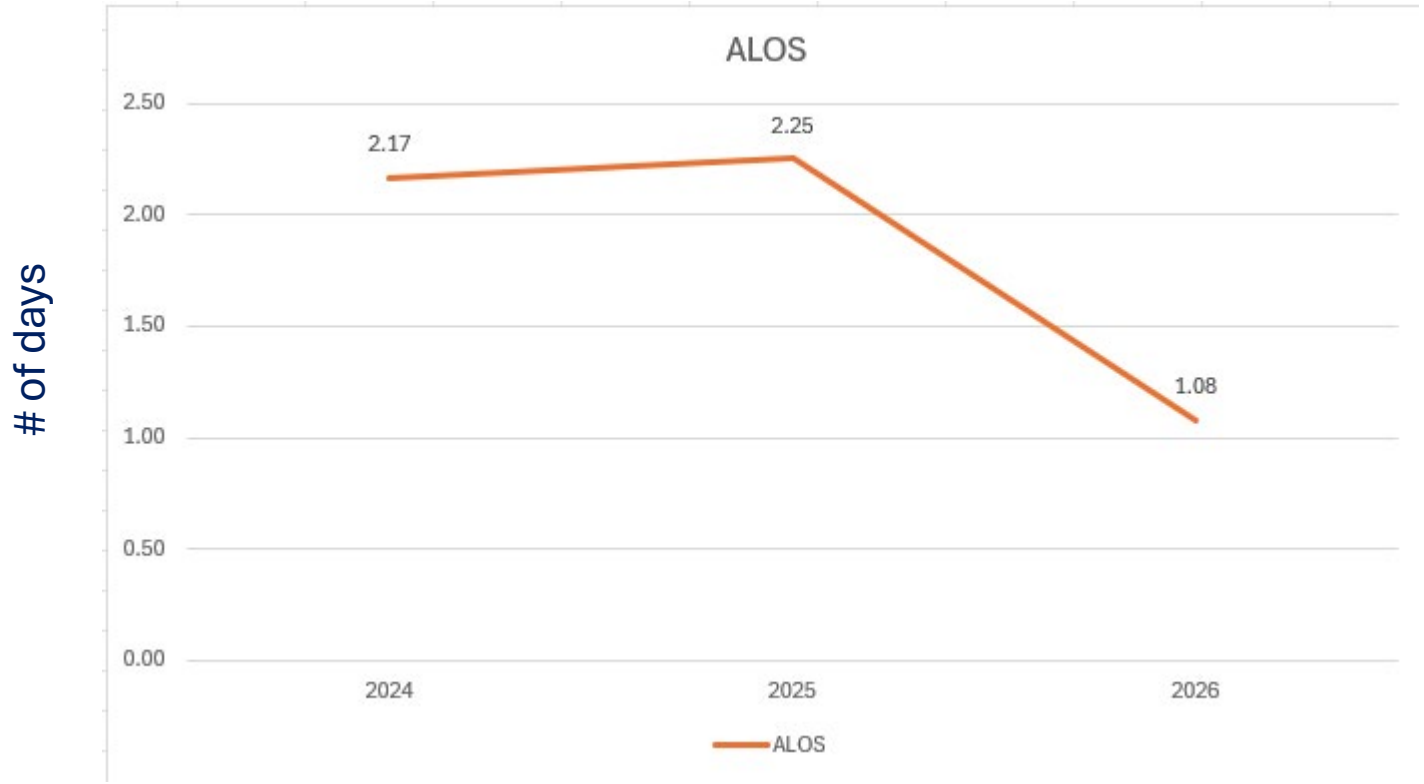
Staff capacity

Improved ability to recognize needs and use disability-informed strategies.

