



Perioperative Tools to Increase Compliance and Reduce Anxiety in Children with Autism Spectrum Disorders



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Purpose

- To develop a plan for increased compliance and anxiety reduction with perioperative care among children with Autism Spectrum Disorders (ASD)

Significance

- 1 in 68 U.S. children have ASD
- 51 children with ASD required anesthesia in July
- Children at risk for:
 - ↑ anxiety
 - ↑ behavioral problems
 - ↓ cooperation during perioperative period
- Parents and staff ↑ risk for stress/dissatisfaction

Identified Prevalence of Autism Spectrum Disorder

ADDM Network 2000-2010
Combining Data from All Sites

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Prevalence per 1,000 Children (Range)	This is about 1 in X children...
2000	1992	6	6.7 (4.5 - 9.9)	1 in 150
2002	1994	14	6.6 (3.3 - 10.6)	1 in 150
2004	1996	8	8.0 (4.6 - 9.8)	1 in 125
2006	1998	11	9.0 (4.2 - 12.1)	1 in 110
2008	2000	14	11.3 (4.8 - 21.2)	1 in 88
2010	2002	11	14.7 (14.3 - 15.1)	1 in 68

Methods

- Evidence Based Practice Project
 - Titler's Iowa Model (2001)
 - Intra-professional team
 - Literature search
 - Terms: Autism Spectrum Disorder, ASD, anxiety, perioperative, children, tools
 - Level of Evidence
 - 2 Level I
 - 1 Level II
 - 5 Level III
 - 3 Level IV
 - Quality of Evidence
 - Grade A
 - Grade B

Outcomes

Parent Questionnaire

- **Communication**
- **Behavior**
- **Suggestions for my child**

Preoperative Special Accommodations Questionnaire

Communication

My child:

- Speaks in full sentences Speaks in short phrases
- Speaks 1-2 word responses
- Non-verbal Uses a communication device _____

My child communicates best using:

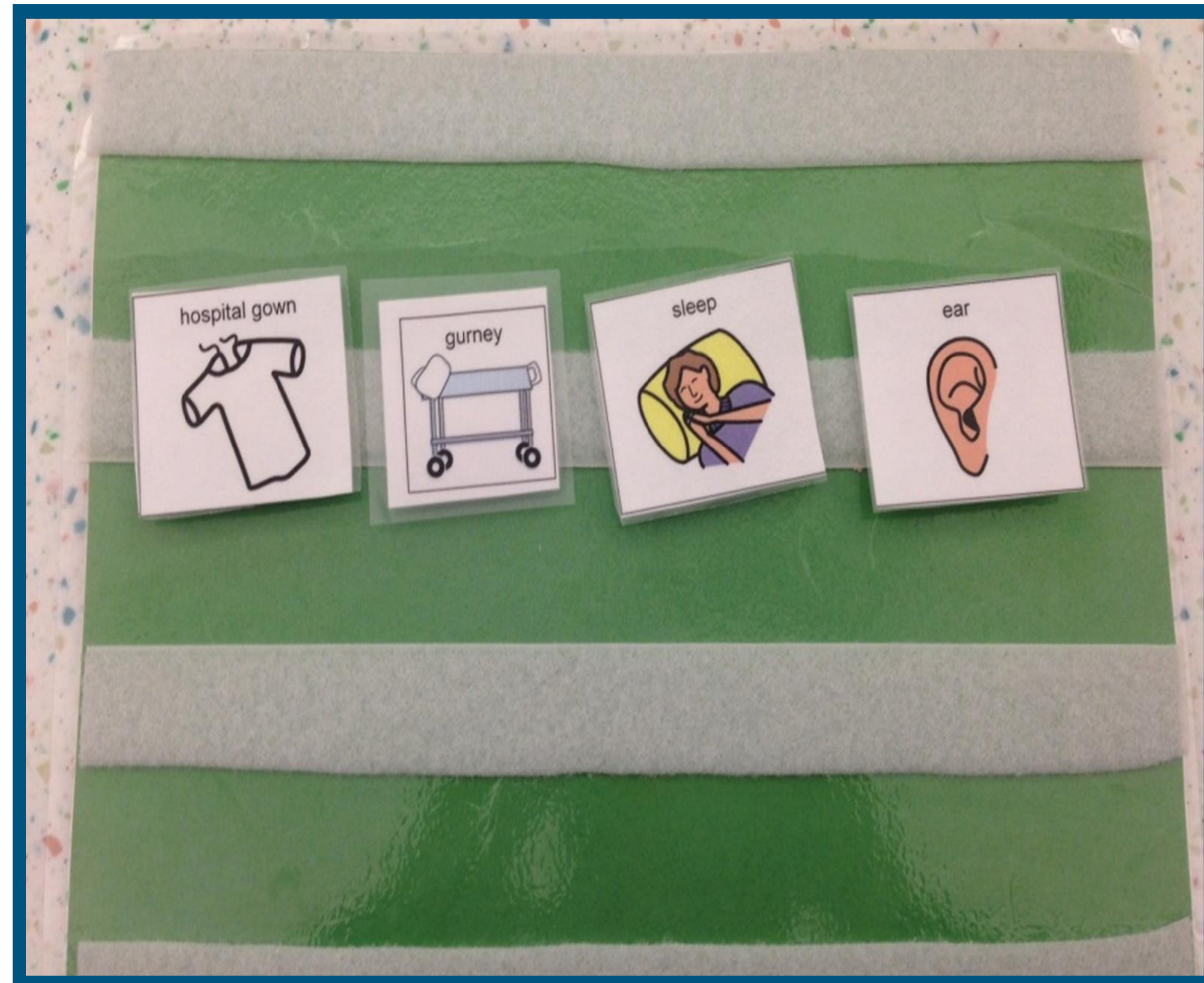
- Spoken language Pictures Written Words

