Original Article

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Bridging the Gaps: Allied Health Practitioners, Clinical Educators, and Peers Perspectives on Resident Performance Assessments

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Abstract

Introduction: Teaching hospitals integrate healthcare, education, and research but face challenges in assessing residents as learners and healthcare providers. Conventional supervisor-led assessments may not fully capture real-world competencies, necessitating multi-source evaluation. This study examines stakeholder perspectives on resident performance assessment and key evaluation criteria.

Methods: This study employed a qualitative content analysis and inductive approach to examine stakeholder perspectives on residents' performance. Data were collected through focus group discussions with purposively sampled clinical educators, allied health practitioners, and senior residents. Transcribed discussions were analysed using inductive thematic analysis in MAXQDA, following a reflexive six-phase approach. Researchers developed codes, organised them into potential themes, and refined them into a coherent narrative addressing the research questions.

Results: Five themes emerged: Clinical Competency, Learning-Teaching and Mentorship, Professionalism and Ethics, Communication and Teamwork, and Managerial and Administrative Roles. Clinical educators prioritized Learning-Teaching and Mentorship alongside Professionalism, while allied health professionals emphasized Communication and Teamwork, and Managerial and Administrative duties. Residents primarily focused on Learning-Teaching and Mentorship. Subthemes emphasised varied across participant groups.

Conclusion: Teaching hospital stakeholders assess residents differently. Addressing hierarchical barriers, enhancing communication, and fostering professionalism are essential for comprehensive, context-sensitive, and effective resident training and performance assessment.

Keywords: Feedback, Resident, Assessment, Professionalism

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Introduction

Teaching hospitals are central to the Academic Health System, integrating healthcare delivery, medical education, and research to improve health outcomes (1, 2). However, balancing these functions presents challenges, particularly in managing residents' dual roles as learners and essential healthcare providers. Limited resources, misaligned curricula, and inconsistent teaching quality across clinical units further complicate this integration (2, 3). Addressing these challenges requires robust assessment frameworks that ensure residents are adequately prepared for both their educational and clinical responsibilities.

A critical component of this preparation is performance evaluation, which must distinguish between competence, what a resident is theoretically capable of, and performance, what they actually demonstrate in clinical practice (4). Ensuring residents meet expected competency levels is vital as they balance learning with patient care (5, 6). Given their integral role in hospital operations, residents contribute significantly to healthcare delivery, with their productivity estimated at 37% of senior physicians (7), varying across specialties from 74% in Neurology to 95% in Diagnostic Medicine (8). Since the quality of care provided by residents is directly linked to their clinical competencies, assessment tools must be rigorous, fair, and reflective of real-world performance (9, 10).

Traditional assessment methods, such as the conventional supervisor-led assessments, often theoretical and standardised, may not fully capture the residents' day-to-day clinical competencies (6). Multi-source assessment approaches, such as 360-degree feedback, have gained attention for reducing bias and providing holistic evaluations (11). These methods incorporate insights from multiple evaluators, including clinical educators, peers, allied health professionals, and even patients, ensuring a more balanced assessment of residents' competencies in real clinical settings (12, 13). By integrating diverse perspectives, multi-source assessments improve the reliability and validity of evaluations while offering direct feedback on essential skills for daily practice.

Despite their advantages, implementing multi-source assessment in developing countries like Indonesia presents challenges. Limited resources and logistical constraints hinder the feasibility (14). Additionally, Indonesia's strong hierarchical culture can create power imbalances, undermining assessment objectivity (15, 16). Senior faculty may exert undue influence over evaluations, while residents may hesitate to provide honest peer assessments due to the fear of repercussions. These dynamics can distort the fairness and effectiveness of competency evaluations, raising concerns about the applicability of global assessment frameworks like Competency-Based Education in diverse cultural contexts (17).

Given these challenges, we argue that resident performance assessment must be tailored to the specific cultural and institutional context in which it is applied (13). Incorporating local perspectives from clinical educators, allied health professionals, and peers can improve the reliability and validity of evaluations. This study explores how stakeholders perceive resident performance in a teaching hospital and what key criteria should be included in evaluating it.

