

ASPAN Conference 2019  
Nashville, TN

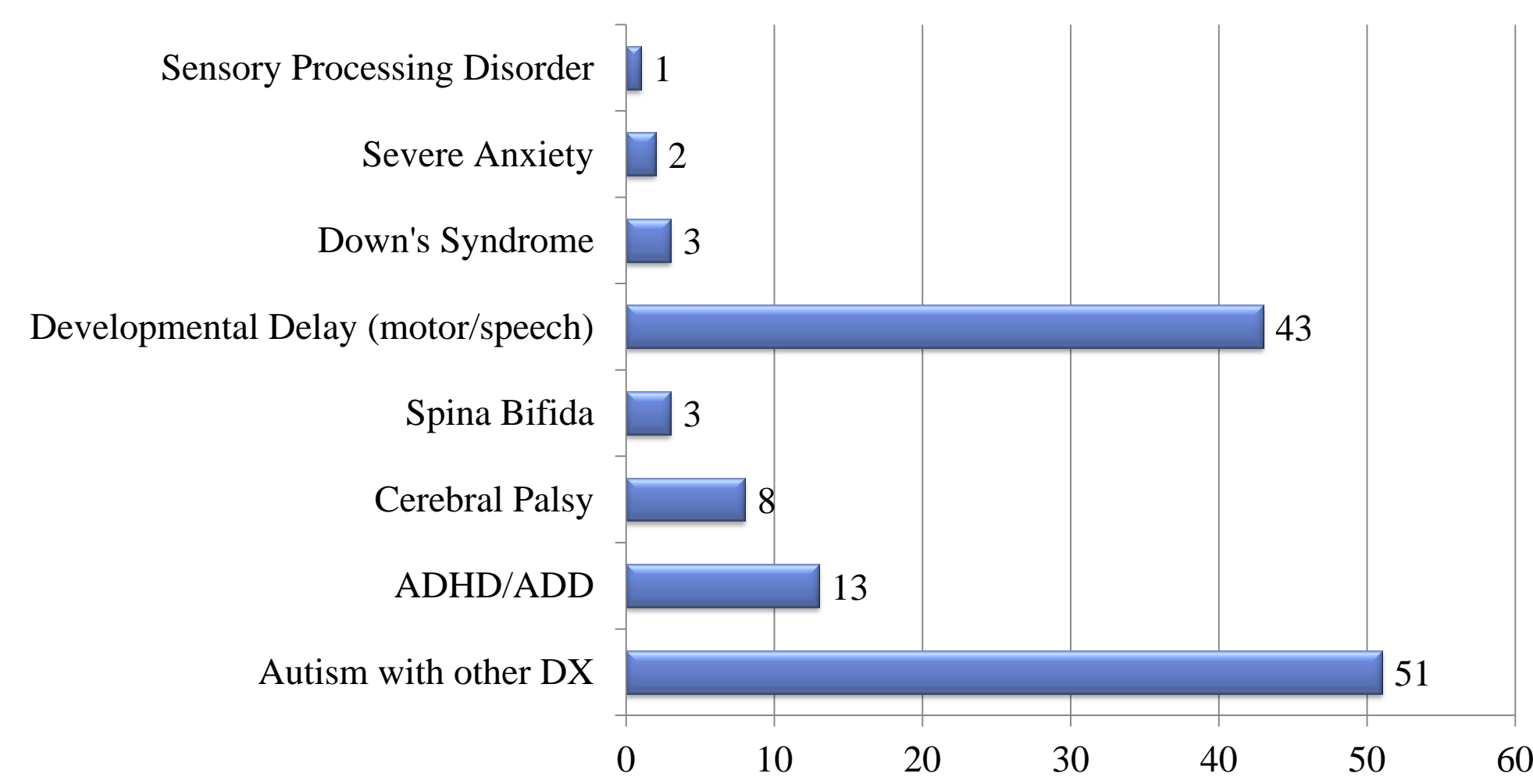
Geraldine delos Santos MSN RN CPAN, Jo-Lynn McDaniel RN CPAN, Heather Brandon BSN RN CPN,  
Angela Clanahan BSN RN CPN, Sheri Ermis RN CAPA, Lisa Regalado BSN RN,  
Giovaana Trainor BS CCLS, Melissa Webber RN

Memorial Hermann Hospital  
Houston, TX

## BACKGROUND

- An opportunity to implement best clinical practice was identified for patients with developmental disabilities (e.g., Autism, ADHD, sensory processing disorders, cerebral palsy, and other learning or developmental delays)—collectively denoted as patients with special needs.
- Limitations in social interaction and nonverbal communication in patients with developmental disabilities impact the level of anxiety or distress during hospitalization.
- 1 in 6 children in the US have developmental disabilities.
- Autism is the fastest growing developmental disability in the US; affecting 1 in 59 children.
- Evidence supports multidisciplinary staff education, a screening tool, an individualized plan of care, and strategies to reduce anxiety or distress to enhance the perioperative experience for these patients with special needs.