Nursing Checklist

- **Environmental controls/distraction**
- **Child Life referral**

Preoperative Autism Spectrum Disorder Checklist

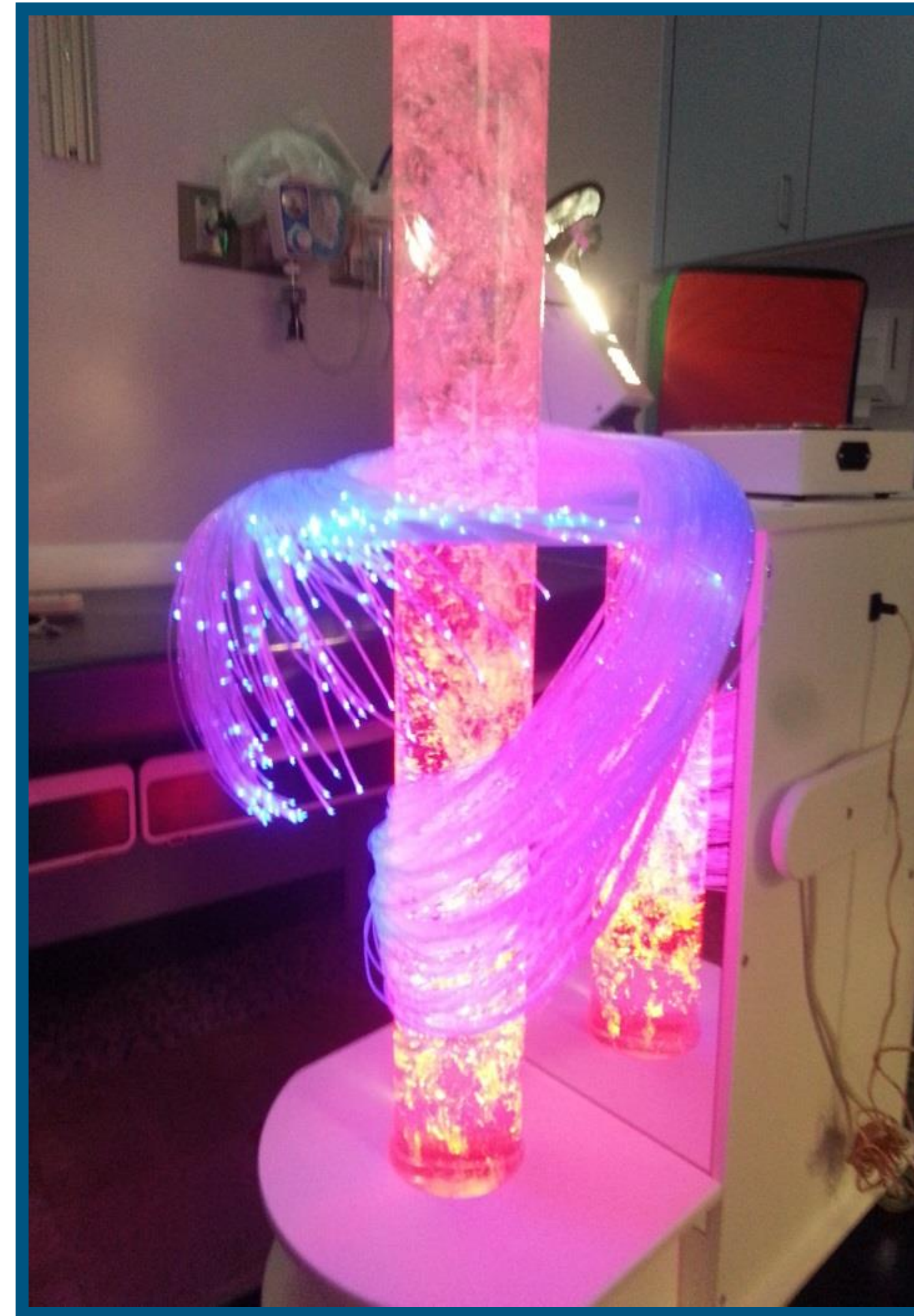
- Preoperative Special Accommodations Questionnaire completed
- Quiet environment provided
- Non-essential items removed from preoperative room
- Notification of Child Life Specialist



