

Characteristics of non-operating room pediatric case cancellations at a large academic medical center in 2016-2017



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Introduction

Case cancellations result in a waste of resources, inconvenience to providers and families, and financial strain. Though often preventable, case cancellations can be as high as 24% to 40%(1,2) on the day of surgery. A significant amount of these canceled cases are attributed to factors such as incomplete medical/surgical evaluation, recent patient illness, lack of insurance authorization/financial(3), scheduling error, or patient or family declining surgery(4).

Study Aim

To investigate the amount and type of canceled pediatric non-operating room cases at University of California, Davis Children's Hospital during a one-year period and reasons for cancellations. Secondly, to examine factors including patient age, type of anesthesia, type of non-operating room procedure or imaging, and the need for an interpreter.

Methods

We retrospectively analyzed all non-operating room pediatric cases, including those scheduled, completed, and canceled in our institution from May 2016 to May 2017. We defined pediatric patients to be under 18 years of age. We collected data from our electronic medical record including age, type of anesthesia, department distribution of cases, need for an interpreter, and reason for cancellation. Data was analyzed using R statistical software.

References

1. Gac Med Mex. 2003; 139: 545-551
2. Int J of Surgery. 2013; 11(10):1126-1130
3. Pediatr Radiol. 2015 Jan;45(1):99-107
4. J Anesthe Clinic Res. 2010; 1:109
5. ANZ J Surg. 2009 Sep;79(9):636-40