Methods

This study employed a hybrid qualitative approach combining content analysis (18), which utilizes predefined categories from the literature, and inductive thematic analysis, which allows new themes to emerge from the data (19, 20). To maintain methodological rigour, the study design and procedures were guided by the COSMIN (COnsensus-based Standards for the selection of health Measurement Instruments) standards for content validity (13), which informed the sampling size and strategy, data collection, and analysis. Focus group discussions were selected as the best qualitative method to explore the phenomenon of resident performance, conducted using a pre-established interview guide to ensure consistency; they were videotaped and transcribed verbatim to explore the key themes on resident performance. Data analysis involved independent coding, consensus resolution, and structured management. Triangulation of data sources and analysts was employed to enhance trustworthiness, and a final decision was reached through consensus meetings.

Participants

A purposive sampling strategy recruited 6 to 10 participants per group to foster a dynamic and engaging conversation. Eligible allied health practitioners and clinical educators are required to have at least five years of experience in mentoring and assessing residents in teaching hospitals. Residents had to be in their third year of study to be qualified. Clinical educators included unit coordinators and department heads. In qualitative research, the number of interviews required depends on factors such as the complexity of the construct under investigation, design of the instrument, and

diversity of the target population. A sample of 4 to 6 participants is generally considered adequate, while seven or more is regarded as very good (13). Aligned with these recommendations, the proposed sample size is well-suited to achieve data saturation and generate rich, meaningful insights. Recruitment involved direct invitations, referrals, and snowball sampling.

Data Collection

Three focus group discussions were held, each for a specific participant group, following cognitive interview study standards (13). Before the discussions, participants received an information sheet and consent form. An interview guide with some leading questions and probes was used during the discussion to maintain consistency in the topics discussed. Initially, we conducted a literature review to identify five priori domains commonly used to describe resident performance: *Professionalism, Clinical Competency, Communication, Management,* and *Interpersonal Relationships*. These domains informed the development of our discussion guide and served as a preliminary coding framework. For each domain, discussions were guided by three open-ended questions: [1] How participants define the domain, [2] What aspects they believe should be assessed, and [3] How the domain is integrated into residents' daily development and its impact on patient care or team performance. These questions were intentionally broad to encourage open expression of experiences and perspectives.

Facilitators used flexible probing to clarify and deepen the responses. Probes included: "*Can you give a concrete example*?", *"What do you mean by that in a clinical setting?", "How would that look like in daily practice?", "Can you recall a recent case that illustrates your point?", "Have you seen a situation where this worked well—or didn't?",* or *"If a resident showed specific behaviour related to the topic , what specific behaviours would you expect to see?"*. A prepared set of probes was used selectively depending on the discussion flow.

This approach reflects the principle that interview guides are dynamic tools rather than rigid scripts (13). The structure ensured consistency across the groups, while the flexibility allowed the participants to raise additional relevant insights. The facilitators ensured equal participation and managed conflict respectfully. The discussion sessions were videotaped, transcribed, and submitted to MAXQDA 2022 (21). A scribe documented verbal and non-verbal cues.

Data Analysis

A combination of content and inductive approach was adopted to analyze the data. Two researchers familiarized themselves with the data by thoroughly reviewing the text sources, noted the frequency and recurrence of ideas to assess how well the participants' perspectives were aligned with the existing framework, and then systematically developed codes to identify relevant segments of the data. To ensure openness to participants' unique insights, we subsequently conducted an inductive thematic analysis. While the initial domains guided early coding, participants were not restricted to these categories in the discussions. This allowed for the identification of new codes and the refinement of the existing ones. The codes were evaluated and organized into potential themes. They were refined, clearly defined, and labelled to ensure that the themes accurately reflected the data. Consensus resolution followed independent coding, where discrepancies were discussed and resolved. The analysis was finalized by integrating the themes into a coherent narrative that addressed the research questions.

Ethics Statements

Participation was voluntary, with the right to withdraw anytime. All participants gave their consent before discussions. Data remained confidential, and the findings were shared anonymously to protect privacy. The study was approved by the Ethics Board of the Medical Faculty of Hasanuddin University, Indonesia (Approval No. 643/UN4.6.4.5.3L/ PP36/ 2024).

Results

This section first provides a descriptive overview of the distribution of focus and participants' perceptions. Subsequently, the qualitative inductive analysis results are presented to address the research objectives, focusing on a deeper understanding of the emerging perspectives and dynamics from the data.

