Factors that contribute to residents’ perception of autonomy and its relationship to clinical decision-making opportunities and motivation to learn are incompletely understood. Examining these relationships may augment the professional development of residents despite the current conditions of increased supervision. This study explored relationships between residents’ opportunities to make clinical decisions and their feelings of ownership over patient care with autonomy, motivation to learn, and burnout.

Methods: We recruited residents from 3 different pediatric programs in 2019–2020 for semistructured interviews using critical incident technique and explored experiences related to remembered moments of decision making. We invited participants to complete the Maslach Burnout Inventory (MBI) to trigger reflections on experiences of burnout. We analyzed data through an iterative, inductive process in which 2 investigators coded interview transcripts to generate themes. We used Dedoose (UCSF, San Francisco, California) software for analysis. Institutional review boards approved this study.

Results: Thirty-eight residents participated in interviews. We identified 3 major themes:

1. Decision-making opportunities can be diminished by (a) learning environment (culture, subspecialist involvement), (b) patient factors (complexity, acuity), and (c) resident factors (seniority, knowledge, confidence).

2. Sense of ownership is most affected by (a) relationship with patients and families and (b) inclusion in decision making.

3. Cultivation of purpose is attributed to (a) relationships with families, team, and supervisors, and (b) finding and holding a voice.

Residents defined patient care ownership as the doctor who takes care of the patient, regardless of who makes the decisions. The degree of patient care ownership residents felt varied by institution.

Residents described burnout more often when they perceived decreased ownership of patient care, increased subspecialty involvement (often related to patient complexity), or other structural factors such as lack of ancillary staff.

Discussion: Our study showed that in pediatric residency training, autonomy, and supervision are not necessarily mutually exclusive. Residents reported feeling ownership of patient care even in the absence of perceived autonomy. Being the primary communicator with patients and families and having space to participate in the decision-making process was critical to residents feeling ownership over clinical care of a patient. Furthermore, the role of primary communicator allows residents to build relationships with patients and families, which for many constituted a critical factor in their ability to find joy at work and stave off burnout.

At all 3 institutions, team composition, and patient complexity were contributing factors. At institutions where subspecialists were the primary decision makers or present on daily rounds, residents felt less of a sense of patient care ownership and even a loss of purpose, often describing that they were nothing but a conduit for decisions. As such, characteristics of individual supervisors appeared less important than such structural factors.

Significance: Residents’ ability to feel ownership over patient clinical care is essential for professional development, but this is diminished by several factors outside of residents’ control, including institutional culture and patient complexity. Lessons learned from this study can aid in shifting the focus from allowing resident autonomy to promoting resident ownership of patient care despite increased supervision.

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A Question of Scale? Comparison of Generalizability in Ottawa and Chen Scales When Used to Formulate Ad Hoc Entrustment Decisions for the Core EPAs

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Purpose: Assessment of the Core Entrustable Professional Activities (Core EPAs) is based on observations of supervisors throughout a medical student’s progression toward entrustment. In our previous work, we examined performance of the Ottawa Clinic Assessment Tool (Ottawa) when used to measure medical student performance of the Core EPAs in the workplace setting. The findings from that study demonstrated poor generalizability of the Ottawa scale. The primary purpose of the present study was to compare performance of the Ottawa scale with a second scale—the undergraduate medical education (UME) supervisory scale proposed by Chen and colleagues (Chen) in terms of reliability and generalizability. A secondary aim was to determine the impact of frequent assessors on the validity and reliability of the data.

Methods: For the 2019–2020 academic year, the Virginia Commonwealth University School of Medicine modified a previously described, student-initiated, workplace-based assessment (WBA) system developed to provide formative feedback for the Core EPAs across clerkships. The WBA scored students’ performance using both the modified Ottawa and the modified Chen scales. Generalizability and decision studies were performed to determine the reliability of each scale. Secondary analysis explored whether faculty who frequently assess the EPAs demonstrated better reliability.

Results: A total of 923 raters completed 7,277 WBAs on 208 medical students across all clerkships. Using Ottawa, variability attributable to the student ranged from 0.8% to 6.5%. For Chen, variability attributable to the student ranged from 1.8% to 7.1%. These findings indicate that the majority of the variation for EPA ratings was due to the rater (42.8%–61.3%) and other unexplained factors. A range of 28 to 127 assessments were required to obtain a Phi coefficient of 0.70. For 2 EPAs, using only faculty who frequently assess the EPA improved generalizability—requiring only 5 and 13 assessments for the Chen scale.

Discussion: Both the Ottawa and Chen scales performed poorly in terms of variance attributed to the learner. The frequent assessor model seemed to increase variance attributed to the learner for the Chen scale in only 2 Core EPAs. Overall, these findings were similar to our previous study involving only the Ottawa scale. Based on these findings in conjunction with prior evidence, we suggest that the root cause analysis for challenges associated with WBAs for the Core EPAs involves the lack of a true competency-based curriculum in UME; the choice of scale alone does not appear to impact performance.

Significance: This study adds to the emerging literature around WBAs specific to the Core EPAs in UME. Based on these findings as well as those from prior work, we feel there is a need to reconsider the workflow, scale, and investment of learners and faculty to best assess the Core EPAs in the UME setting.

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