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Student Competency in Outpatient Documentation: Insights From the 2025 CERA Clerkship Directors Study

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ABSTRACT

Background and Objectives: Competency in clinical documentation is a core entrustable professional activity expected of graduating medical students, and multiple national organizations have established expectations for documentation training and assessment. However, limited guidance exists on how these competencies are operationalized and assessed in clinical settings, and little is known about current educational practices. This study aimed to characterize how family medicine clerkships teach and assess outpatient documentation competency.

Methods: We conducted a cross-sectional analysis using five documentation-related items embedded in the 2025 Council of Academic Family Medicine Educational Research Alliance clerkship directors survey. The survey was distributed to 174 US and Canadian family medicine clerkship directors. Descriptive statistics summarized the responses.

Results: The response rate was 57.4% (100/174). Most directors (78.7%) rated assessing documentation competency as important or very important. At clerkship entry, 60.2% of students required intermittent prompting, while 32.3% needed repeated direction. Teaching methods varied: 33.3% reported no formal instruction, and only 19.4% used a common rubric. Informal assessment predominated (56.4%), and 8.5% reported no formal process. Regarding accuracy and integrity, 37.6% had no formal evaluation, while 25.8% used direct observation and 22.6% employed standardized patients or simulations.

Conclusions: Teaching and assessment of outpatient documentation competency in family medicine clerkships are highly variable, with many programs lacking structured approaches. These findings underscore the need for standardized guidelines and curricular integration to ensure that all students achieve competency prior to residency.

INTRODUCTION

The Association of American Medical Colleges (AAMC) denotes the ability to document a clinical encounter in the electronic health record (EHR) as a core entrustable professional activity (EPA) for medical students entering residency.[1] Medical students typically begin learning this skill during their preclinical years, refining it through clinical practice in clerkships and subinternships, and often are assumed to have the ability to demonstrate competency as residents from day one. The Society of Teachers of Family Medicine (STFM) National Clerkship Curriculum outlines learning objectives pertaining to clinical documentation, including health maintenance, acute care, and chronic care encounters.[2] Subsequently, in residency training, the Accreditation Council for Graduate Medical Education (ACGME) Milestones for family medicine include expectations for accurate and timely documentation of clinical encounters, yet a lack of consensus exists on how this is measured or verified.[3]

In its 2012 collaborative statement, the Alliance for Clinical Education emphasized that medical students should actively document authentic patient encounters in the EHR, receive structured faculty review and feedback, engage in supervised order entry, participate in comprehensive EHR training, and undergo formal assessment of their EHR documentation competencies during their clerkships.[4] In 2018, the Centers for Medicare & Medicaid Services updated its policy to allow teaching physicians to use medical student EHR entries for evaluation and management services, enabling verification rather than redocumentation of history, exam, and decision-making.[5] In addition, the *21st Century Cures Act* requires immediate patient access to clinical notes via secure portals, making accuracy and clarity in student documentation increasingly critical.[6] The emerging *Foundational Competencies for Undergraduate Medical Education*, cosponsored by AAMC, American Association of Colleges of Osteopathic Medicine, and ACGME, further emphasizes the importance of clearly defined expectations for core clinical skills such as documentation.[7] However, practical guidance for how these competencies should be operationalized and assessed in clinical settings remains limited.

Despite major shifts into competency-based models, medical education has traditionally followed an apprenticeship model, in which learners develop knowledge, skills, and professional behaviors through experiential learning, observation, and participation under supervision. Within this historic framework, teaching clinical documentation may occur implicitly through shared documentation practices, cosignature workflows, and informal feedback from supervising clinicians rather than through structured curricular methods. Understanding this existing environment provides context for the variability observed in teaching and assessment approaches, including reliance on general impression and the absence of formal instruction in some clerkships. In addition to experiential learning within the clinical environment, family medicine clerkships frequently incorporate a range of structured curricular elements, such as supervised outpatient preceptorships, didactic sessions, workshops, and increasingly, active learning approaches such as case-based learning and team-based activities.[8] These varied instructional strategies reflect both formal and informal approaches to skill development within the clerkship setting.