The study included 20 participants, comprising eight clinical educators, six allied health professionals, and six residents. The majority were female (15 out of 20), and the participants' ages ranged from 25 to 59 years, with most falling between 30 and 44 years. Their professional backgrounds were diverse, covering both medical and allied health fields. Among allied health professionals were physiotherapists, pharmacists, nurses, radiographers, and public health experts. Clinical educators were experts in anesthesiology, cardiology, physical medicine and rehabilitation, obstetrics and gynecology,

clinical pathology, internal medicine, and urology. Additionally, residents came from various specialties, including anesthesiology and intensive therapy, physical medicine and rehabilitation, psychiatry, orthopedics and traumatology, pulmonology and respiratory medicine, and radiology. Experience in mentoring or assessing residents varied, with a minimum of 5 years, with 8 participants having over 10 years of experience mentoring and assessing residents in teaching hospitals.

Five domains were initially identified from the literature (*Professionalism, Clinical Competency, Communication, Management, and Interpersonal Relationships)* and used to inform the interview guide. Through analysis and iterative team discussions, we developed five final themes: *Clinical Competency, Learning-Teaching and Mentorship, Professionalism and Ethics, Communication and Teamwork,* and *Managerial and Administrative Roles*. The final themes were derived from the content and inductive analysis of the discussion transcripts, reflecting both the literature-based framework and new perspectives introduced by participants. *Clinical Competency* was retained, while the others evolved: *Professionalism* broadened to include ethical considerations, *Communication* and *Interpersonal Relationships* merged to *Communication and Teamwork*, and *Management* expanded to encompass administrative roles. Thus, four domains were adapted, and *Learning-Teaching and Mentorship* emerged as a new theme, reflecting the central role of education and mentorship in residents' development.

Figure 1 shows the results of a document portrait analysis from MaxQDA, which compares contributions from three interview groups: clinical educators, allied health professionals, and residents. The document portrait visually represents the distribution of codes or main themes in the documents, highlighting the focus and differences across these groups. In this analysis, rectangles represent segments of the codes in the documents. The color of each rectangle indicates a specific code or theme.

Figure 2 summarizes the contributions of clinical educators, allied health professionals, and residents in the five key domains. The matrix quantified the intensity of qualitative data codes, facilitating the identification of patterns across groups, while its size reflects how frequently that code appears. The clinical educator's dominance in the *Learning-Teaching and Mentorship* domain showed their focus on *guidance and assessment*. Allied health professionals emphasized *Managerial and Administrative* roles in *accurate and timely documentation of medical records*. Residents' contributions are more visible in the *mentor-mentee dynamics* and *clinical decision-making*. Each group's specific perceptions and priorities are displayed in Figure 2.

The following is a summary of the narratives developed by allied health practitioners (AHP), clinical educators (CE), and peer residents (P) during the discussions.

Professionalism and Ethics

This theme encapsulates how residents conduct themselves in patient interactions, work in a team, and fulfil their responsibilities within the healthcare setting.

A key emerging aspect is professionalism in conduct, appearance, and communication, which includes how residents introduce themselves and establish rapport with patients.