Patients with Special Needs Identified during Preop Call  
December 1, 2016 to March 21, 2017 (N=124)



## PURPOSE

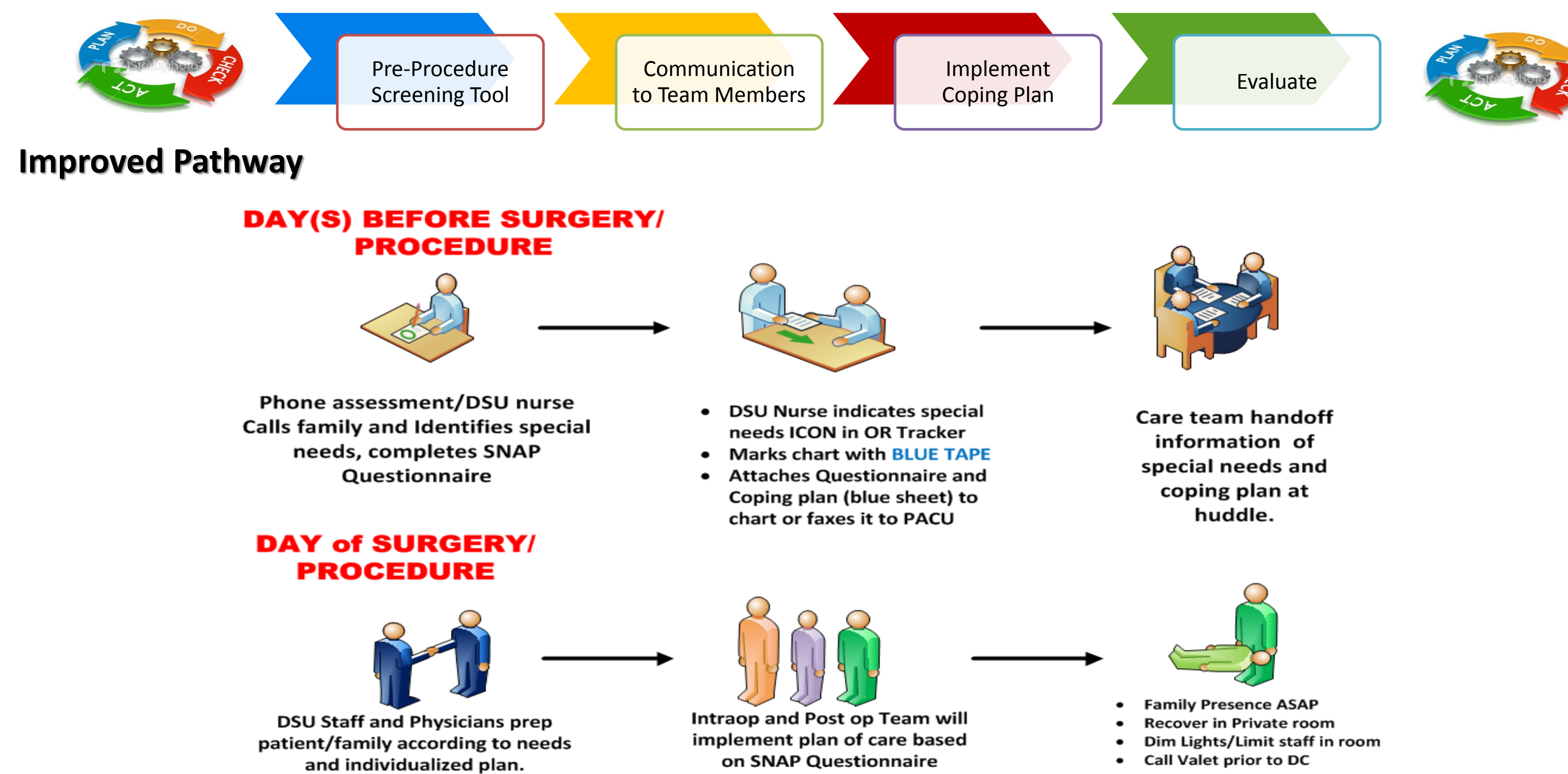
The project aimed to develop and implement a customized care plan for patients with developmental disabilities requiring anesthesia for diagnostic or surgical procedures to avoid exacerbating caregivers' and patients' stress levels during the preoperative phase.

