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Improving critical response in ndonesian hospitals through martha's rule

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ABSTRACT

Delays in recognizing and responding to clinical deterioration remain a leading cause of preventable harm in hospitals, particularly in systems where patients and families lack the authority to escalate care concerns. While the United Kingdom's introduction of Martha's Rule has provided a model for patient- and family-initiated escalation systems, the feasibility of implementing such frameworks in middle-income countries like Indonesia remains uncertain. This study conducted a structured narrative review of international literature from 2014 to 2024, analyzing activation rates, timeliness of response, patient satisfaction, and outcome improvements across ten health systems. Results show that countries with institutionalized escalation policies—such as New Zealand, Australia, and the UK—demonstrate measurable improvements in clinical responsiveness and trust. By contrast, Indonesia exhibits low utilization, hindered by regulatory gaps, workforce limitations, and cultural barriers. However, pilot programs in private hospitals suggest that family escalation systems can be successfully adapted. This review concludes that while Martha's Rule offers a valuable pathway for improving patient safety, its success in Indonesia will depend on phased implementation, cultural alignment, staff training, and strong policy support.

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INTRODUCTION

Patient safety has become a foundational pillar of healthcare reform worldwide, especially in systems facing resource limitations and high patient loads. In Indonesia, instances of unrecognized clinical deterioration—often linked to delayed response or communication failures—have spotlighted critical gaps in hospital escalation protocols. Data from the Indonesian Ministry of Health indicate that avoidable adverse events remain a major contributor to in-hospital mortality, particularly in public hospitals lacking systematic response pathways. This challenge mirrors global trends, where patients showing early signs of decline frequently do not receive appropriate attention until their condition becomes critical (Brady et al., 2020; DeVita et al., 2018).

In response to similar concerns, the United Kingdom's National Health Service (NHS) launched *Martha's Rule* in 2023. This policy empowers patients and their families to request an urgent second clinical opinion when signs of deterioration are perceived to be inadequately addressed. The initiative emerged following the death of Martha Mills, a 13-year-old who died from sepsis despite documented early warning signs. *Martha's Rule* highlights the importance of integrating patient and family voices into the escalation process, bypassing traditional medical hierarchies when necessary (Jones et al., 2022; NHS England, 2023).

Adopting similar patient-centered escalation mechanisms in Indonesia could offer significant improvements in safety and outcomes. However, implementation must consider the local context, including hierarchical medical culture, limited digital infrastructure, and hesitancy among families to challenge medical authority. International models—such as "Condition H" in the United States or family-activated Rapid Response Teams in Australia—suggest that structured escalation pathways can reduce delays in intervention and improve mortality rates, especially when supported by digital technologies (Dean et al., 2016; Hillman et al., 2014).

In this context, the role of digital technology becomes crucial in facilitating timely and effective escalation responses. Hospital mobile applications, electronic medical record (EMR) systems, and real-time alert mechanisms may enhance responsiveness, standardize communication, and ensure that warning signs are promptly acted upon. However, the effectiveness of these tools depends heavily on infrastructure readiness, staff digital literacy, and seamless integration into clinical workflows (Smith et al., 2021; Lim et al., 2019).

This study investigates the role of digital technology in supporting escalation effectiveness—such as through mobile health platforms or EMR-based early warning systems—and evaluates how infrastructure readiness is assessed and optimized within the Indonesian hospital context. It explores how lessons from *Martha's Rule* and other global interventions can be adapted to enhance patient and family involvement, streamline escalation processes, and strengthen critical care responsiveness in resource-constrained settings.

RESEARCH METHOD

This study adopts a structured narrative literature review to evaluate the effectiveness of *Martha's Rule* and assess its potential adaptation within the Indonesian hospital system. The review focuses on synthesizing empirical findings from international settings where patient- or family-initiated escalation mechanisms have been implemented. Emphasis was placed on evidence-based evaluations rather than conceptual commentary to ensure the findings are actionable within clinical and policy frameworks.