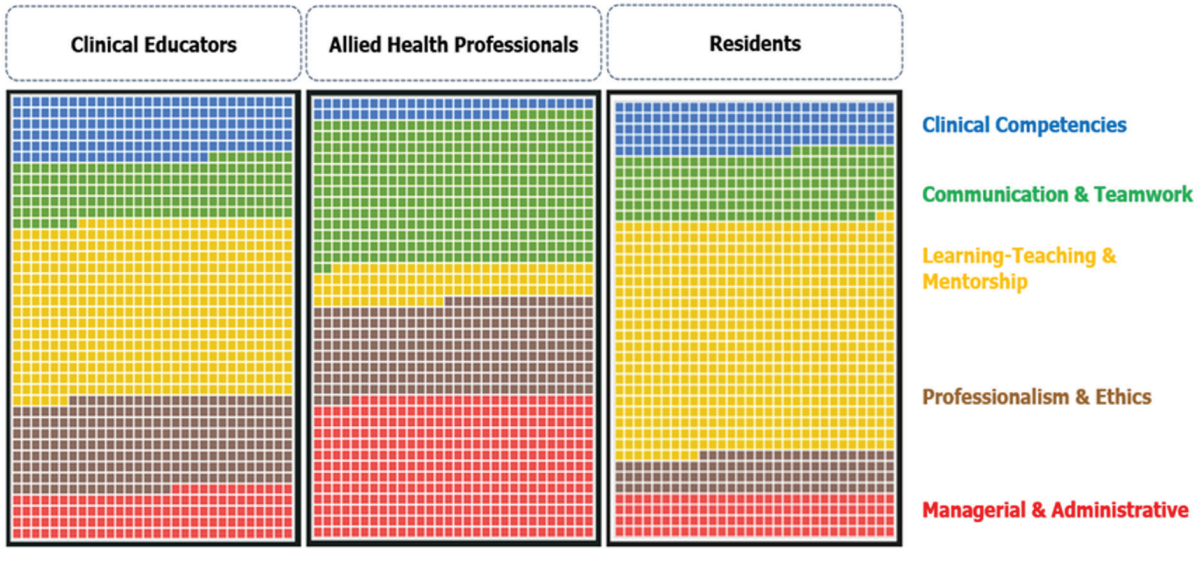
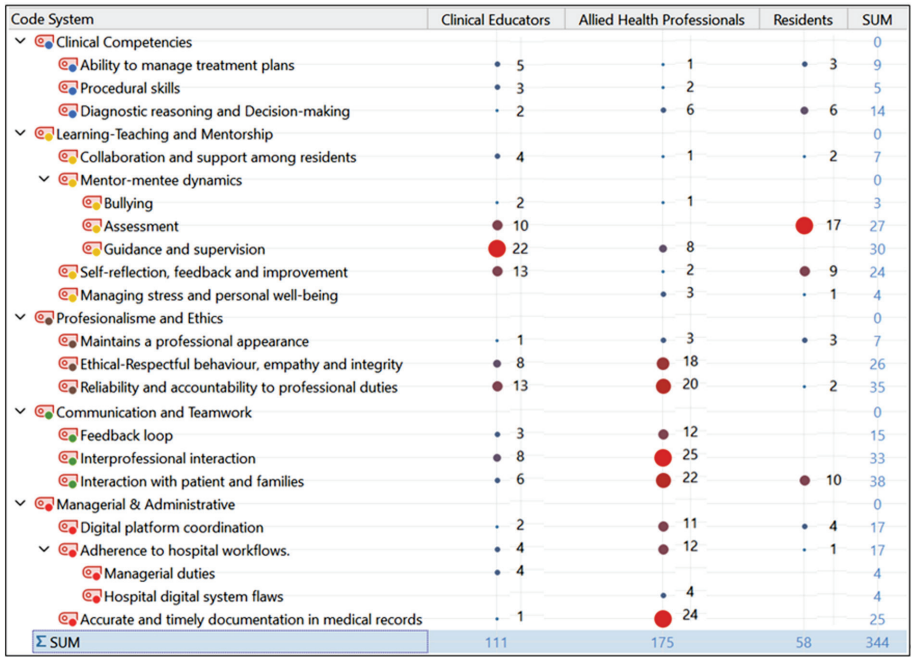


Figure 1: Descriptive Comparative Analysis across Competency Domains



Code System	Clinical Educators	Allied Health Professionals	Residents	SUM
Clinical Competencies				0
Ability to manage treatment plans	5	1	3	9
Procedural skills	3	2		5
Diagnostic reasoning and Decision-making	2	6	6	14
Learning-Teaching and Mentorship				0
Collaboration and support among residents	4	1	2	7
Mentor-mentee dynamics				0
Bullying	2	1		3
Assessment	10		17	27
Guidance and supervision	22	8		30
Self-reflection, feedback and improvement	13	2	9	24
Managing stress and personal well-being		3	1	4
Profesionalisme and Ethics				0
Maintains a professional appearance	1	3	3	7
Ethical-Respectful behaviour, empathy and integrity	8	18		26
Reliability and accountability to professional duties	13	20	2	35
Communication and Teamwork				0
Feedback loop	3	12		15
Interprofessional interaction	8	25		33
Interaction with patient and families	6	22	10	38
Managerial & Administrative				0
Digital platform coordination	2	11	4	17
Adherence to hospital workflows.	4	12	1	17
Managerial duties	4			4
Hospital digital system flaws		4		4
Accurate and timely documentation in medical records	1	24		25
Σ SUM	111	175	58	344

Figure 2: Domain-Specific Contributions across Participant Groups

Clinical educators and allied health professionals noted concerns when residents failed to properly introduce themselves and establish rapport with patients, impacting patient care. As one stated, *"The professionalism of a resident can also be seen by the patient, including whether the resident greets them and introduces themselves."* (CE1). Beyond appearance, professionalism is also demonstrated through clinical competence: *"A professional resident is one who, when serving patients, really performs the examination well, and the assessment must be correct and precise."* (CE4). Appearance further influences perceptions, as highlighted in a resident observation: *"I saw one resident wearing flip-flops, with long hair, and I thought, 'Is this really a resident?''* (P3)

Closely tied to professionalism is integrity and ethical practice, particularly in patient consent and documentation. Some residents fail to provide patients with sufficient information before seeking consent, raising ethical concerns. One allied health practitioner noted, *"Patients often agree with procedures without truly understanding what will be done."* (AHP4) Ensuring transparency and ethical responsibility in communication is acknowledged as a challenge in maintaining the patients' trust and safety.