## OUTCOME MEASURES

- The primary outcome measure was the difference in the stress levels of adult and pediatric patients with special needs and their caregivers on a typical day and on the day of hospital visit.
- The quality measure were anecdotal statements or comments by parents/caregivers in the Press Ganey Survey on the assessment and implementation of customized care for patients with developmental disabilities, including autism spectrum disorder.

## PROCESS OF IMPLEMENTATION

A multidisciplinary team composed of Adult and Pediatric Day Surgery Unit nurses and support staff, anesthesia providers, and a child life specialist was formed. The team developed strategies for an improved pathway and adapted the SNAP questionnaire with an individualized coping plan. An interdisciplinary handoff process was implemented using a visual cue for the staff to PAUSE and look at the triggers and coping plan. The team implemented customized care throughout the perioperative process. Caregiver and patient stress level questionnaire was given to compare the parent and child stress levels on a typical day versus this hospital visit using a Visual Analog Scale after the patient goes into the procedure area. Post discharge call backs were done within 24-48 hours.



### Special Needs Assessment and Plan Questionnaire

- Identify Triggers
- Communication Barriers (verbal/non-verbal)
- Sensory Issues (touch, taste, sound, light)
- Restrictive/Repetitive Behaviors
- Signs of Increasing Anxiety or Pain
- Methods to de-escalate
- Comfort Items/Devices
- Ways to Approach Patient (IV insertion/Vs/ID band)
- Mobility (wheelchair/ambulatory)
- Living arrangements

### Individualized Coping Plan (as applicable)

- 90 min arrival prior to start of procedure.
- Registration in Preop Area instead of Admissions.
- Patients bypass general waiting area.
- Dim lights, reduce noise levels, limit number of caregivers in the room.
- Comfort items, communication tablet, headphones, sensory toys, weighted blanket, movies, music, games, spinners, etc.
- Parent/Child Life Specialist present on induction (per anesthesia discretion).
- Allow family presence in PACU as soon as possible.
- Call Valet Services to lessen wait time at discharge.

## QUALITATIVE RESULTS

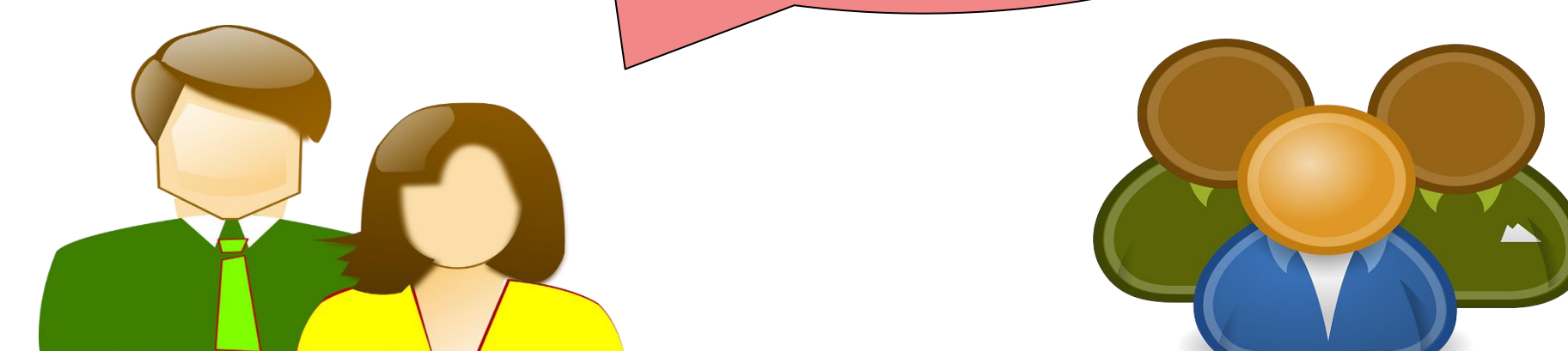
### Press-Ganey Survey Comments

"Allowing us to stay with him until he was asleep really helped with his anxiety."

"This was a perfect visit. Having a sensory child usually makes every experience stressful. Everyone at Hermann Memorial made this experience stress free."

