

HISTORICAL SUMMARY

- Pediatric patients are often scheduled for diagnostic imaging (DI) studies with the use of sedatives/ anesthetics. Many hospitals have age guidelines and restrictions for attempting imaging studies without sedation or anesthesia. This approach does not provide for child and family-centered care, thereby increasing stress and anxiety in patients and families.
- Studies have shown the provision of child life services in pediatric imaging departments can increase parent, staff and child satisfaction, decrease the perception of child pain and distress and increase family's ability to cope with a challenging and frightening situation[1,2]. Additionally, studies have shown through the use of child life interventions, exams can be performed without sedation [3]. One study required mandatory child life evaluation for all patients undergoing MRI scans, which resulted in a significant decrease in anesthesia use [4].

INTRODUCTION

- These child life authors have been a consistent and effective presence in the DI setting for several years. Therefore, when advocating for a more patient and family-centered approach to DI exams, support was easily garnered from physicians and DI management to launch this project.
- These child life authors invited two registered nurses to collaborate in the development of study design and methods. Pediatric patients were provided with preparation and procedural support by a certified child life specialist (CCLS), in conjunction with a patient-centered approach from medical staff.

OBJECTIVE

- The objective was to identify how the utilization of child life procedural preparation and support can decrease children's anxiety and the amount of sedatives/anesthetics administered to pediatric patients aged 3-10 years completing DI studies at Yale New Haven Children's Hospital (YNHCH) over a 3-month pilot period.
- These child life specialists assessed patients by reviewing temperament, past medical history, coping skills, among other components, and provided the team with recommendations for triaging patients for either sedated vs. non-sedated DI scans.