Another crucial aspect is responsibility and accountability in task completion. Concerns were raised about neglecting duties by residents, being difficult to contact, failing to follow up on patients, being unresponsive to patients' and co-workers' concerns, or shifting responsibilities to colleagues. As one-educator-observed, *"Some residents fail to follow up with patients or communicate with the medical team. They sometimes ask a colleague to handle issues that should be their responsibility."* (CE1)

Finally, professional growth and competency awareness are vital in ensuring safe and effective patient care. Both educators and allied health professionals emphasized that residents must understand their skill levels and avoid engaging in tasks beyond their expertise. One concern raised was, *"Residents must understand their competencies and limitations. For example, if a second-semester resident is asked to perform an advanced procedure, it can lead to problems if they have not developed the necessary skills yet."* (CE5)

Participants identified professionalism in conduct, ethical responsibility, accountability, and competency awareness as the key aspects shaping resident performance. These factors were perceived to influence the quality of patient care and the effectiveness of teamwork and collaboration within the clinical setting.

Communication and Teamwork

Effective communication is essential for residents' interactions with patients and their collaboration with healthcare teams. Poor communication is believed to frequently delay decision-making and patient care, particularly in inter-professional settings where coordination is crucial.

One major concern is teamwork expectations. Residents are expected to actively participate in

medical decision-making and collaborate with allied health professionals to ensure comprehensive patient care. However, there is often uncertainty about their responsibilities, as highlighted by one clinical educator: *"A resident is expected to handle medical decisions and collaborate with allied health professionals to ensure holistic patient care. However, often, we see that residents are unsure about delegating tasks or communicating effectively with the team".* (CE4). This issue extends to accountability for teamwork, with allied health professionals expressing frustration over residents not taking ownership of patient follow-ups. As one noted, *"Some residents seem disinterested in following up on patients they've seen, leaving us to manage unresolved issues without proper handover.* (AHP3)

A related issue is communication breakdowns in patient information sharing, often resulting in treatment delays or errors. Residents sometimes fail to provide essential documentation, causing procedural challenges. One allied health professional described a common scenario:

"Usually, we say that if the treatment document is incomplete, for example, without a supervising physician's prescription or referral letter, we will not proceed. But we are again under pressure with requests like, "My patient is in critical condition; can you proceed, and we will complete the documents later?" (AHP5)

Another critical area is patient education and ensuring understanding. Allied health professionals reported that residents often do not provide clear explanations regarding treatment plans, which can lead to confusion and non-adherence to prescribed medications. As one observed, *"Usually, we inform the patient, but the resident did not explain clearly about the medication, and later, the patient asked: "Which pill is for morning and night."* (AHP5). Clinical educators also noted that insufficient patient education, particularly for chronic conditions such as heart disease, can result in frequent readmissions due to improper care understanding.

Overall, the sentiments underscore the importance of effective communication in collaboration practices and team dynamics. Clarity in delegation, documentation, and patient education was identified as crucial for enhancing resident performance in teamwork among healthcare professionals.

Clinical Competency

Stakeholders highlight expectations regarding residents' clinical competency, particularly in diagnostic reasoning, decision-making, and patient education. Residents' ability to make sound clinical decisions is a significant concern, especially under pressure. Early-stage residents often struggle with diagnostic reasoning in emergency and routine patient care situations. The challenge is particularly evident in high-stress environments like the emergency department (ER) and intensive care unit (ICU), where prioritizing urgent cases is critical. As one allied professional noted:

"The ICU and the ER are both emergencies, but in the ER, everyone feels like they are an emergency. Everyone wants to be treated, but residents who are in their first semester are the ones who cannot make decisions. We expect no first-semester residents in the ER. (AHP1)"

Additionally, some residents demonstrate hesitation in collaborative decision-making, mainly when working in multidisciplinary teams. Clinical educators observed that certain residents lack initiative in proposing solutions or taking responsibility for medical decisions, which can hinder the effectiveness of team-based patient management.