Results

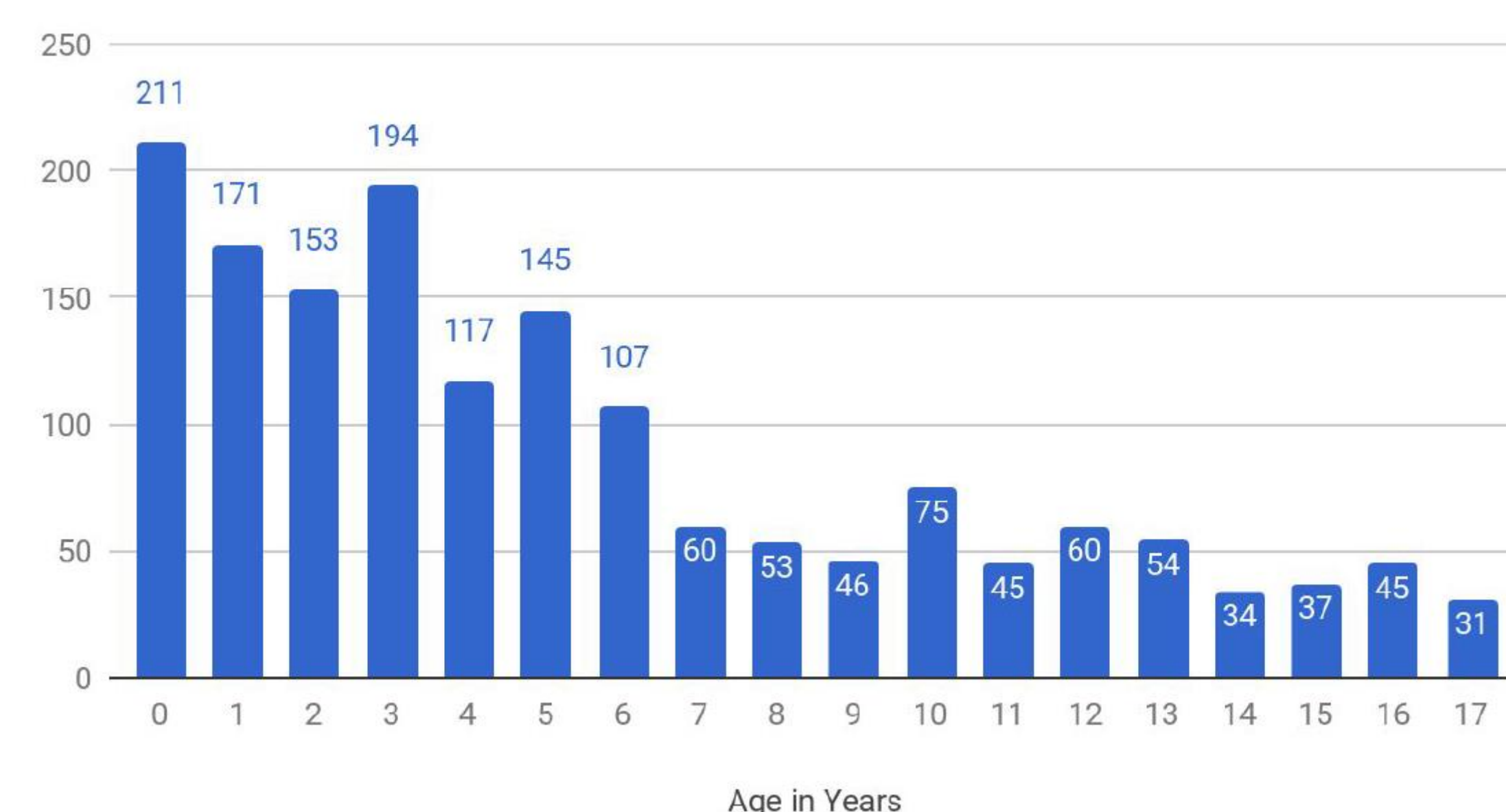


Figure 1. Age distribution of all pediatric non-operating room pediatric cases (completed and cancelled)