METHOD

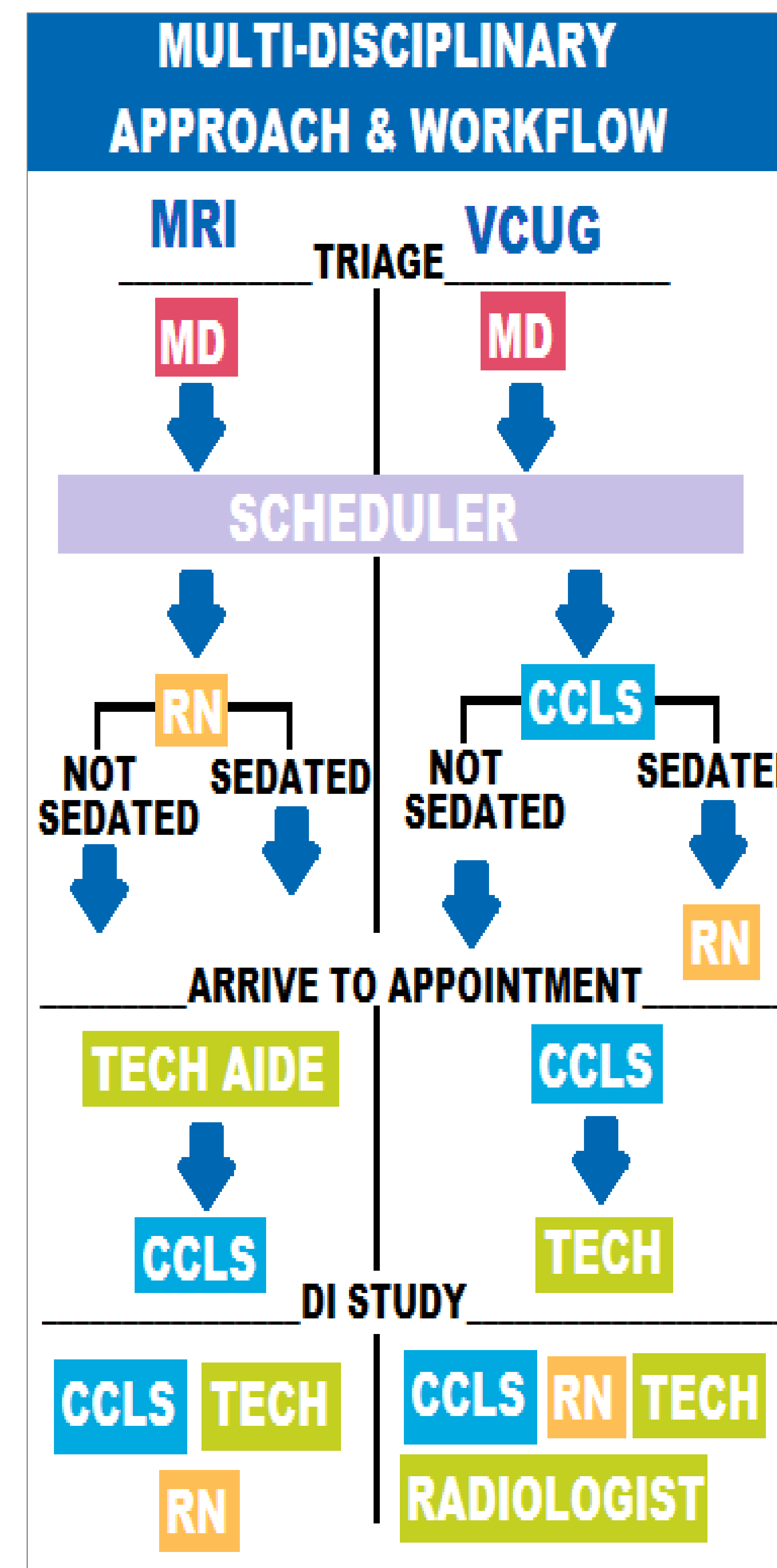
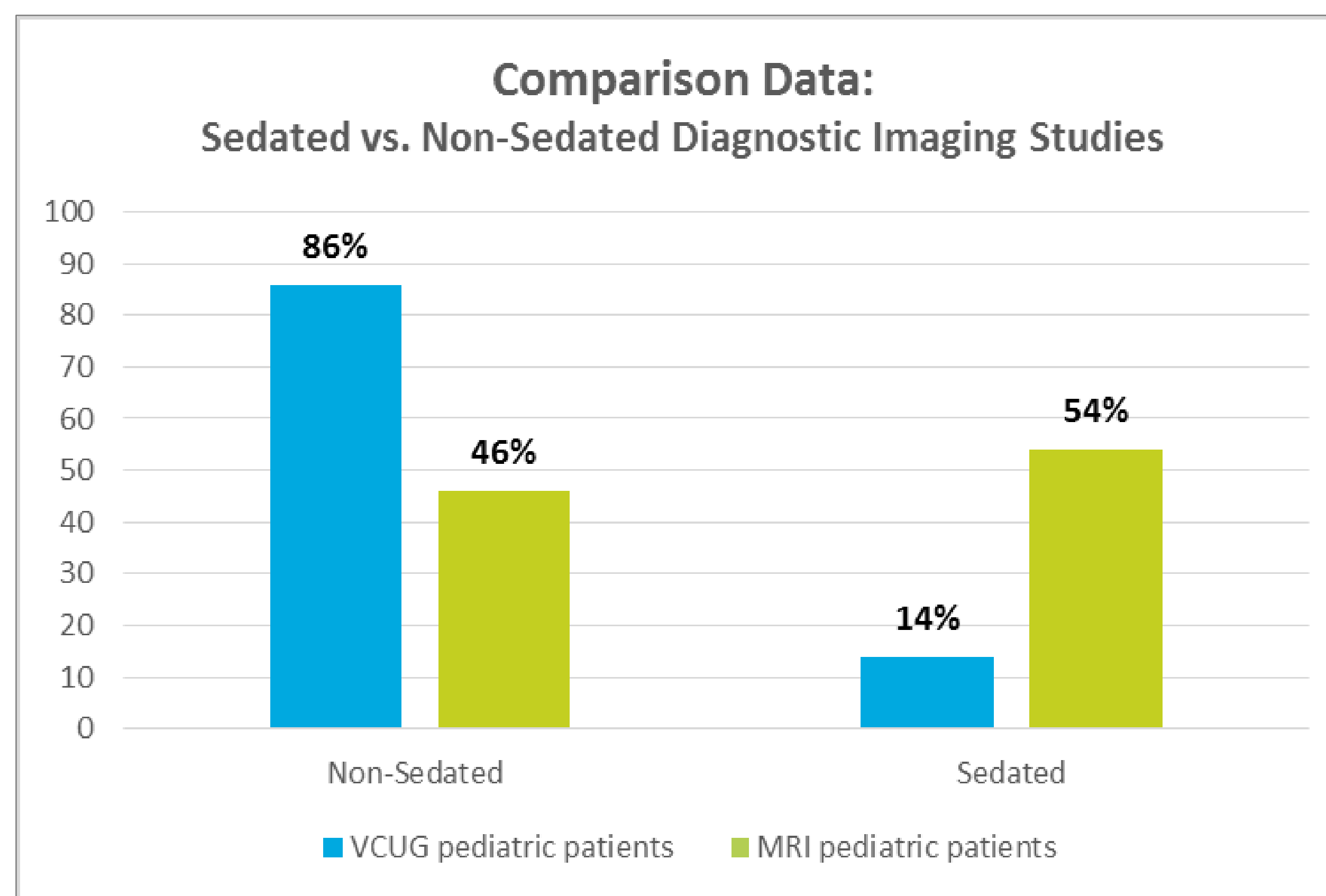
- With a multi-disciplinary team including certified child life specialists, physicians, nurses, technologists and parents, pediatric patients completing DI studies were analyzed over the course of a 3-month pilot period at YNHCH.
- Patients ages 3-10 years-old completing either Magnetic Resonance Imaging (MRI) studies or Voiding Cystourethrograms (VCUGs) were examined. Data was tracked for these patients on receiving preparation or procedural support from a CCLS, if the administration of sedatives/anesthetics were required, the types of medications utilized, and whether or not the scan was deemed successful.