Another issue is the feedback loop in clinical decision-making. Adequate supervision is essential in guiding residents through the decision-making process. However, supervisors' approval or guidance delays sometimes impact timely patient care. As one allied professional pointed out, *"Sometimes, decisions are delayed because the resident has to wait for approval from a senior or supervisor, which can compromise the patient care."* (AHP3). All peer participants silently shared this sentiment. This highlights the need for a structured feedback mechanism to ensure that residents can make timely and informed decisions.

Clinical educators recognize the issues related to this feedback loop. Direct involvement from senior residents or clinical educators is seen as a crucial factor in improving the residents' clinical performance. One educator emphasized, *"In the ICU, having a senior resident or a clinical educator directly involved in patient management ensures better decision-making and faster responses."* (AHP3). Such supervision enhances the patient outcomes and strengthens the residents' clinical competencies over time.

Another expectation is the residents' ability to communicate effectively with patients. Within this theme frame, effective communication is a critical indicator of a resident's ability to provide comprehensive care.

Learning-Teaching and Mentorship

This theme explores the residents' complex role as learners providing healthcare in teaching

hospitals. The high expectations placed on them in patient care often compete with their responsibility to meet learning objectives.

Collaboration among residents was identified as a critical component in fostering a positive learning environment and enhancing clinical performance. Participants emphasized that peer interactions, particularly between junior and senior residents, contributed to a shared understanding of the strengths and weaknesses, facilitating teamwork and skill development. One educator noted, *"The bond between residents helps them understand each other's strengths and weaknesses, leading to better collaboration."* (CE8). Senior residents played a significant role in guiding junior colleagues, especially during handovers. Structured knowledge transfer was perceived as essential for ensuring that new residents were well-prepared to manage clinical responsibilities. An allied health practitioner highlighted this by stating, *"The process of handing over knowledge by senior residents at the start of the month ensures new residents are well-prepared."* (AHP6)

Mentorship also emerged as a crucial factor influencing residents' skills, confidence, and overall professional growth. Some clinical educators stated that effective mentorship, including senior to junior resident coaching, was characterized by constructive feedback, clear communication, and mutual respect. However, the residents raised concerns regarding negative mentorship experiences, particularly in the form of bullying. One resident remarked, *"Bullying often becomes apparent as residents advance in their training, possibly due to a sense of seniority".* (P6)

Assessment of resident performance relied on multiple feedback mechanisms, including multi-source feedback (MSF), peer evaluations, and patient input. These methods were perceived to have provided a more comprehensive evaluation of residents' clinical abilities. Peer evaluations were emphasized to accurately reflect the residents' performance in daily clinical practice. One resident noted, *"Peers see you in action day-to-day, and their feedback tends to be more honest and detailed."* (P6). While considered an important perspective, patients' feedback was also recognized as subjective and potentially influenced by individual biases. Some resident expressed their reluctance to be evaluated by patients. Providing constructive criticism and positive reinforcement in mentorship was also emphasized. A resident stated their expectation, *"Mentorship must be constructive, focusing on positive reinforcement and constructive criticism."* (P4)

Residents faced considerable challenges related to heavy workloads and stress, impacting performance and engagement in reflective learning. Participants noted that residents often rushed through tasks in high-demand settings, increasing the likelihood of errors. As one resident described, *"Residents have to visit many places in the morning, especially in the paediatric ward, because only two residents cover the ICU, ER, and inpatient care, so they often rush through less demanding tasks."* (AHP3). Long working hours further exacerbated these challenges, limiting opportunities for self-reflection and learning. One resident stated, *"We start at 7 a.m., finish at 10 p.m., until Friday. We barely have time for ourselves, let alone to write reflections, only on Saturday, and even then, we have to do rounds."* (P3). Allied health professionals played a supportive role in mitigating some of these challenges by double-checking the patients' information and minimizing errors caused by residents' fatigue. One participant explained, *"We always double-check before accepting instruction. The mistakes are often coming from residents trying to hurry."* (AHP5)

These findings highlight the complexities of resident training and performance evaluation, emphasizing the need for structured mentorship, balanced workload management, and comprehensive assessment methods to support both learning and patient care.

Managerial and Administrative Roles

This theme explores resident performance in a teaching hospital and extends beyond clinical competencies to include managerial and administrative responsibilities. Participants identified the key areas where these administrative roles influenced patient care, workflow efficiency, and hospital coordination.