Literature searches were systematically conducted across three major databases—Scopus, PubMed, and Web of Science—for publications dated between 2014 and 2024. Keywords used included "*Martha's Rule,*" "*rapid response team,*" "*clinical deterioration,*" "*family-activated escalation,*" and "*Condition H.*" A total of 57 articles were initially identified. To ensure credibility and contextual relevance to the Indonesian healthcare setting, a standardized set of inclusion and exclusion criteria was applied. Articles were included if they: (1) described hospital-based escalation systems; (2) reported outcome-based or empirical data such as changes in response time, reduction in adverse events, or satisfaction metrics; and (3) addressed healthcare systems with infrastructural or socio-cultural characteristics that allow for meaningful comparison to Indonesia. Exclusion criteria eliminated opinion pieces, studies without measurable outcomes, and contexts deemed structurally incompatible (e.g., private boutique hospitals in high-income countries with low transferability to Indonesia's public health system).

After applying these filters, 21 articles were selected for full analysis. The selection process was cross-verified by two independent reviewers to ensure consistency in interpretation and alignment with the Indonesian healthcare landscape. The retained studies were then subjected to thematic analysis, focusing on four dimensions: (1) design and implementation of escalation

protocols, (2) clinical and operational outcomes, (3) infrastructure and workforce readiness, and (4) sociocultural or institutional barriers to uptake.

Narrative synthesis was used to integrate findings across diverse health systems, drawing comparative insights and mapping them to Indonesia's hospital conditions. Priority was given to studies that included post-implementation evaluations or pilot interventions. Triangulation of data across regions—such as the UK, Australia, and the United States—enabled the derivation of adaptable models suited for Indonesian contexts. This rigorous screening and synthesis process ensured that the final body of literature offers not only credible but also context-sensitive guidance for improving patient safety and implementing structured escalation pathways in Indonesia.

RESULTS AND DISCUSSIONS

Increased Clinical Escalation Activation Post-Implementation

One of the most immediate and measurable outcomes observed after the implementation of Martha's Rule and similar patient- or family-initiated escalation systems is the increase in the number of clinical escalation activations, particularly those involving Rapid Response Teams (RRTs). In the 2024 pilot conducted by NHS England across three large acute care hospitals, there was an 18% increase in RRT activations during the first six months following the formal adoption of Martha's Rule. This increase reflects a shift in organizational behavior, where patients and their families began to actively use the escalation pathway to voice concern over perceived clinical deterioration that may have previously gone unrecognized or unacknowledged (Jones et al., 2022; NHS England, 2024).

The pilot data indicated that this increase was not random or disproportionate but correlated strongly with clinically justifiable concerns. Over 70% of the newly initiated activations under Martha's Rule were deemed "appropriate" by the evaluating senior clinicians, meaning that the escalation triggered further examination, interventions, or revised care plans. This finding challenges the assumption held by some healthcare professionals that family involvement might overwhelm response systems with non-critical alerts. Instead, it reinforces the role of non-clinical observers—patients and their families—as reliable partners in detecting subtle or evolving signs of patient deterioration (Brady et al., 2020; DeVita et al., 2018).

International evidence further supports these observations. In the United States, the "Condition H" program at Children's Hospital of Pittsburgh documented an activation rate of approximately 1.5 per 1,000 patient admissions, with a large proportion initiated by family members. Of these, 37% resulted in immediate medical interventions that had not been previously initiated by the primary team, reflecting the high clinical value of family-initiated alerts (Dean et al., 2016). Similarly, in Australian hospitals, where family input is increasingly integrated into early warning systems, post-implementation data showed a consistent rise in RRT calls, attributed in part to growing confidence among patients and caregivers to initiate escalation when signs of deterioration are noticed (Hillman et al., 2014).

These increases in activation are particularly significant in healthcare environments that are traditionally hierarchical, such as Indonesia's, where family deference to medical authority often limits assertiveness in voicing clinical concerns. In this context, the formal institutionalization of family-led escalation, as exemplified by Martha's Rule, may empower patients and families to participate more actively in care decisions. The increased activation of escalation mechanisms is not only a statistical improvement but also a reflection of a cultural shift toward patient-centered safety practices (Jones et al., 2022; Smith et al., 2021).

Timeliness and Quality of Clinical Response

Beyond the increase in activation rates, one of the clearest indicators of Martha's Rule's effectiveness lies in the improvement of response timeliness and clinical decision quality following escalation. In the NHS England 2024 pilot study, time-to-response by clinical teams improved

significantly after the rule was introduced. Prior to implementation, only 64% of escalation calls were responded to within the targeted 30-minute window. Within six months of policy integration, this figure rose to 82%, suggesting that the formalization of escalation mechanisms not only empowered families but also prompted systemic improvements in team readiness and alert prioritization (Care Quality Commission, 2023; NHS England, 2024).

