

Nursing and Technologist Preprocedural Preparatory Task Durations in Interventional Radiology: A National Assessment



Jacob J. Bundy, MD, MPH; David S. Shin, MD; Eric J. Monroe, MD;
Christopher R. Ingraham, MD; Jeffrey Forris Beecham Chick, MD, MPH

Introduction and Purpose

Efficient preprocedural tasks by nurses and technologists may improve interventional radiology (IR) suite utilization. This study evaluated time spent by nurses and technologists during the immediate preprocedural phase of patient care in IR.

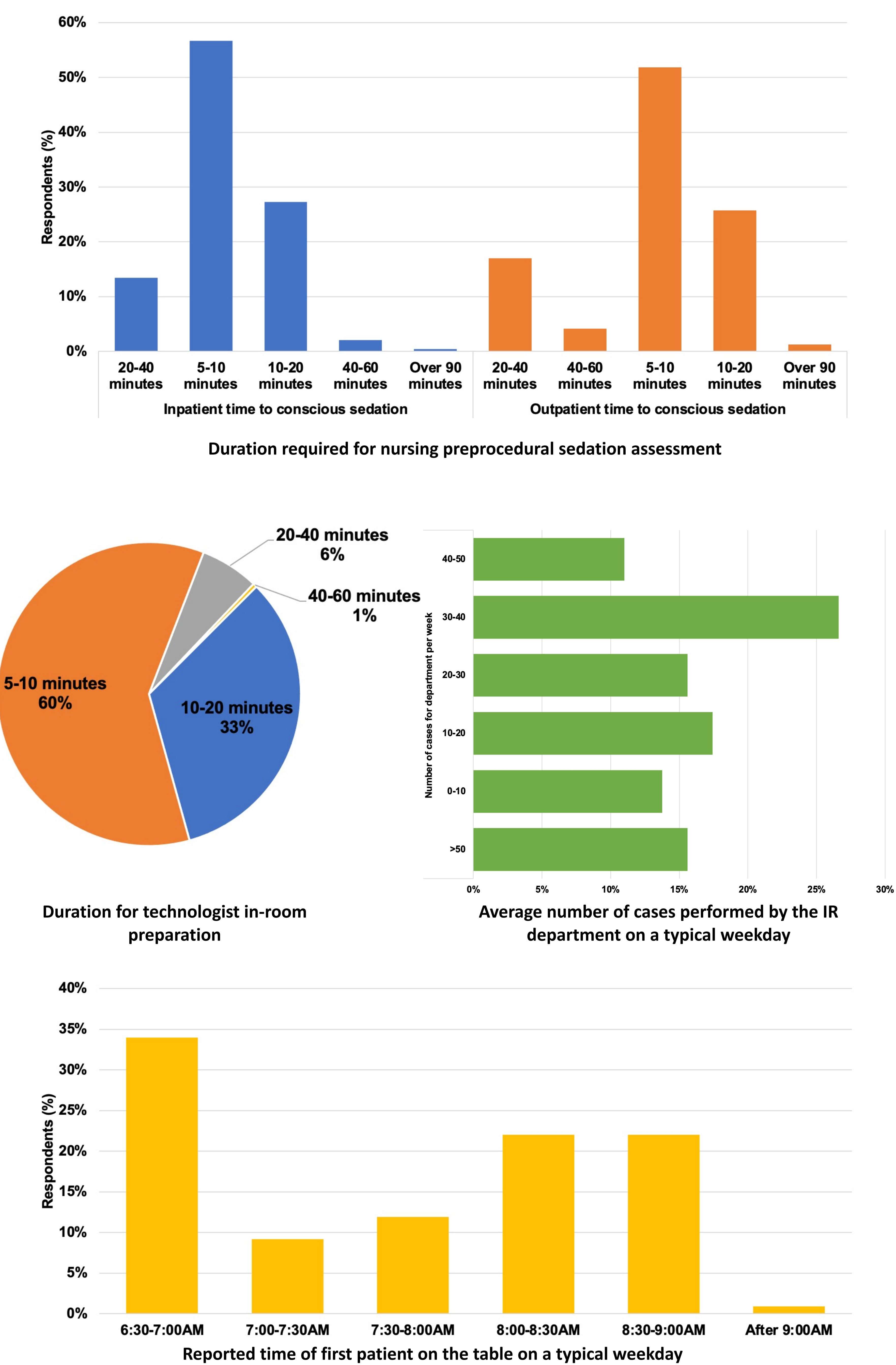
Materials and Methods

A national survey of 243 IR physicians practicing within the United States was conducted from January 22, 2021 through February 13, 2021 (22 days). The survey was distributed on social media platforms (SIRConnect, Twitter, LinkedIn, and Facebook) and via email. The survey consisted of eight questions regarding the location and type of practice, the durations of nursing sedation assessment and technologist in-room preparation for typical inpatient and outpatient procedures, and procedure timing and volume.

Results

Respondents reported practicing at academic (111; 45.7%), private (92; 37.8%), hybrid (30; 12.4%), and Veterans Affairs (10; 4.1%) centers. A majority (135; 56.0%) of responses reported 5-10 minutes of nursing preprocedural sedation assessment, followed by 10-20 minutes (65; 27.0%), 20-40 minutes (32; 13.3%), 40-60 minutes (5; 2.1%), and >90 minutes (1; 0.4%).

Figures



Results Cont.

The most commonly reported duration for the technologist in-room preparation was 5-10 minutes (145; 60.2%), followed by 10-20 minutes (80; 33.2%), 20-40 minutes (15; 6.2%), and 40-60 minutes (1; 0.4%). On a typical weekday, the first patient was reported to be on the table during the following times, in decreasing frequency: 6:30-7:00 AM (37; 15.5%), 8:00-8:30 AM (24; 10.0%), 8:30-9:00 AM (24; 10.0%), 7:30-8:00 AM (13; 4.5%), 7:00-7:30 AM (10; 4.1%), and after 9:00 AM (1; 0.4%). During a typical weekday, the number of cases performed by the IR department was the following, in decreasing frequency: 30-40 (29; 12.0%), followed by 20-30 (17; 7.1%), >50 (17; 7.1%), 0-10 (315; 6.2%), and 40-50 (12; 5.0%).

Conclusions

This study provides insight into the amount of time that nurses and technologists spend for their preprocedural preparation tasks in IR departments across the country. This data may be used to compare different institutions, identify improvement opportunities, and establish benchmarks and standards for efficient workflow.

Contact

Jacob Bundy JBundy@WakeHealth.edu @JBundyRad