Administrative coordination and workflow management were reported as critical yet challenging aspects of resident responsibilities. Inefficiencies in discharge procedures, documentation, and system processes contributed to delays and miscommunication. A recurring concern was the reliance on junior residents' incomplete reports for discharge decisions. One allied health professional stated, *"Patients were discharged without being seen by the resident in charge. The decision was made based on reports from junior residents, which did not reflect the actual patient condition."* (AHP1). Additionally, administrative errors, such as inaccuracies in medical record numbers, resulted in delays in prescription fulfilment. Another allied health

professional explained, *"If an error exists in the patient's medical record, such as typing/writing a wrong medical record number, it can cause delays in prescription fulfilment, ultimately affecting patient care."* (AHP5)

Issues related to document accuracy and completion were also highlighted, with participants emphasizing the importance of thorough and timely medical records for clinical decision-making. Incomplete documentation, particularly in the emergency department, posed challenges for continuity of care. One participant noted, *"In the emergency department, though the residents have visited the patient, frequently there is no written confirmation. The consultation sheet remains unanswered."* (AHP1). System-related limitations further complicated documentation, as shared accounts restricted data tracking and verification. An allied health professional described, *"The current system uses the senior doctor or supervisor account, not a resident personalised account, making it difficult to track who inputs data and verify patient records."* (AHP3)

In addition to documentation and workflow management, leadership and managerial skills were identified as integral to resident performance. Participants highlighted that residents who demonstrated strong leadership could better balance clinical and administrative duties, leading to improved hospital operations. One clinical educator highlighted this connection: "*When a resident can manage both patient care and the organizational aspects of the hospital, the care provided is typically more streamlined and efficient"* (CE3)

The findings highlight that residents' administrative responsibilities, including workflow coordination, documentation accuracy, and system navigation, are integral to their overall performance in a teaching hospital.

Discussion

This study aimed to identify key differences in how allied health practitioners, clinical educators, and residents evaluate residents' performance and uncover the gaps between their expectations. Through qualitative content analysis and inductive thematic analysis, the findings revealed notable stakeholder priorities and variations in perspective, highlighting the complexity of performance assessment within resident training in teaching hospitals. Five interrelated themes emerged: professionalism and ethics, communication and teamwork, clinical competency, learning, teaching, and mentorship, and managerial and administrative roles. Together, these themes underscore the multifaceted expectations placed on residents, who are required not only to demonstrate sound clinical judgment but also to function effectively within complex interprofessional systems.

Each stakeholder group brings a unique lens to performance assessment. Allied health practitioners prioritized communication, documentation, administrative tasks, and professionalism, with an emphasis on efficiency, accountability, and team functionality. Their expectations reflect the resident's role not only in patient safety, but also in maintaining daily clinical operations. Clinical educators, by contrast, focus on clinical competence and mentorship, shaped by their responsibility to foster technical proficiency and uphold high standards of care. Residents themselves view performance through the lens of personal growth, emphasizing knowledge acquisition, diagnostic reasoning, adaptability, and the confidence that stems from building clinical competence.

Professionalism, though uniformly valued, was interpreted differently across stakeholder groups. For allied health professionals, it centred on empathy, accountability, and respectful conduct; for educators, it involved mentoring, leadership, and collegiality; and for residents, it encompassed continuous learning and adaptability. These findings align with previous research positioning professionalism as a dynamic interplay of personal behaviour, communication style, and institutional expectations (22). The variation in interpretations across groups underscores the importance of using assessment frameworks that are context-sensitive and inclusive of multiple perspectives, using tools validated through rigorous psychometric evaluation (13, 23).

Communication and teamwork emerged as pivotal to residents' capacity to coordinate care and collaborate across professional boundaries. Stakeholders noted frequent communication breakdowns that disrupted handovers, delayed treatment, and impaired patient education. These findings align with prior studies emphasizing communication as a key determinant of patient safety and team effectiveness (24). Notably, allied health professionals often observe residents in more naturalistic, team-based interactions and advocate for broader feedback approaches, such as 360-degree evaluations, that capture emotional intelligence and interpersonal skills (6). Despite some variations, all groups consistently valued communication, though it was conceptualized differently: educators highlighted structured patient education, residents viewed it as integral to decision-making, and allied health staff prioritized respectful and responsive dialogue

that supports collaborative care (22).

Residents' clinical competencies were closely linked to supervision, decision-making under pressure, and the ability to integrate feedback into practice. Challenges in emergency and intensive care settings highlighted the need for more structured formative assessments and scaffolding through senior support. Early-stage residents, in particular, often struggle with diagnostic reasoning under pressure, an issue compounded by vague, delayed, or overly formalized feedback. Constructive feedback, as written or verbal comments, when delivered effectively, enhances both skill development and emotional resilience (25). This supports the application of Entrustable Professional Activities (EPA) as a framework to build trust and independence in clinical tasks gradually (6).