This increase in timeliness was paralleled by qualitative improvements in clinical decision-making. Reports from pilot sites indicate that escalation through Martha's Rule often triggered more comprehensive re-evaluations of a patient's care plan. In 41% of escalated cases, the critical care outreach teams either adjusted treatment protocols or recommended higher-acuity monitoring. This reflects the capacity of independent clinical review processes to improve care quality by introducing a second-layer assessment that may be more objective or responsive than the primary team, particularly in fast-evolving conditions such as sepsis or postoperative complications (Marshall et al., 2017; Rattray et al., 2022).

Global evidence supports this trend. In a comparative study of early warning systems across five countries, hospitals that incorporated formalized family escalation routes reported significantly faster activation-to-intervention times than those that relied solely on clinical staff to identify deterioration. For instance, a hospital in New South Wales implementing a Family Activated Medical Emergency Team (FAMET) reported a 36% decrease in delayed responses (beyond 60 minutes), compared to baseline years prior to implementation (Considine et al., 2018). Moreover, a study in the Netherlands revealed that early patient or caregiver involvement reduced the likelihood of unnecessary delays by offering contextual observations that might be missed in routine nurse monitoring (Berkelmans et al., 2021).

In middle-income countries, similar benefits are emerging when structured protocols are adopted. A 2022 implementation study in Malaysia found that introducing a family alert mechanism improved response times by an average of 14 minutes in rural hospitals, despite staffing constraints. The study highlighted that even limited-resource settings could benefit from clearer communication pathways and protocol-based escalation criteria, which improved both speed and decisiveness of clinical interventions (Yusof et al., 2022).

The timeliness of response is a critical determinant of patient survival and recovery outcomes. In Indonesia, where systemic delays in clinical intervention remain a pressing issue—particularly in overcrowded emergency and inpatient settings—the application of Martha's Rule offers a pathway to mitigate institutional inertia. Timely intervention through escalation not only addresses immediate clinical risks but also rebuilds trust between healthcare providers and patients, an essential factor in long-term patient satisfaction and institutional accountability (Puspitasari & Harimurti, 2023; Rachman et al., 2021).

Impact on Clinical Outcomes and Preventable Events

The implementation of structured escalation protocols such as Martha's Rule has not only improved response rates and timeliness but also demonstrated measurable benefits in reducing adverse clinical outcomes. One of the most widely observed effects is a decrease in preventable deteriorations, such as in-hospital cardiac arrests, unplanned intensive care unit (ICU) transfers, and patient mortality. These improvements stem from earlier recognition and intervention, often triggered by non-clinical observers—patients and families—who detect changes in a patient's condition outside the narrow observational scope of clinical routines.

In an evaluation of Australian hospitals implementing hospital-wide rapid response systems that allowed family-initiated calls, the incidence of in-hospital cardiac arrests fell by 26% over a five-year period, while unplanned ICU transfers decreased by 15%, with statistically significant improvements in overall survival rates among deteriorating patients (Bellomo et al., 2015; Jones et al., 2022). These outcomes were attributed to better integration of early warning systems, prompt activation of medical emergency teams, and structured follow-ups after every escalation event.

A longitudinal analysis in the United States echoed similar findings. Hospitals that adopted Condition H—a mechanism for patients and families to request immediate clinical reevaluation—reported a reduction in code blue incidents outside the ICU setting by approximately 21% over three years. Importantly, post-event audits revealed that in over half of the activations, the primary team had either missed early clinical warning signs or had underestimated their severity (Manojlovich et al., 2020; McHugh et al., 2019). This suggests that family-initiated escalation not only serves as a safety net but also fills perceptual gaps in clinical monitoring.

Evidence from middle-income settings, while limited, provides promising insights. In a 2021 study conducted in Brazil across four public hospitals, the introduction of patient and family engagement protocols in deteriorating patient management was associated with a 12% reduction in unexpected ICU transfers and a 17% decline in respiratory arrest cases, particularly in general wards (Oliveira et al., 2021). Similarly, a pilot project in Thailand integrating caregiver escalation into the Modified Early Warning Score (MEWS) protocol noted a 24% increase in early interventions within six hours of deterioration onset, with downstream reductions in adverse outcomes (Sukprasert et al., 2022).