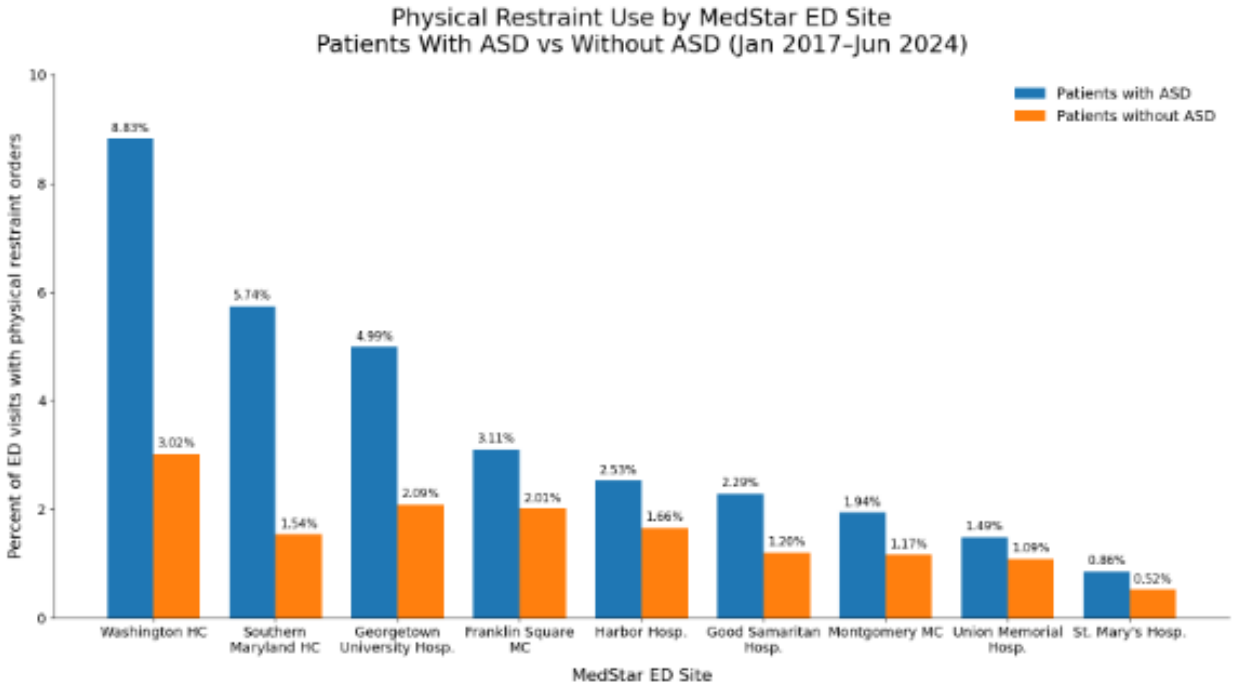
Preliminary findings should be interpreted in the context of ongoing implementation and measurement.

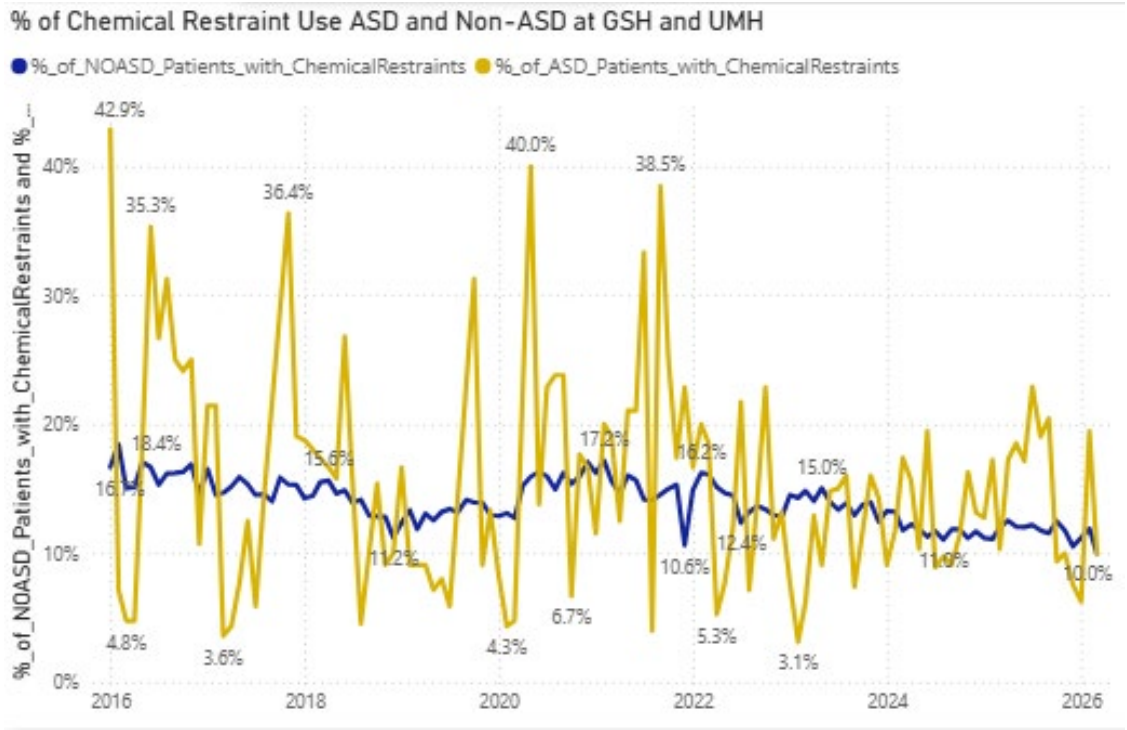
Trends in outcomes (52% dec in LOS)