Learning and mentorship are central to resident development, but experiences vary widely. While some residents benefited from peer collaboration and effective role modelling, others faced unclear expectations and even bullying, highlighting the need for psychologically safe learning environments. Residents preferred timely, specific, and verbal feedback over formal evaluations, aligning with research on the effectiveness of informal, context-rich guidance (26, 27). Negative experiences, such as vague or overly formalized comments, can erode confidence and emotional resilience (25, 28). These findings suggest that a healthy feedback culture requires both interpersonal sensitivity and institutional support (29), particularly in settings where indirect communication and harmony-seeking behaviours may hinder candid dialogue (30). Psychological safety, open dialogue, and structured peer collaboration can help establish environments where feedback is a routine, constructive, and collaborative component of clinical education.

The managerial and administrative dimension of resident performance, often overlooked in clinical evaluations, proved crucial in shaping care continuity and hospital workflow. Allied health professionals, in particular, emphasized documentation accuracy, time management, and system navigation as essential yet underappreciated competencies (27, 31). Residents often underestimated these responsibilities, viewing them as peripheral to their primary learning goals. This disconnect reveals a "hidden curriculum" in which non-clinical competencies are expected but not explicitly taught. As prior research suggests, integrating structured training into residency programmes can better prepare residents for the realities of clinical practice (27).

Beyond individual competencies, this study highlights how institutional culture and workplace hierarchy shape residents' communication and performance dynamics. In Indonesian healthcare settings, sociocultural norms such as high-power distance, collectivism, and long-term orientation reinforce hierarchical structures that often inhibit open dialogue (31-35). Residents may hesitate to contact supervisors without explicit approval, delaying clinical decisions and feedback-seeking. This is further compounded by a cultural emphasis on politeness, harmony, and moral responsibility, which, while fostering respectful environments, can limit the exchange of honest and constructive feedback (29, 30, 36). Indirect communication styles and conflict avoidance, common in such settings, can make open feedback exchanges more difficult and reduce opportunities for meaningful learning conversations.

Overall, the findings suggest that improving resident performance requires a comprehensive and collaborative approach: one that integrates interprofessional communication, progressive clinical entrustment, structured mentorship, administrative preparedness, and culturally informed feedback practices. A shift toward competency-based education, supported by workplace-based assessments and 360-degree feedback, may foster more holistic and equitable evaluations. Institutional reform must also address systemic cultural barriers, particularly hierarchical and indirect communication norms, that inhibit open dialogue and meaningful learning. Building a respectful, inclusive learning environment that encourages continuous feedback and peer engagement is essential for developing competent, collaborative, and resilient residents.

This study has several limitations. The analysis is limited to three stakeholder groups, residents, clinical educators, and allied health practitioners, and does not include other perspectives such as patients, hospital administrators, or policy-makers. Furthermore, the findings are embedded in the cultural and institutional context of Indonesia, which may limit their transferability to other healthcare settings with different values, hierarchies, and educational structures.

Conclusion

This study highlights differing perspectives of allied health practitioners, clinical educators, and residents in assessing resident performance. By identifying key thematic domains, ranging from clinical competence to interprofessional collaboration and mentorship, the findings highlight the need for assessment practices that are inclusive, context-sensitive, and culturally

responsive. Enhancing residents' promotion requires not only robust educational frameworks but also institutional cultures that support open communication, feedback, and professional growth.

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Authors' Contribution

BD.A, ATP.R contributed to Conceptualisation, Methodology; BD.A, I.ARR, A.SA, S.D, ATP.R contributed to Formal analysis; BD.A, Ma, Za contributed to Resources; BD.A contributed to Writing - Original Draft; BD.A, I.ARR, A.SA , S.D, ATP.R contributed to Writing - Review & Editing; BD.A, Ma, Za contributed to Supervision; BD.A, Za contributed to Project administration; BD.A, Ma, Za, S.D contributed to Funding acquisition. All authors contributed to the discussion, read and approved the manuscript, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Conflict of interest

The authors declare no conflicts of interest.

Declaration on the use of AI

Artificial intelligence (GPT-5, ChatGPT) was used for translation support and English language proofreading. All outputs were reviewed and verified by the authors to ensure accuracy and integrity of the content before inclusion in the manuscript.

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