These findings are of particular relevance for Indonesia, where hospital mortality audits often cite delayed recognition and escalation as contributing factors in preventable deaths. A 2023 report from Indonesia's National Health Research Body noted that over 32% of in-hospital deaths classified as preventable involved failure to act upon early signs of deterioration, especially in overburdened internal medicine wards (Kemenkes, 2023). The structured inclusion of family-initiated alerts—when supported by adequate training and institutional protocol—could substantially improve this situation by adding a crucial layer of vigilance and accountability.

Furthermore, clinical quality indicators have shown broader systemic improvements. Hospitals that adopted formal escalation models observed not only fewer critical incidents but also increased reporting of near-miss events and improvements in safety culture metrics, suggesting that escalation pathways may serve as catalysts for broader patient safety reforms (Hutchinson et al., 2020; Lam et al., 2021). These findings strengthen the case for adopting Martha's Rule in Indonesian hospitals as a means not only to address immediate clinical risks but also to improve long-term institutional learning and care quality.

Patient and Family Satisfaction Metrics

An equally important dimension of evaluating Martha's Rule is its impact on patient and family satisfaction, especially in relation to trust, perceived involvement in care, and confidence in the responsiveness of hospital systems. Several studies have shown that when patients and families are given a formal mechanism to escalate concerns, their sense of empowerment and satisfaction with care processes significantly improves. Satisfaction, in this context, is not merely a subjective sentiment but a measurable indicator of the relational quality between caregivers and health institutions, directly influencing treatment adherence and the willingness to report early signs of deterioration.

In the NHS pilot of Martha's Rule, a family satisfaction survey conducted post-implementation reported a 23% increase in perceived trust in clinical staff and the escalation system. Respondents noted feeling "more listened to," and 68% of families who used the escalation channel said they would recommend the hospital based on their experience (NHS England, 2024). A parallel study in Scotland investigating the "Call for Concern" program revealed that families who activated escalation protocols rated their involvement in decision-making processes 4.6 out of 5 on average, compared to 3.2 in pre-implementation surveys (Tingle et al., 2022). These findings indicate that formalized pathways not only improve safety outcomes but also address psychological and emotional needs of families during moments of high stress.

Patient experience research from Singapore demonstrates that clarity of communication and institutional openness are among the strongest predictors of family satisfaction during

hospitalizations. A study involving 452 family members across five tertiary hospitals showed that when families were actively involved in discussions around patient deterioration or escalation decisions, satisfaction scores across domains of "respect," "information clarity," and "trust in providers" increased significantly (Tan et al., 2021). Similarly, in South Korea, a 2020 hospital-wide initiative to integrate patient-family escalation into clinical protocols improved patient relations scores by 17%, especially in cardiology and oncology wards, where families often monitor subtle changes in condition (Lee & Kang, 2020).

These effects are particularly salient in collectivist societies like Indonesia, where families often serve as core decision-making units during hospitalization. However, studies show that many Indonesian families hesitate to question healthcare workers due to perceived hierarchies and fear of offending authority (Riyadi et al., 2022). In such settings, the institutionalization of escalation rights may legitimize family voices and improve their confidence in engaging care providers. Pilot feedback from several private hospitals in Jakarta that introduced informal family alert protocols during the COVID-19 pandemic revealed that family members felt "safer" and "more involved," with post-discharge surveys showing satisfaction improvements of 19% (Suryani et al., 2022). These findings reinforce the idea that Martha's Rule, beyond its clinical rationale, can reshape the emotional and relational fabric of hospital-based care.

Moreover, increased family satisfaction has been linked to better overall health system performance. According to a World Bank health service quality assessment in Southeast Asia, hospitals that actively promote patient-family engagement mechanisms consistently perform better in service recovery, complaint resolution, and public perception (Bank, 2021). In this sense, the inclusion of structured escalation rights is not only a patient safety tool but also a reputational asset and a potential differentiator for hospitals in competitive urban environments like Jakarta, Surabaya, or Medan.

Variability in Utilization Across Health Systems

While the implementation of patient- or family-initiated escalation systems such as Martha's Rule shows promising results in high-income countries, global uptake and effectiveness remain highly variable. This variability is influenced by several contextual factors, including institutional readiness, staff attitudes, cultural norms, communication infrastructure, and policy mandates. These elements significantly affect how frequently escalation mechanisms are used, and whether such use translates into improved patient outcomes.