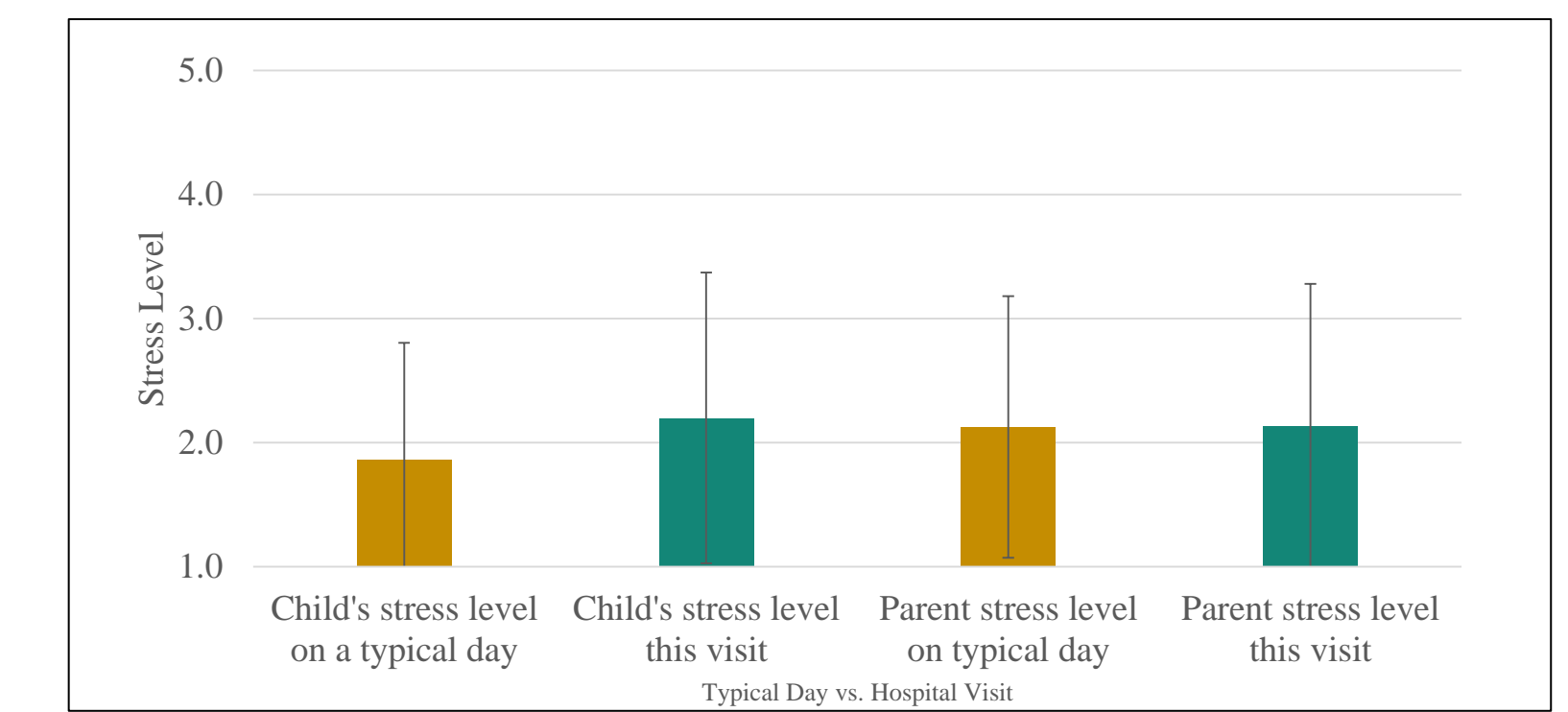
"It meant a lot that the nurse called before his procedure to see if he needed special attention in regards to light and sounds."

"Not everyone needs special care but my son does, so I really appreciated how caring they were."