RESULTS

- During the 3-month pilot period, findings showed **86%** of patients ages 3-10 years were able to successfully complete non-sedated VCUGs with the support of child life.
- Additionally, **46%** of patients ages 3-10 years , supported by child life, were able to successfully complete MRIs without the use of sedatives/ anesthetics.
- The results indicate patients as young as 3 years-old, when provided with appropriate supports, are capable of completing DI studies without the use of sedatives/anesthetics.

IMPACT OF CHILD LIFE INTERVENTIONS

- YNHCH utilizes a unique approach in providing child and family-centered care. By using a method that focuses on the reduction of stress and anxiety, our multi-disciplinary team was able to demonstrate the benefit of providing child life support within a patient and family-centered approach to care.
- Anecdotally, families expressed a sense of relief that their child was able to complete the exam without sedatives or anesthetics, thereby eliminating concerns about risks and side effects.
- Patients and families verbalized satisfaction with their experiences in DI, citing child life interventions as beneficial and empowering.
- Patients reported a sense of pride after completing imaging scans, often stating, “That wasn't as bad as I thought it would be!”
- With the help of a CCLS, children were able to master challenging medical experiences, which will set them up for success during future visits.
- Staff has provided positive feedback, noting their appreciation and respect for the child life role and the expertise of assessments and interventions provided by a CCLS.



IMPLICATIONS

- Patient and family-centered interventions have a direct and positive impact on measurable patient satisfaction outcomes.
- The unique approach taken by staff during MRI and VCUG studies demonstrates the essential value of child life interventions and multi-disciplinary collaboration.
- Allowing pediatric patients the opportunity to complete DI studies without the use of sedatives/anesthetics reduces risks and side effects from these medications, decreases hospital costs, increases efficiency in DI areas and improves the quality and safety of the scans completed.
- These benefits and interventions provided by child life specialists are easily transferrable to other clinical areas and other institutions, where children and families may face potentially intimidating and stressful medical experiences.