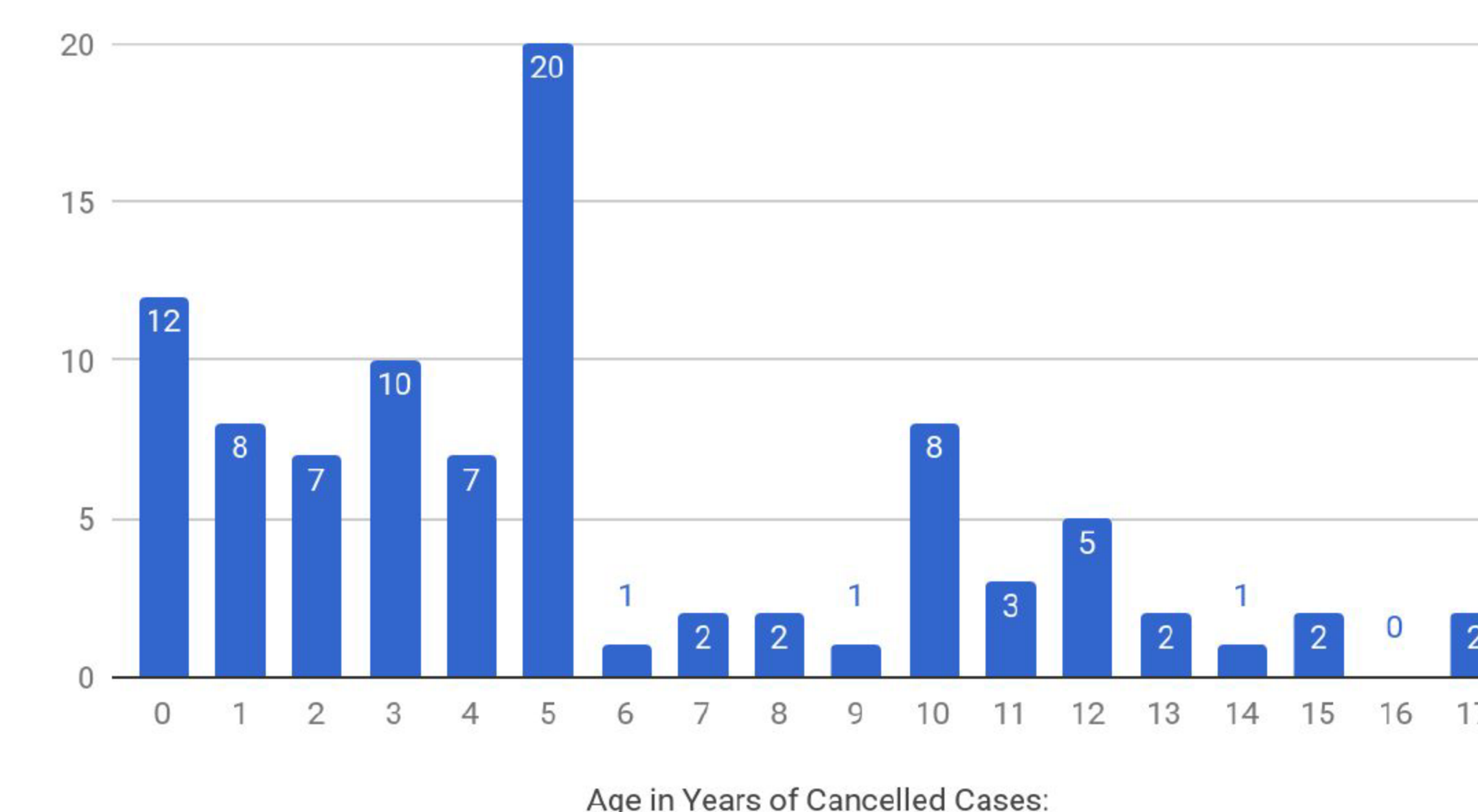


Figure 2. Age distribution of cancelled cases

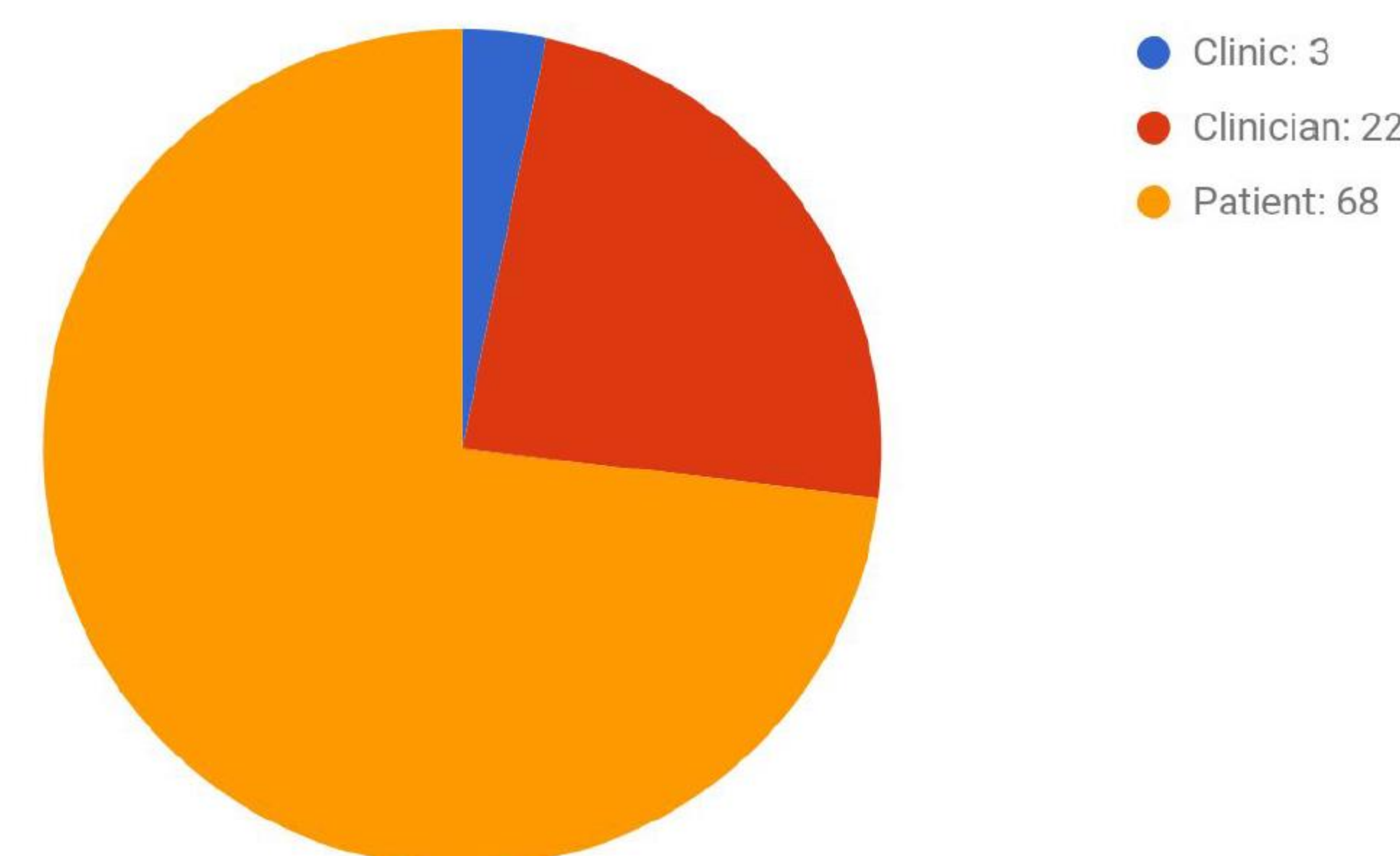


Figure 3. Reason for case cancellation

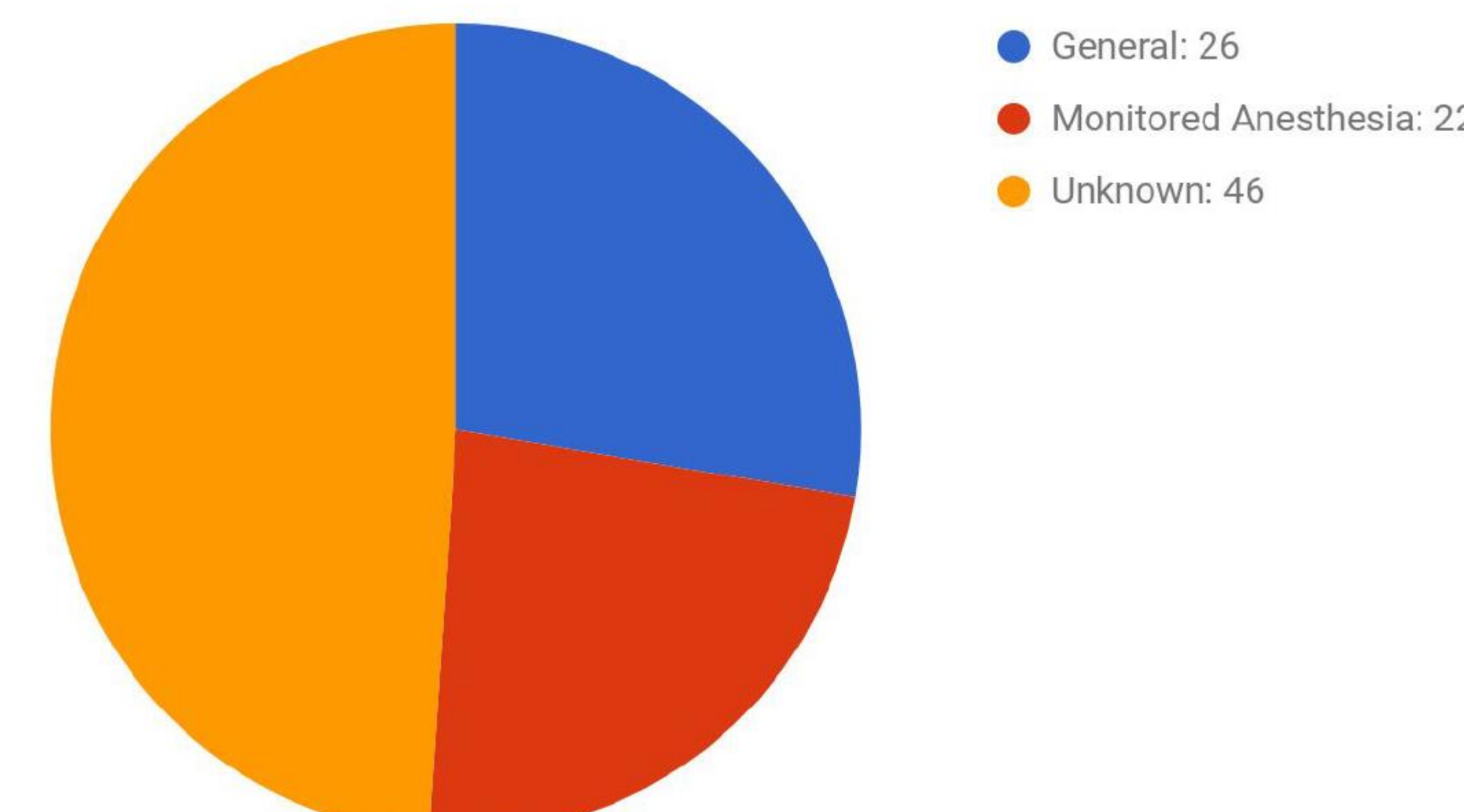


Figure 4. Cancellations by anesthesia type

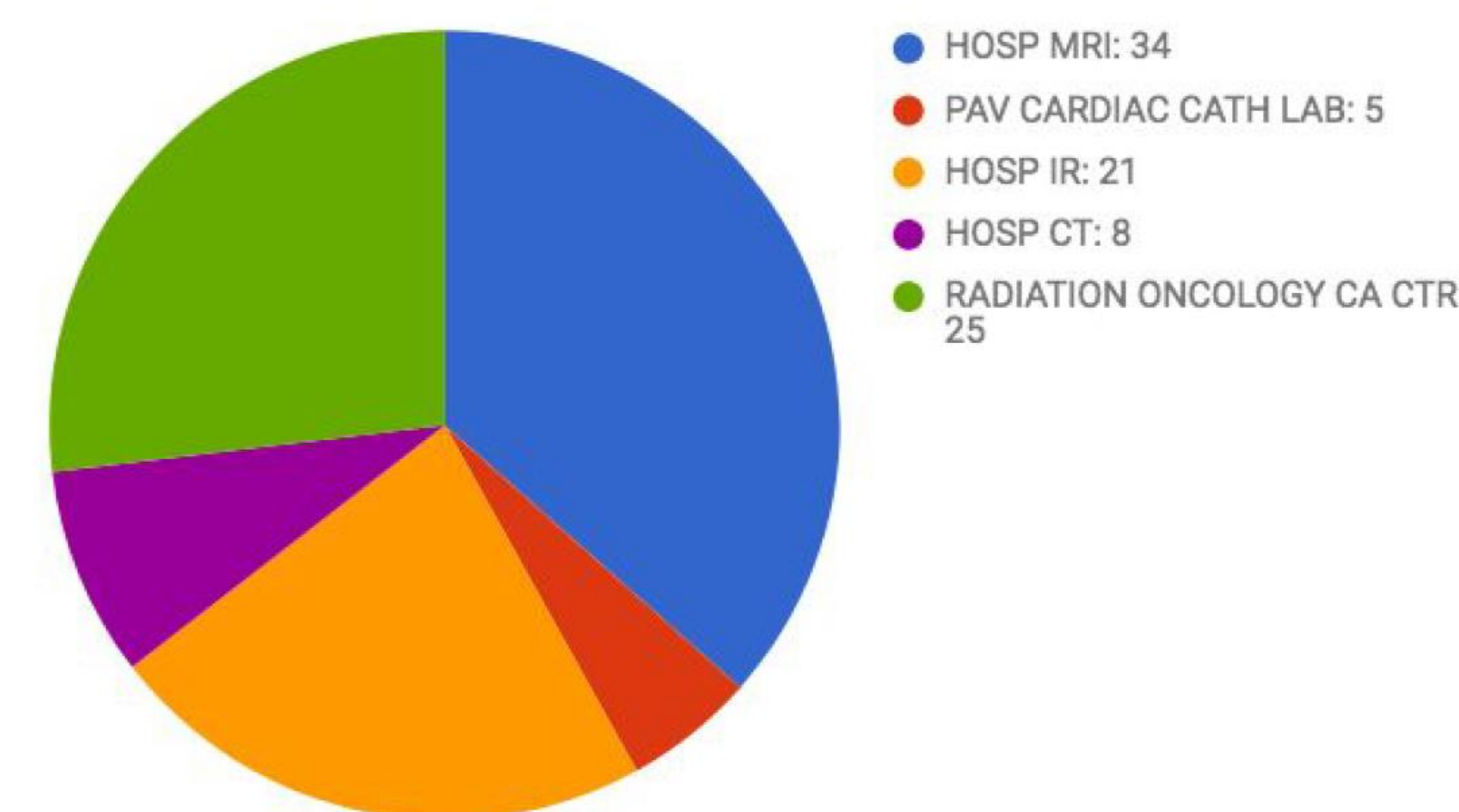


Figure 5. Department distribution of cancelled cases

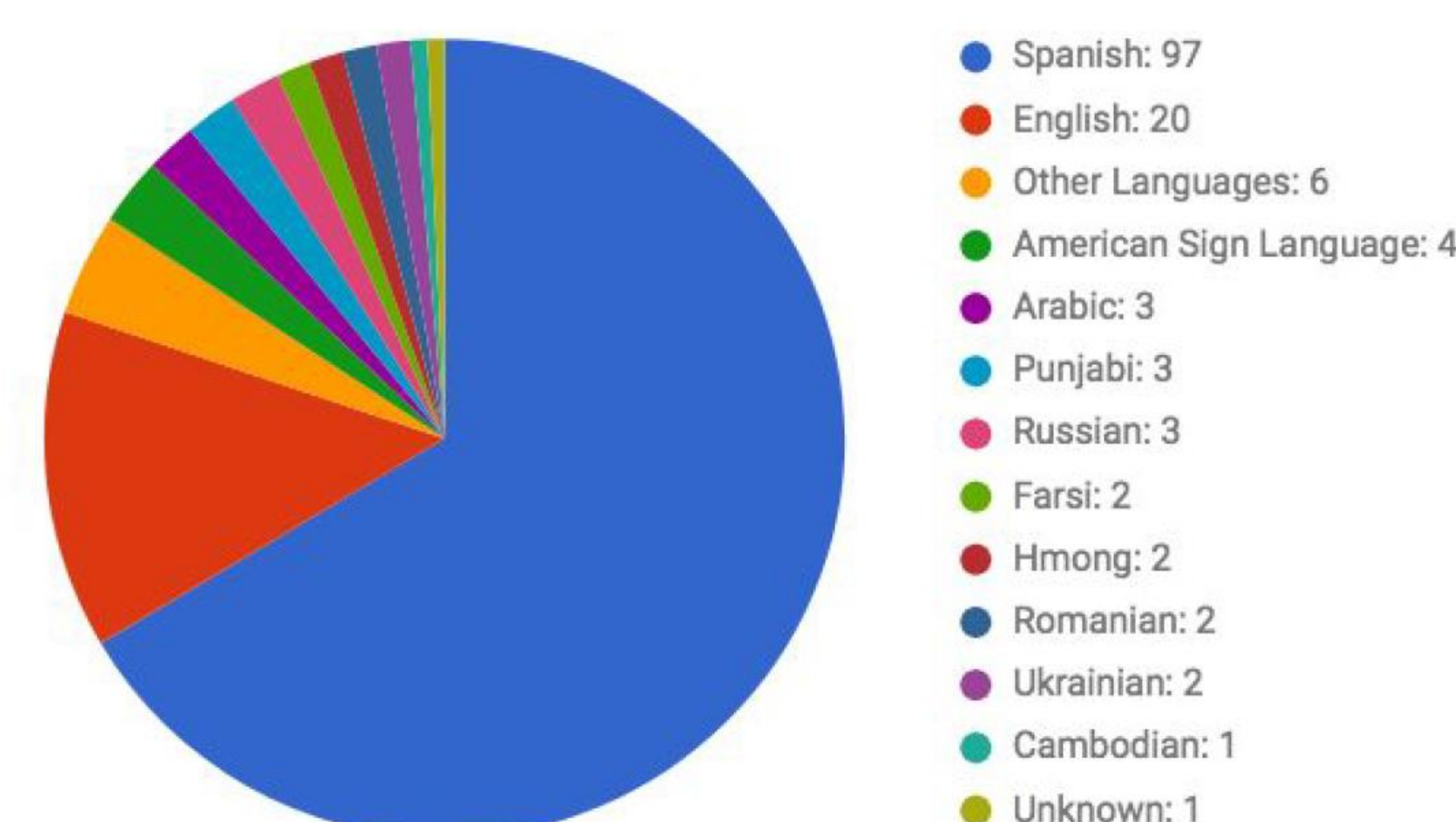


Figure 6. Interpreter Requirements by case (completed and cancelled)

Results