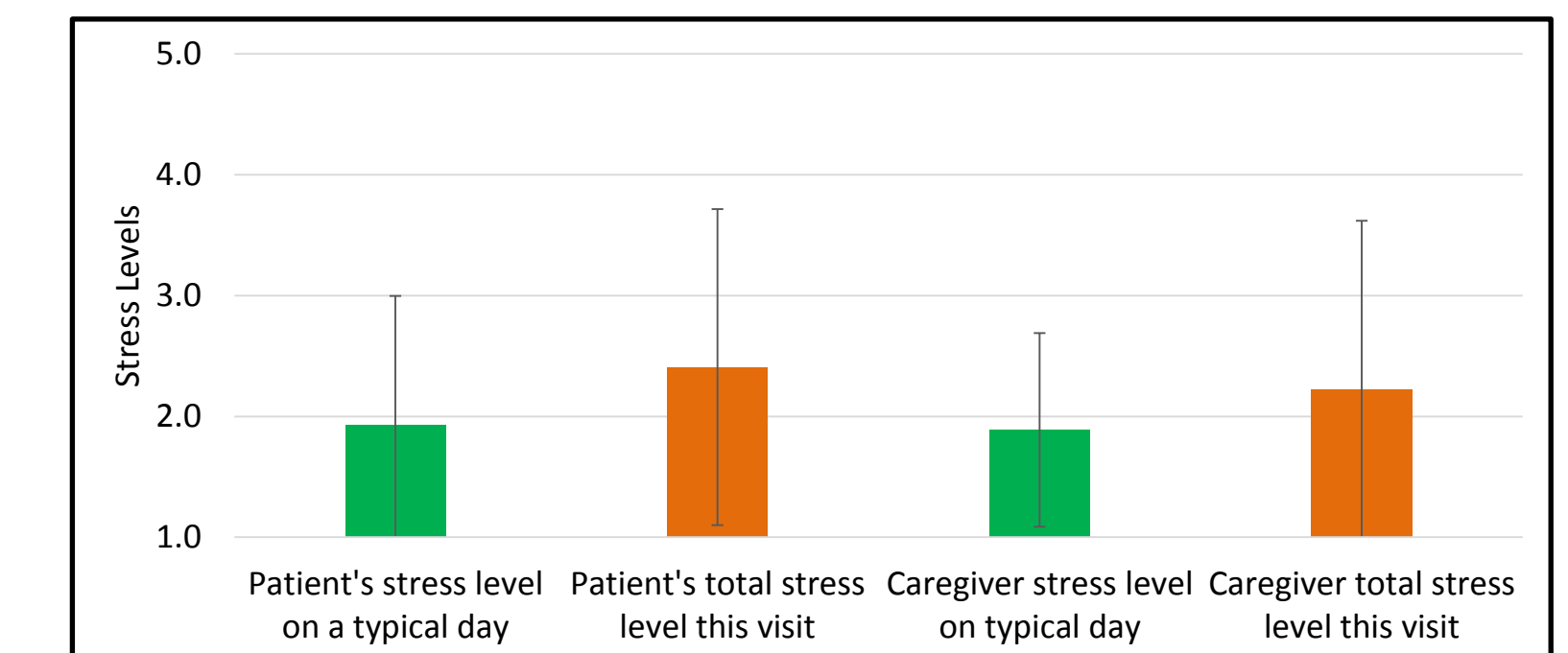
## QUANTITATIVE RESULTS

### Parent and Child Stress Level Questionnaire (Pediatrics n=111)



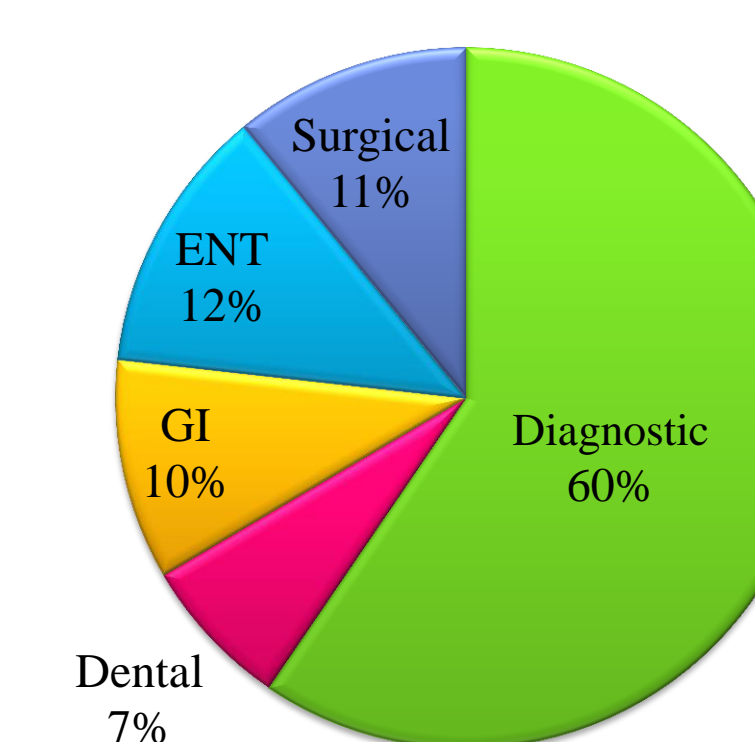
Analysis of the parent-rated comparison of stress levels on a typical day versus the hospital visit showed **NO change or only mild stress** for the children as well as for the parents.