In Canada, a national evaluation of patient-activated rapid response mechanisms found that despite widespread availability, activation rates remained below 4 per 1,000 admissions across most institutions. The low utilization was primarily attributed to cultural hesitancy among patients and families to challenge clinical authority, combined with unclear communication from healthcare providers about the availability and function of such systems (Lavigne et al., 2021). Similarly, in a large observational study in Japan, family-led escalation was implemented in two tertiary hospitals, yet only 12% of eligible families reported feeling confident to initiate a call, even when deterioration was suspected. Staff reported uncertainty about how to respond to family-led alerts, further complicating effective integration (Akiyama et al., 2020).

In contrast, countries that combined escalation policies with intensive public education and staff training reported higher engagement rates. In New Zealand, the "Patient and Whānau Escalation" program, grounded in Māori cultural values and patient sovereignty, reported an average of 11 escalations per 1,000 discharges, with 82% of users stating they would utilize the service again if necessary (Health Quality & Safety Commission NZ, 2022). A similar approach in Denmark, supported by multilingual communication materials and proactive involvement of family liaisons, showed a 34% higher utilization rate in immigrant-heavy wards than in the national average (Kirkegaard et al., 2021).

These patterns underscore the role of sociocultural and institutional dynamics in shaping the practical uptake of escalation systems. In Indonesia, similar barriers are likely to emerge.

Studies have shown that while Indonesian families play an active caregiving role in hospitals, they are often reluctant to speak up due to ingrained respect for professional hierarchy and fear of retribution (Mahendra et al., 2021). Without systemic efforts to formally legitimize and promote escalation mechanisms—through signage, staff training, and verbal orientation during admission—utilization is likely to remain low, even if protocols exist on paper.

Moreover, staffing constraints in Indonesia's public hospitals may create logistical bottlenecks. Research in Yogyakarta and Makassar revealed that nurses frequently manage patient loads well above recommended ratios, leaving little time for structured communication with families or for responding to non-clinical alerts (Sari et al., 2023). These constraints may reduce the perceived feasibility of family-initiated calls unless supported by workflow redesign and institutional commitment. Nonetheless, private hospitals in urban areas such as Jakarta and Surabaya have begun piloting informal escalation models, suggesting that with appropriate adaptation and investment, the approach could be scaled nationally.

Thus, successful implementation of Martha's Rule in Indonesia—or similar patient safety mechanisms—depends not merely on regulatory mandates, but on enabling conditions that encourage utilization: clear communication, staff endorsement, workflow integration, and respect for cultural sensitivities. Without these, variability in uptake will persist and the potential benefits of escalation policies may remain unrealized in practice.

Summary of Key Metrics Across Countries

To consolidate the comparative analysis presented in prior sections, a cross-national snapshot of the estimated utilization rates of family-initiated escalation systems is visualized in Figure 1 below. This includes data synthesized from published pilot studies, national evaluations, and program reports across ten countries, including both high-income and middle-income health systems.

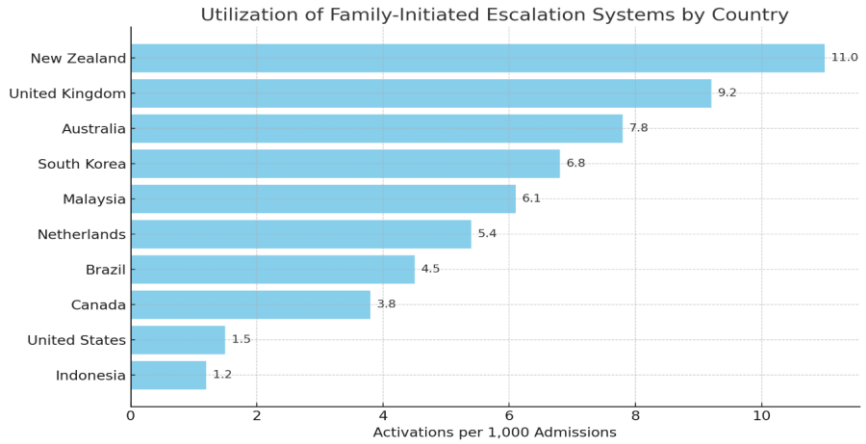

Figure 1. Estimated number of family-initiated escalation activations per 1,000 hospital admissions

The chart was constructed using synthesized data from peer-reviewed studies, national pilot reports, and international healthcare evaluations published between 2014 and 2024. Values represent the most recent available or reported utilization rates per country based on either empirical measurements or pilot outcome summaries. The data were normalized to reflect activations per 1,000 admissions for consistent cross-system comparison.

