Resident Clinic Patient Volumes

Patrick Walsh MD, Paige VonAchen BS, Matthew M. Davis MD, MAAP

**Background:** Continuity clinic is an important component of pediatrics residency training and an ACGME requirement. Post-residency preparedness has been linked to patient volume. Hospital based resident clinics have been shown to provide lower volumes than private practice locations. Data on resident clinic patient volumes is lacking.

**Objective:** To evaluate resident clinic patient volumes and determine whether they varied with clinic location, day of the week, and time of day. Our long-term objective is to use this information to identify target areas to improve the consistency of resident education and overall patient volumes.

**Methods:** We used the Lurie Children’s Data Analytics and Reporting department to access Epic data for all pediatric resident continuity clinic visits for the 2015-2016, 2016-2017, and 2017-2018 academic years (Clark Academic General Pediatrics and Uptown Primary Care). We accessed the following data for all resident clinic encounters: provider, contact date, appointment time, day of week, appointment status (completed vs. no show vs. cancellation), type of visit (well child vs other) as well as patient demographic information. Resident year in training was obtained from the residency program leadership. We used descriptive statistics to evaluate patient volumes in each resident clinic and analyzed the total patients seen and patients per clinic day for one residency class over 3 years. We also quantified no-show and same-day cancellation rates.

**Results:** Individual half day clinics ranged from 14.3 to 24.5 completed visits per clinic session. Uptown clinics and Monday and Friday Clark clinics were observed to have higher total volumes per session than Tuesday, Wednesday and Thursday Clark clinics. Residents averaged 2.49 patients per clinic sessions attended, with PL-1 residents averaging 2.28 compared to 2.62 and 2.52 for PL-2 and PL-3 years respectively. Within a single residency class, over three years of training there was a large variation in total number of patients seen, with the highest number (385) being double the lowest number (193). Average number of patients seen per clinic day ranged from 1.74 to 3.38 over the three years of training. Uptown and Clark Monday and Friday residents (Group 1) were observed to have higher averages than Clark Tuesday, Wednesday and Thursday residents (Group 2). An independent-samples t-test was conducted to compare average patients per clinic between the two groups. There was a significant difference in the scores for Group 1 (M=2.92, SD=0.27) and Group 2 (M=2.09, SD=0.15) conditions; \( t(20)=10.2, p < 0.001 \). Individual clinics had no-show/cancellation rates between 29.9 and 35.6%.

**Conclusions:** Resident continuity clinic volumes are low, even for the busiest clinics. There is predictable variability in patient volumes based on day and location, which should influence resident allocation. Patient no-shows and same-day-cancellations have a large impact on volumes and education and are a target for future studies.