### Patient and Caregiver Stress Level Questionnaire (Adult n=27)

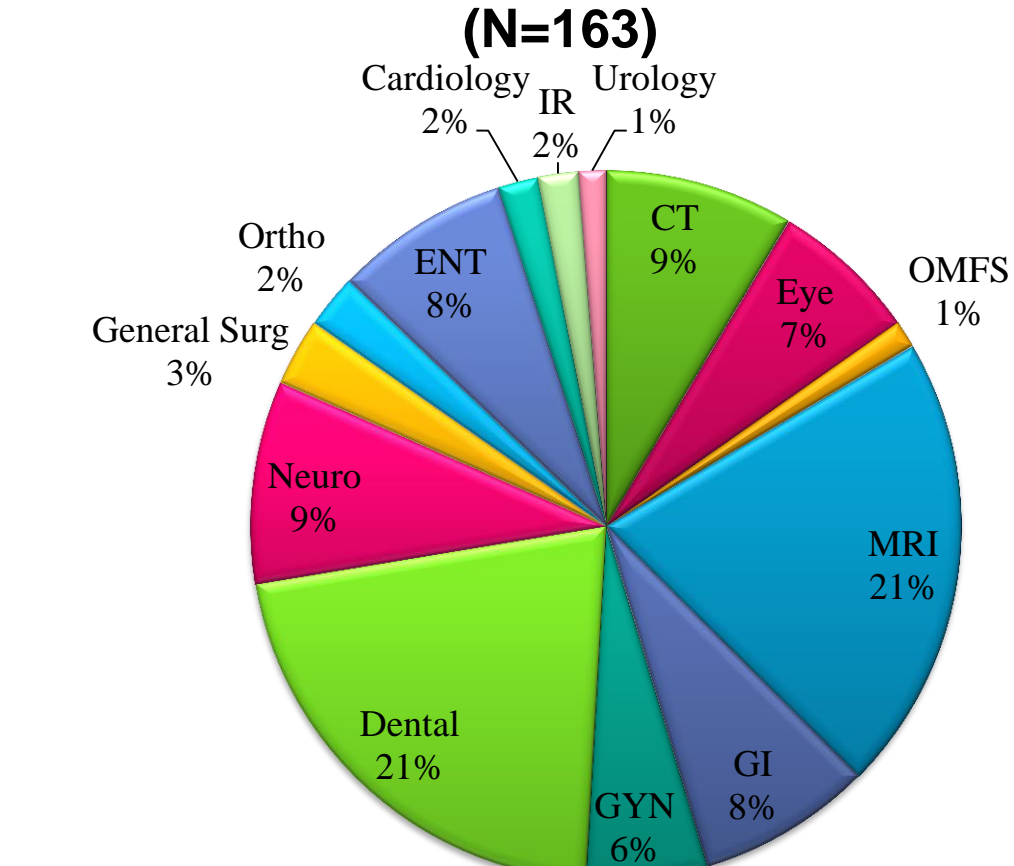


Comparison of stress levels on a typical day versus the hospital visit showed **NO change or only mild stress** for the patients as well as for the caregivers.

### Pediatric DSU Procedures Performed March 2017 to March 2018 (N= 292)



### Adult DSU Procedures Performed July 1, 2017- June 30, 2018 (N=163)



## PRACTICE IMPLICATIONS

- A multidisciplinary team to screen and provide individualized care for patients with developmental disabilities may help aid in avoiding exacerbation of caregivers' and patients' stress levels during the preoperative phase.
- Continuous PDCA cycles to improve the process. Currently working with ISD for electronic version of the SNAP form. Expansion of process in additional units is in progress.

## REFERENCES

- Scully, S. M. (2015). Opening up the perioperative autism toolkit. *OR Nurse Journal*, 9(3), 40-47.
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- Wittenberg, B. M., Wirth, K., Johnson, J.A., and Hovinga, C.A. (2014). Special needs assessment and plan (SNAP) Assessment Survey [An assessment survey for children with autism spectrum disorder in the surgery setting]. Unpublished instrument.