Length of stay among autistic patients in the pilot

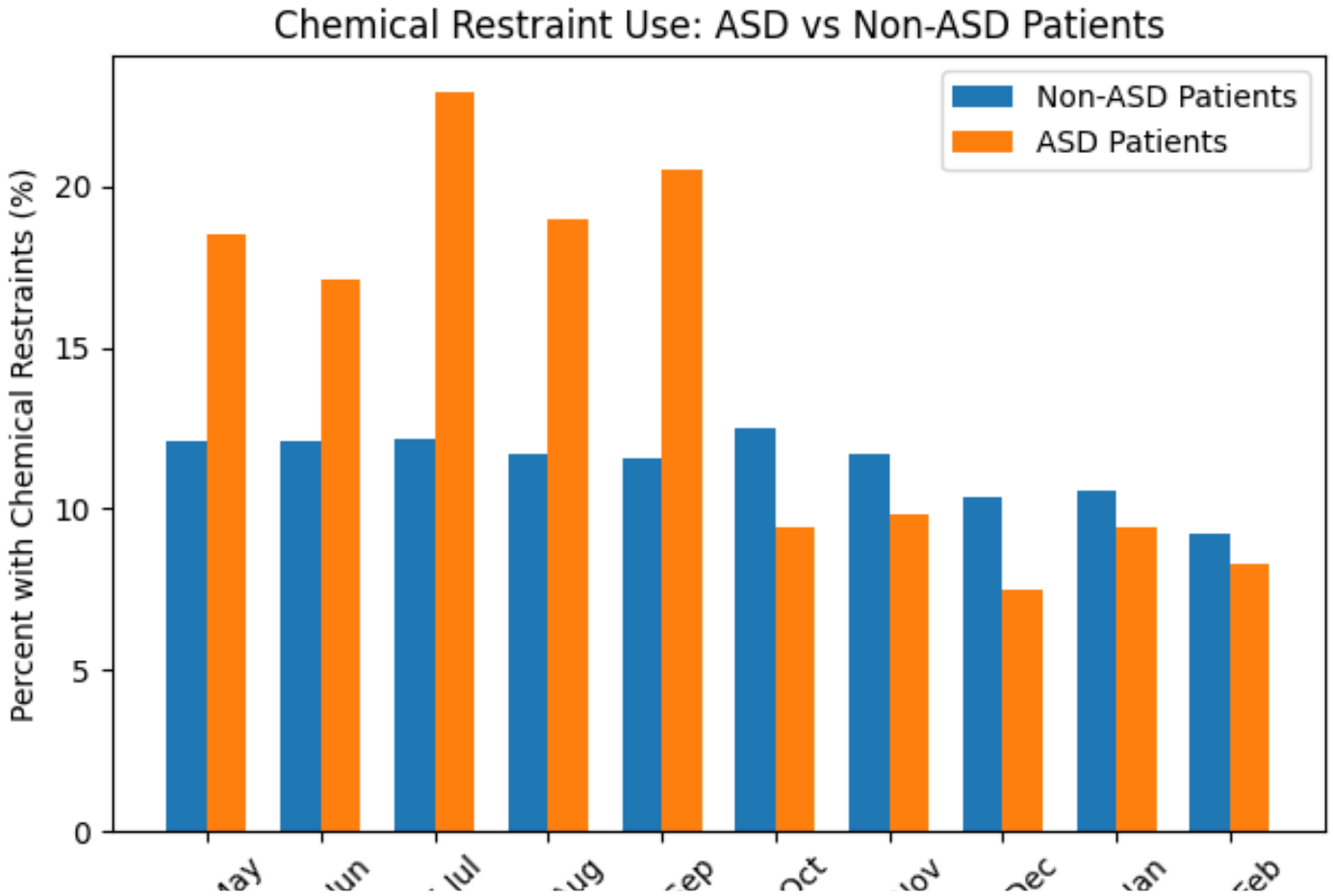


Pre-pilot restraint patterns





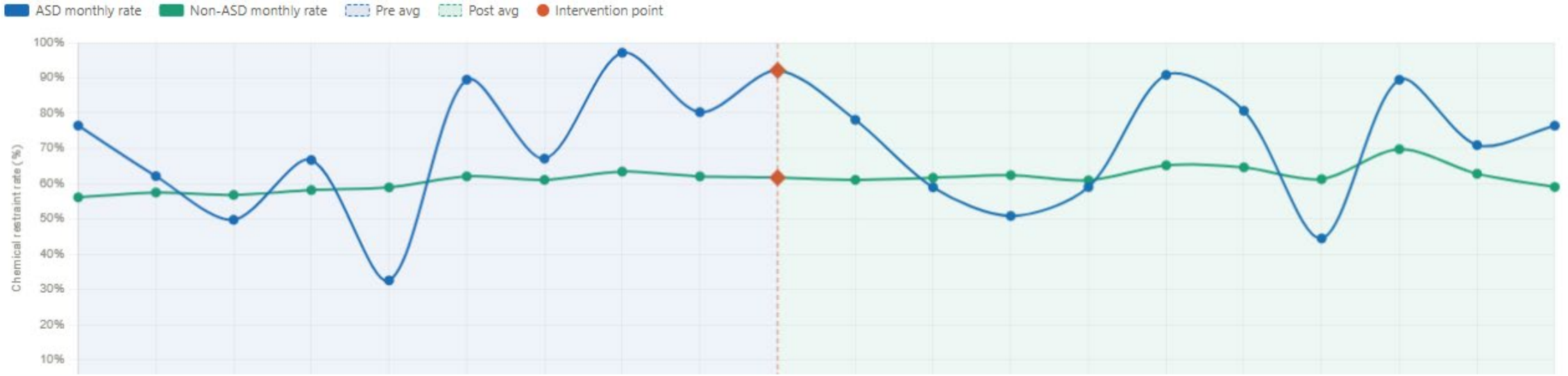
Post-pilot restraint patterns



ADAPTIVE MEDICINE PRE V POST INTERVENTION

MedStar Health

	Pre-intervention avg	Post-intervention avg	Absolute reduction	Relative reduction
ASD PATIENTS	**81.7%** Nov 2024 – Aug 2025	**74.0%** Sept 2025 onward	**-7.7 pp** percentage points	**-9.4%** vs pre-intervention
NON-ASD PATIENTS	**59.7%** Nov 2024 – Aug 2025	**63.2%** Sept 2025 onward	**+3.5 pp** percentage points	**+5.5%** vs pre-intervention



Staff Feedback & National Recognition

- **Grace Smith, RN Charge MHH 4South:**

"We have already seen a remarkable shift in how we think, plan, and approach our patient's needs. Several associates who were previously anxious have come forward with thoughtful, creative ideas for improving our care."

- **Magnet Appraisal Summary:**

"There is a strong organizational commitment to quality initiatives… Examples include the Sunflower Program and Adaptive Medicine Program for patients with hidden disabilities."

- **Angela Profili, RN Charge MUMH ED**

"A 20-year-old woman with ADD/Autism was extremely appreciative of the weighted blanket. Her mother was also very impressed, almost to tears, saying how innovative this was and how helpful and soothing it was to her daughter.

- **Joint Commission Survey MGSH**

"They specifically mentioned that our Sunflower program is a best practice that they would like to submit to the Joint Commission for other hospitals to emulate."

Thank you

Contact me: whitney.a.deal@medstar.net

Thank you