Implications

Nursing Practice

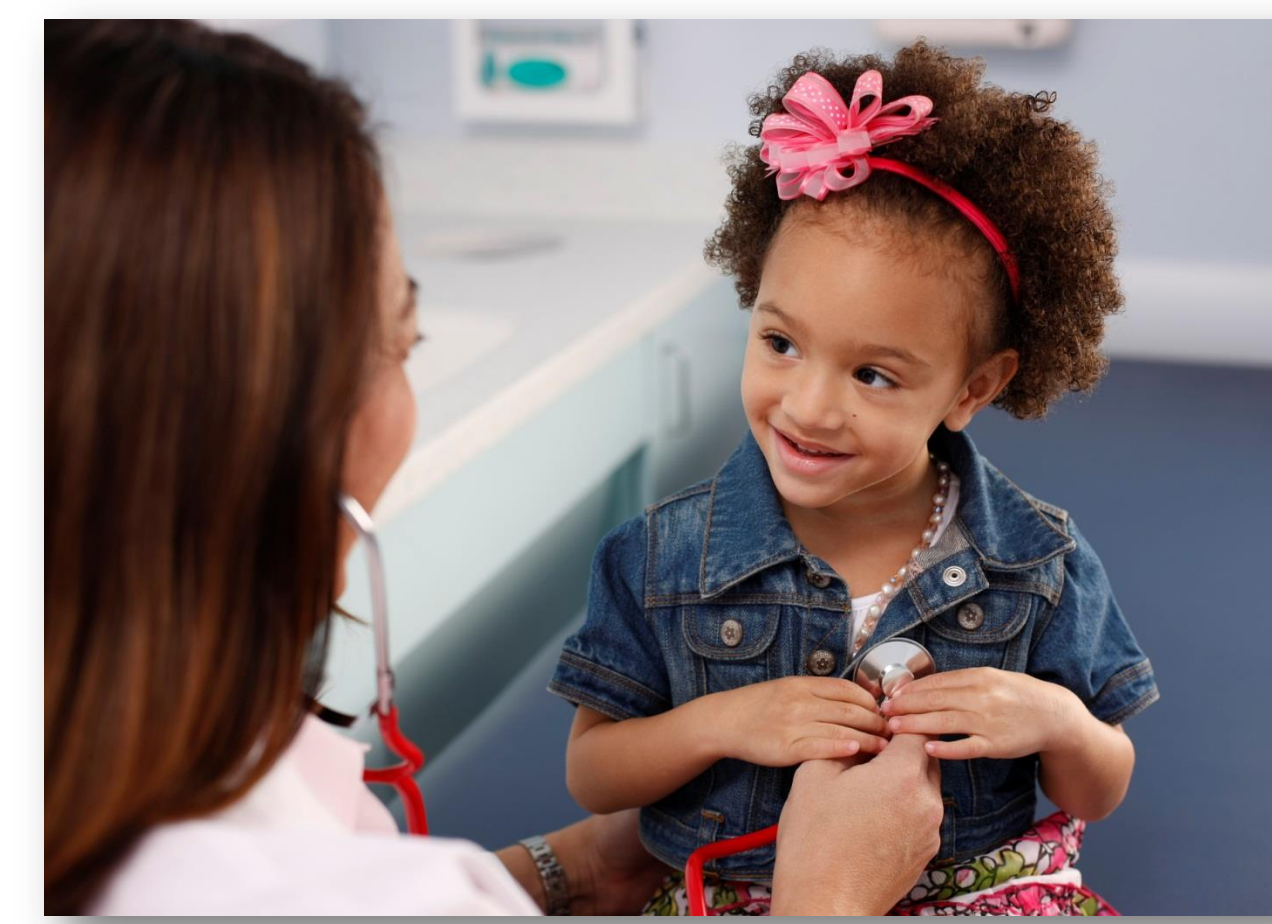
- Improved outcomes
- Implementation



Perioperative Tools to Increase Compliance and Reduce Anxiety in Children with Autism Spectrum Disorders



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Purpose

To develop a plan for increased compliance and anxiety reduction with perioperative care among children with Autism Spectrum Disorders (ASD)

Significance

1 in 68 children (1 in 42 boys and 1 in 189 girls) diagnosed with an Autism Spectrum Disorder (ASD)

In July, Fifty one children with an ASD diagnosis required anesthesia for procedures at Cook Children's Medical Center

Children with ASD may exhibit increased anxiety, behavioral problems, and lack of cooperation during perioperative period

Children with ASD are at increased risk for a frightful perioperative experience and increased stress for patient, family, and staff

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Prevalence per 1,000 Children (range)	This is about 1 in X children...
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Methods

Evidence Based Practice Project

- Titler's Iowa Model (2001)
- Intra-professional team
- Literature search:

Terms: Autism Spectrum Disorder (ASD), anxiety, perioperative, children, tools

Level of Evidence:

2 Level I

1 Level II

5 Level III

3 Level IV

Quality of Evidence

Grade A

Grade B



Outcomes

Evidence-based innovations included new forms and interventional strategies such as use of Rover® cart and unit-specific storyboards for surgical preparation of children with ASD. A preoperative nurse checklist and a parent questionnaire were designed to involve parents, nurses, and Child Life in customized-care planning pre-surgery

Outcomes

Parent Questionnaire

- Communication
- Behavior
- Suggestions for my child

Nursing Checklist

- Environmental controls/distraction
- Child Life referral

Preoperative Special Accommodations Questionnaire
 Communication

My child:

Speaks in full sentences Speaks in short phrases

Speaks 1-2 word responses

Non-verbal Uses a communication device _____

My child communicates best using:

Spoken language Pictures Written Words

Implications

Incorporation of individualized perioperative support strategies in children with ASD facilitates care and reduces anxiety

Finalization of nursing checklist and parent questionnaire for implementation

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