This study aimed to answer how family medicine clerkships teach and assess outpatient documentation competency, which we define as accurate documentation of key clinical elements, clinical reasoning, assessments, and management plans. We hypothesized significant variability in practices due to the absence of standardized guidelines as curricular requirements. Our goal was to establish a starting point to inform future research, guidelines, and standardization across the continuum from undergraduate medical education to graduate medical education practice. As academic medicine continues to gravitate toward competency-based medical education, our group aimed to define and determine competency in clinical documentation within the outpatient context.[9]

METHODS

Study Design and Participants

This study is a cross-sectional analysis of data from the 2025 Council of Academic Family Medicine Educational Research Alliance (CERA) family medicine clerkship directors study. The sampling frame included 174 Canadian and US family medicine clerkship directors at accredited medical schools. In addition to the standard questions of the survey, our research group submitted five questions to assess sentiments and current standards surrounding outpatient clinical documentation. The complete survey received approval in May 2025 by the American Academy of Family Physicians Institutional Review Board.[10]

Survey Measures

For this analysis, the primary variables of interest were the five outpatient clinical documentation items included in the 2025 CERA clerkship directors survey. Each item used a fixed-response format and captured a distinct dimension of outpatient documentation practice. The first item assessed the level of supervision required for students to document a typical outpatient, problem-focused encounter at the start of the family medicine clerkship, using four ordered categories ranging from complete faculty guidance to near independence. The second item measured the perceived importance of evaluating outpatient documentation competency, using a five-point ordinal scale from less important to very important. A third item asked respondents to identify the primary method through which outpatient documentation is taught during the clerkship, offering four mutually exclusive options reflecting formal instruction, rubric use, informal approaches, or no explicit teaching. For clarity in interpretation, we consider formal teaching to include structured, intentional instructional activities such as didactic sessions, workshops, or direct observation with feedback, in contrast to informal or experiential learning in clinical settings. The fourth item examined the primary approach used to assess documentation competency, with response options including rubric-based evaluation, informal evaluator impression, or the absence of a formal assessment process; however, commonly used strategies such as standardized end-of-rotation evaluations were not explicitly included as response options. The fifth item elicited the strategies used to evaluate the accuracy and integrity of student documentation, allowing respondents to select among multiple categorical options such as direct observation, indirect observation, use of standardized patients or simulations, patient feedback, or other locally developed methods. For statistical analysis, we coded each variable according to its ordinal or categorical response structure. In addition, to contextualize survey findings, we analyzed

demographic variables provided through the CERA dataset, including institutional characteristics and respondent training and experience.

Statistical Analysis

Because the survey data consisted solely of descriptive, categorical, and ordinal response options and the study was not designed to compare subgroups, only descriptive statistics were generated. We calculated response frequencies and percentages for each of the five outpatient documentation items. No inferential statistical tests were performed. All statistical analyses were performed using SPSS version 31 (IBM Corp).

RESULTS

In June 2025, 174 Canadian and US family medicine clerkship directors received the 2025 CERA clerkship directors survey with an overall survey response rate of 57.4% (100/174). Standard demographic variables (eg, location, gender, race/ethnicity, and underrepresented in medicine status) were collected and compared with the sampling frame to assess representativeness. Respondents were generally representative, with no significant demographic differences[10]. Additional selective respondent demographic characteristics are summarized in Table 1. Most respondents were affiliated with public medical schools (70.4%), the median duration in the clerkship director role was 4 years (IQR: 2–9), and slightly more than half (54%) had graduated from residency training in 2011 or later.

Our five survey questions pertaining to outpatient clinical documentation competency are shown in Table 2 along with question response rates, response options, and survey result rates. Most clerkship directors (60.2%) responded that medical students at the beginning of the family medicine clerkship required direction from time to time, with another 32.3% of respondents indicating that their students required a higher level of supervision, requiring repeated direction. The majority (78.7%) of the surveyed clerkship directors responded that it was important or very important to assess the competency of clinical documentation of outpatient encounters. We found a broad distribution of methods to teach outpatient documentation, ranging from having a documentation rubric (19.4%) and other formal teaching methods (23.7%) to no formal teaching at all (33.3%). A small majority (56.4%) indicated that evaluator general impression is the primary method of assessing outpatient documentation competency in the family medicine clerkship. Regarding the veracity of clinical documentation, 37.6% of clerkship directors noted no formal process to assess documentation accuracy and integrity, while 25.8% use direct observation and 22.6% use standardized patient or simulated encounters.