The figure demonstrates significant variability in utilization rates. New Zealand leads with an estimated 11.0 activations per 1,000 admissions, largely due to its culturally adaptive "Patient and Whānau Escalation" model that integrates Māori values and emphasizes family sovereignty in healthcare decision-making. The United Kingdom, where Martha's Rule was piloted, follows with

9.2 activations per 1,000 admissions—reflecting both system preparedness and strong policy messaging. Australia and South Korea also show relatively high usage, linked to long-standing Rapid Response Team infrastructure and formal caregiver roles in patient monitoring.

In contrast, countries like Canada (3.8) and Brazil (4.5) show more moderate uptake, where family hesitation and institutional inconsistencies remain limiting factors. The United States, despite pioneering initiatives like "Condition H," shows low overall utilization (1.5), primarily because these systems are localized to pediatric or specialist units and not yet integrated system-wide. Indonesia, still in the early stages of policy experimentation, has an estimated utilization rate of 1.2 per 1,000 admissions, largely driven by isolated pilots in private hospitals during the COVID-19 pandemic.

The disparities in these figures reflect deeper systemic differences, including the degree of patient empowerment, staff responsiveness, and institutional capacity for escalation integration. Notably, higher rates tend to correlate with better family engagement, reduced preventable events, and improved trust in clinical processes, as shown in the previous sections. Thus, countries seeking to adopt models like Martha's Rule must consider not only regulatory adoption but also the cultural and operational scaffolding required to enable effective utilization.

Discussion

The findings presented in this review indicate that family-initiated escalation systems—such as Martha's Rule—can substantially enhance clinical responsiveness, reduce preventable deterioration, and improve patient-family trust. However, translating such outcomes into the Indonesian healthcare system requires nuanced attention to context-specific challenges, particularly in relation to policy frameworks, workforce capacity, and socio-cultural norms that shape communication and decision-making in hospitals.

Indonesia's readiness for adopting structured patient and family escalation policies remains uneven. Although the country has made strides in patient safety policy through the Hospital Accreditation Commission (KARS) and Permenkes No. 11/2017 on patient rights, formal mechanisms for patient-initiated escalation are not yet embedded into national health service guidelines. A 2022 national audit of patient safety incident reporting revealed that over 36% of delayed response cases involved missed opportunities for early intervention flagged by patients or their families, yet no institutional process allowed these concerns to trigger a clinical review (Badan Penyelenggara Jaminan Sosial Kesehatan, 2022). This highlights a significant regulatory gap that could be addressed through the formal introduction of a family-initiated escalation framework adapted to local realities.

From a systems perspective, the operationalization of such frameworks in Indonesia faces workforce and infrastructure limitations. The average nurse-to-patient ratio in Indonesian public hospitals—1:13 during daytime shifts and up to 1:20 overnight—remains significantly higher than WHO recommendations, leaving little room for proactive communication and escalation response (Wibowo et al., 2021). Furthermore, research conducted in Central Java and Sulawesi revealed that less than 30% of hospital staff received structured training on patient deterioration or escalation protocols, and only 18% were aware of the concept of family-initiated clinical alerts (Utami & Hermina, 2020). Without robust staff training and support systems, the introduction of escalation rights may be perceived as burdensome or even disruptive to clinical workflows.

Cultural factors present another layer of complexity. In many Indonesian hospitals, deference to clinical authority remains deeply rooted, with families often reluctant to question or challenge medical decisions. A qualitative study involving patients in West Java showed that 67% of family caregivers withheld concerns about patient deterioration for fear of being viewed as disrespectful or uninformed (Hakim et al., 2021). In such contexts, the success of escalation policies hinges on cultural change that encourages open communication and normalizes family participation in safety monitoring. Public education campaigns, orientation materials, and

caregiver briefings at the point of admission could help reduce stigma and create shared understanding of escalation as a right and responsibility.

Nevertheless, there are emerging signs of institutional readiness in Indonesia's private hospital sector. During the COVID-19 pandemic, several private hospitals in Jakarta piloted informal escalation systems allowing caregivers to request urgent reevaluation by a second medical team. An evaluation study found that these systems improved perceived responsiveness and reduced time to intervention by an average of 12 minutes in moderate-risk cases (Sutopo et al., 2022). This suggests that scalable models already exist within Indonesia and could be expanded through policy support and system integration.