Our patient population consisted of 93 cancelled cases out of 1544 scheduled cases, for a cancellation rate of 6.02%. The mean age for all cases was 5.55 years old, for completed cases was 5.56 years old and for cancelled cases was 5.39 years old. Among all cases, 1061 (64.8%) were done under general anesthesia, 225 (13.7%) were done under monitored anesthesia care, and 352 (21.5%) were not specified. Among the 93 cancelled cases, 68 (73.1%) were due to "patient", 22 (23.6%) were due to "clinician", and 3 (3.2%) were due to "clinic". Among both completed and cancelled cases, hospital MRI was the most common case type (42.8% v. 36.56%) followed by hospital interventional radiology among completed cases (21.3%) and chemotherapy/radiation among cancelled cases (26.88%). Among all cases, 146 (8.9%) required an interpreter; 142 (9.2%) among completed cases and 4 (4.3%) among cancelled cases. 97 of the 146 cases (66.4%) requiring interpreters were in the Spanish language.

Discussion

The cancellation rate of 6.02% among non-operating room pediatric cases in our institution was similar to rates described elsewhere(5). Age and need for an interpreter did not appear to be associated with case cancellation, and MRI and general anesthesia cases were the most commonly scheduled, completed, and cancelled cases. The majority of cases cancelled were due to patient factors (73%) at a rate similar to that previously described(3), which can include reasons such as NPO violations, recent upper respiratory infection or illness, or patient no show.

Conclusion

Non-operating room pediatric case cancellations at our institution constitute a small minority of overall scheduled cases and are mostly attributable to patient factors.