TABLE 1. Selective Respondent Demographic Characteristics

Characteristic	
Public medical school, n (%)	69 (70.4)
Years in current clerkship director role, median (IQR)	4 (2–9)
Graduated from residency training in 2011 or later, n (%)	52 (54)

Abbreviation: IQR, interquartile range

DISCUSSION

Accurate written documentation of clinical encounters is essential. This is a skill set that is vital for medical students to learn prior to entering residency, and the lack of a structured teaching method for medical students may contribute to the variability in documentation accuracy.[1,11] The use of artificial intelligence, EHR templates, and copy/paste workflows may introduce inaccuracies, propagate errors, and undermine documentation integrity, posing challenges to the development and assessment of clinical documentation competency among medical students.[12,13] Our findings highlight several important themes regarding the teaching and assessment of outpatient clinical documentation in family medicine clerkships. As a descriptive study, these findings reflect reported practices and perceptions, and are not intended to establish causal relationships between instructional approaches and student competency outcomes.

Clinical documentation skills typically are introduced during the preclerkship phase with continued development during clerkships and subinternships. Responses to the survey suggest that some level of competency or entrustment in documentation is present among students entering the clerkship, because most clerkship directors indicated that only intermittent prompting is required at the start of the rotation for outpatient documentation. This finding may reflect expectations that foundational documentation skills are acquired prior to the clinical phase, although the degree to which these skills are standardized and formally assessed remains unclear. These findings underscore that documentation competency should be considered a longitudinal skill that develops across both the preclerkship and clerkship phases, rather than a competency achieved prior to clerkship entry.

Nearly one-half of the respondents rated the assessment of documentation skills during the clerkship as very important, underscoring the perceived value of this competency and suggesting that family medicine should take a leadership position that can guide other clerkships on teaching and assessing clinical documentation in the outpatient setting. Despite this finding, our data revealed considerable variability in both teaching and assessment practices. More than one-third of family medicine clerkships reported no explicit method of teaching outpatient clinical documentation, which likely assumes preexisting student competency. The informal review and sign-off of notes (ie, evaluator general impression or gestalt) was the most reported method (56.4%) of assessing competency in outpatient encounters, which may reflect reliance on faculty judgment within clinical supervision rather than standardized assessment approaches. This finding may leave wide variation in expectations and interpretations of competency, because existing guidance from clerkship

TABLE 2. Submitted CERA Survey Questions Pertaining to Clinical Documentation Competency

Survey question Question response rate—n (%)	Survey response options	Responses n (%)
When considering a typical outpatient, problem-focused visit, what is the typical level of supervision needed for students to document in the medical record at the beginning of their family medicine clerkship?—93 (93.0)	"I did it." the student required complete guidance or was unprepared; I (faculty) had to do most of the work myself.	3 (3.2)
	"I talked them through it." the student was able to perform some tasks but required repeated directions.	30 (32.3)
	"I directed them from time to time." the student demonstrated some independence and only required intermittent prompting.	56 (60.2)
	"I was available just in case." the student functioned independently and only needed assistance with nuances or complex situations.	4 (4.3)
How important do you feel that assessing medical students for competency in outpatient documentation of clinical encounters is in the family medicine clerkship?—94 (94.0)	Less important (taught elsewhere in the curriculum/student is already competent)	3 (3.2)
	Slightly important	2 (2.1)
	Moderately important	15 (16.0)
	Important	31 (33.0)
	Very important (family medicine needs to teach and assess this)	43 (45.7)
How does your clerkship primarily teach students about problem-based outpatient visit documentation?—93 (93.0)	There is formal teaching regarding documentation at beginning of clerkship.	22 (23.7)
	Use of a common visit documentation rubric for students to use in the clinical setting.	18 (19.4)
	Clinical documentation is taught in some other way during the clerkship.	22 (23.7)
	We do not explicitly teach clinical documentation in this clerkship.	31 (33.3)
How does your clerkship primarily assess competency in the documentation of outpatient encounters?—94 (94.0)	Competency is assessed prior to participation in our clerkship.	4 (4.3)
	Standardized rubric of simulated case documentation during the clerkship.	12 (12.8)
	Standardized rubric of clinical encounter documentation during the clerkship.	17 (18.1)
	Evaluator general impression (informal review and sign-off of clinical documentation).	53 (56.4)
	There is no formal process for the assessment of competency of clinical documentation during the clerkship.	8 (8.5)
How does your clerkship evaluate a medical student's ability to competently document a clinical encounter while ensuring the accuracy and integrity of the documentation, particularly when a technically accurate document does not fully capture the reality of the clinical encounter (does not address issues brought up or omits important points)—93 (93.0)	Directly observe the clinical encounter then review the documentation.	24 (25.8)
	Indirectly observe (ie, video/audio recordings), then review the documentation.	3 (3.2)
	Utilize standardized patients and simulated encounters.	21 (22.6)
	Interview patients to gather their perspectives on the accuracy and integrity of the documentation following the encounter.	6 (6.5)
	My clerkship does not have a formal process to assess accuracy and integrity specifically.	35 (37.6)
	My clerkship uses another method(s) to assess accuracy and integrity.	4 (4.3)