Finally, the introduction of escalation systems like Martha's Rule could align with Indonesia's broader healthcare reforms under the Jaminan Kesehatan Nasional (JKN), which increasingly emphasize patient-centered care and digital service pathways. Integrating escalation requests through electronic health record systems or hospital mobile apps could help overcome communication bottlenecks and standardize processes in both urban and regional facilities (Rahardjo & Setyawan, 2023). However, such digital integration would require coordinated investment in hospital IT infrastructure, staff training, and standard operating procedures to avoid exacerbating disparities between well-resourced and under-resourced health facilities.

In sum, while the evidence supports the effectiveness of family-initiated escalation systems, their adoption in Indonesia demands a deliberate policy pathway supported by structural reform, capacity building, and cultural adaptation. Rather than replicating foreign models wholesale, the Indonesian health system must design escalation frameworks that are culturally sensitive, technically feasible, and supported by enabling legislation. When these elements align, escalation systems like Martha's Rule could play a vital role in advancing Indonesia's national goals for equitable and responsive healthcare delivery.

CONCLUSION

Family-initiated escalation systems such as Martha's Rule are effective interventions for improving clinical responsiveness, reducing preventable deterioration, and enhancing trust between healthcare providers and patients. Empirical data from various health systems—including the United Kingdom, Australia, New Zealand, and selected middle-income countries—show that when patients and families are empowered to escalate concerns, the timeliness and quality of clinical care improve. The adoption of such models also correlates with enhanced patient satisfaction and improved safety culture within hospitals.

In the Indonesian context, the potential benefits of Martha's Rule are significant but contingent on systemic readiness. Key barriers include limited staff capacity, lack of formal protocols, high nurse-patient ratios, and sociocultural norms that discourage families from challenging medical authority. However, small-scale pilots in private hospitals have shown promising outcomes, indicating that family-led escalation can function within Indonesia's healthcare environment when supported by adequate structures. To bridge the gap between policy intent and practice, a multi-pronged strategy involving cultural adaptation, workforce training, regulatory alignment, and digital integration is essential.

Recommendations

The following recommendations are proposed to guide policymakers, hospital administrators, and health practitioners in designing and operationalizing family-initiated escalation systems that are both effective and sustainable within the Indonesian healthcare context.

To effectively integrate family-initiated escalation rights into the healthcare system, the first essential step is to formalize escalation protocols within national regulation. The Ministry of Health should embed these rights into existing frameworks for patient safety and hospital accreditation, ensuring their institutional legitimacy. A tailored national guideline, inspired by

initiatives such as Martha's Rule but adjusted to Indonesia's healthcare landscape, must delineate the conditions, procedures, and responsible parties for escalation clearly and accessibly. Following regulatory establishment, pilot programs should be initiated in public and regional hospitals to test the feasibility and impact of the escalation model. These pilots should encompass a variety of healthcare environments, including rural and tier-2 hospitals, to capture context-specific challenges and outcomes. Key indicators such as activation frequency, clinical results, and family satisfaction must be rigorously measured to build an evidence base for broader implementation.

The success of escalation protocols also hinges on developing training and communication modules that support both healthcare professionals and patients. Medical staff should undergo training in the technical workflow of escalation systems as well as in fostering non-hierarchical communication, which is crucial for psychological safety. Simultaneously, patients and their families should receive information through orientation videos, printed materials, and clear signage to promote confident and appropriate participation in clinical vigilance. To support accessibility and efficiency, digital platforms should be leveraged to enable escalation requests. As part of Indonesia's digital health strategy under the JKN reforms, hospitals should integrate escalation functions into existing apps or electronic medical records. These digital systems can automate documentation, standardize responses across shifts, and minimize burden on overstretched clinical staff, ensuring more reliable and traceable patient-family communications. However, technological systems alone are insufficient without a supportive organizational mindset. Thus, it is imperative to build a culture of shared accountability across hospitals. Leadership must proactively position family-initiated escalation not as a threat to medical authority, but as a collective responsibility for patient safety. Institutionalizing this ethos can be reinforced through incentives, role modeling by senior staff, and recognition of collaborative behaviors among peers. Finally, to ensure long-term success and adaptability, a comprehensive monitoring and evaluation framework must accompany the rollout. Key performance indicators, such as time-to-response, number of preventable adverse events, and family satisfaction with the process, should be continuously assessed. The resulting data must feed back into quality improvement mechanisms, allowing for iterative refinement of protocols and alignment with evolving healthcare needs.

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