objectives and EPAs does not consistently provide specific or standardized criteria for documentation skills, which may contribute to variability in student competency acquisition and assessment. Additionally, the survey instrument did not include commonly used institutional assessment approaches, such as documentation of evaluation through standardized end-of-rotation evaluations, which may limit the completeness of captured assessment practices.

We believe that evaluating the accuracy and integrity of clinical documentation alongside note-writing skill is also important, because documentation alone may not reliably reflect the details of a clinical encounter. Studies comparing notes with direct observation and audio recordings of patient encounters have demonstrated substantial discrepancies, including both omissions of key findings and documentation of actions not performed.[14,15] As a result, the written record should not be assumed to accurately represent care delivered, and learner assessment approaches that rely solely on written documentation may miss important gaps in clinical reasoning or data gathering. Without direct observation, a learner may produce a well-written note that fails to capture integral components of the encounter, potentially reflecting unrecognized deficiencies in clinical care. Within competency-based medical education, workplace-based assessment frameworks with direct observation have been emphasized as key methods for evaluating and improving clinical competency and may provide a more valid approach to assessing documentation accuracy and integrity.[16]

We were surprised to find that only 37.6% of respondents reported no formal process for assessing documentation

accuracy and integrity, as we expected this proportion to be much higher given the overall reliance on informal methods of documentation competency assessment. Notably, the use of standardized patients and simulated encounters for evaluating documentation accuracy and integrity was higher than we anticipated (22.6%), suggesting that some programs are leveraging these experiential learning modalities to assess the integrity of clinical documentation. This finding may indicate a gradual shift toward more structured evaluation strategies to assess the integrity in clinical documentation. However, we found lack of a clear, unified approach across clerkships given that more than 37.6% of clerkships reported not having a specific formal process for assessing accuracy and integrity of documentation. The questions did not inquire about the allowance of templates for medical student documentation or query the clerkship directors on the perceived impact on learning as well as the integrity of clinical documentation, but concerns have been raised that templates may impact a learner's ability to understand what is required for notes in the EHR.[17]

Demographic characteristics of the clerkship directors who responded to our survey also provide an important context for interpreting these results. The majority (70.4%) were affiliated with public medical schools, so confounding resource limitations may be impacting the clerkships' ability to assess competency. A substantial proportion of respondents were early in their tenure serving as clerkship directors, with 40% being within their first 3 years of service in that role at their institution and nearly one-half having graduated from medical school in 2011 or later. These demographics suggest that our findings reflect perspectives of those who may be more recently trained and potentially more attuned to evolving educational standards and practices. The differences in demographics also may explain the differences in expectations regarding medical student documentation requirements.

CONCLUSIONS

Taken together, these results point to a need for greater standardization in both the teaching and assessment of outpatient clinical documentation. While family medicine educators recognize the importance of this competency, the absence of consistent methods and the predominance of informal assessment highlight opportunities for curricular improvement. Additional research is needed to evaluate the effectiveness of various teaching and assessment strategies and to inform the development of national guidelines, such as the STFM National Clerkship Curriculum. Future work should focus on building consensus among medical education leaders regarding what constitutes competency in clinical documentation, including the development and validation of standardized assessment frameworks or rubrics that can be implemented across clerkships.

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CONFLICT DISCLOSURE

Dr Heidelbaugh is the assigned CERA mentor for this project.

PRESENTATIONS

Dabbs W, Sairenji T, Farah S, Heidel E, Heidelbaugh J, Chamberlin S. Medical Student Clinical Documentation Competency: 2025 CERA Study Insights. Poster presentation at the North American Primary Care Research Group (NAPCRG) Annual Meeting, Atlanta, GA, November 24, 2025.

Dabbs W, Sairenji T, Farah S, Heidel E, Heidelbaugh J, Chamberlin S. Assessing Competency in Outpatient Clinical Documentation: Results From the 2025 CERA Clerkship Director Survey. Poster presentation at the Society of Teachers of Family Medicine Conference on Medical Student Education, Charlotte, NC, January 30, 2026.

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