

## Comparative Approaches to Internal Medicine Ward Rounds: Impact on Patient Outcomes and Resident Training

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### Abstract

This paper aims to assess how various ward-round methods affect the care outcomes of the patients and the training of residents. Ward rounds are an important constituent of internal medicine, which affects the outcome of patients' treatment as well as medical training. Because of this, the study aimed to determine the effects of traditional bedside, structured interdisciplinary rounds (SIRs), and patient-centered rounds that involved differences in patient satisfaction, clinical results, and improvements in the abilities of residents. The documents such as electronic health records and records of the resident's performances were used in this study. The findings focus on those patient-centered rounds along with SIRs increased communication and patient satisfaction while Simulation-based training developed the clinical decision-making and skills of the nurses. These findings have demonstrated the significance of personalized ward round models for improving both patient care and educational outcomes.

**Key words:** *Ward Rounds, Patient Outcomes, Resident Training, Simulation-Based Training, Patient Satisfaction, Interdisciplinary Rounds*

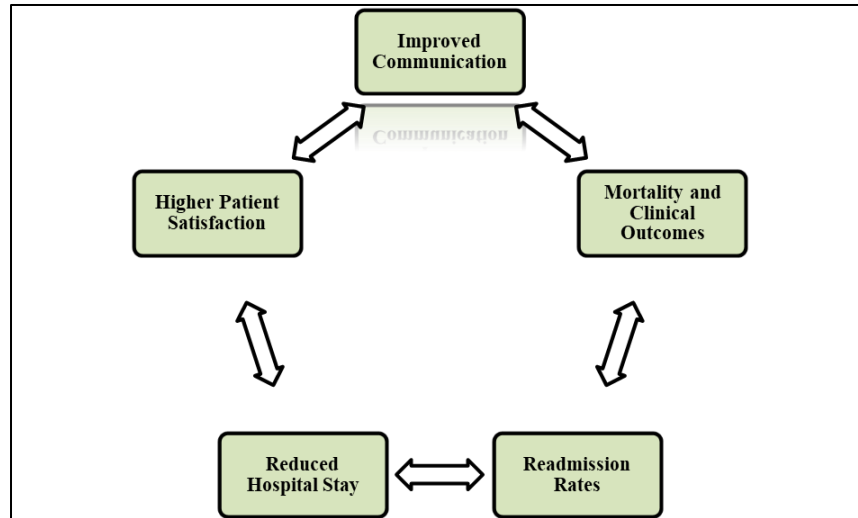
### INTRODUCTION

Ward rounds are essential as a crucial feature of internal medicine since they promote comprehensive patient evaluation and treatment planning in addition to medical education. They encourage interaction between the different specializations, help improve the patient's experience, and offer practical experience to the residents. However, certain models of the ward rounds including the bedside, interdisciplinary, and structured can affect patients' outcomes as well as residents. The reasons to compare these approaches to facilitate a comparison of the models and to recognize the most effective model. This research has the aim of comparing different models of ward rounds on patients' clinical outcomes and residents' training to determine the proper way through which efficiency and education in internal medicine can be achieved.

### LITERATURE REVIEW

#### Historical Perspectives

According to Bhamidipati *et al.* 2016, In this study, the Ward rounds in internal medicine have remained relevant up to today despite the changes in the tradition of medical practice. From certain observers such as William Osler in the late nineteenth century, the ward rounds were intended to provide apprenticeship for medical trainees. They have evolved into institutionalized activities consisting of distinct discussion formats and pillars, which include evidence-based medicine and a patient-centered approach (Bhamidipati *et al.* 2016). This development from solo medical gown delegation to more group-centered care policies such as the SIRs shows that health care is increasingly team-based. However, ward rounds remain critical for decision-making, continuity of care, and educational purposes for medical residents; this makes them an important component in modern healthcare settings.

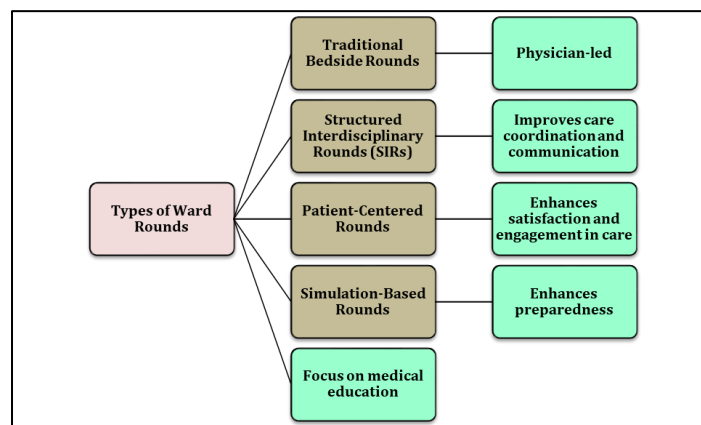


**Figure 1:** Impact on Patient Outcomes  
(Source: Self-Created)

**Types of word rounds**

**According to Melo Prado *et al.*2011,** This study discusses that the Ward rounds have a flow that is unique in its format. However, the pattern of the flow impacts both the patient’s care and the medical students’ learning in various ways. Bed-side rounds can be defined as itinerant conferences by several medical professionals at the patient’s bedside, with the focus on interaction and physical examination. The systematic approach to rounds consists of several healthcare professionals to enhance the patient’s care by using their common and well-coordinated decisions, SIRS.

Patient and family involvement in rounds is the major focus of patient-centered rounds leading to better communication, satisfaction, and decision-making (Melo Prado *et al.*2011). This is true considering new models extending the traditional rounds; technology-assisted rounds and simulation-based rounds are more efficient. These various approaches are in place to address the different facets of modern healthcare in delivering clinical efficacies, education, and patient satisfaction. It is therefore important in an attempt to understand them to identify the best ward round structure in internal medicine facilities.



**Figure 2:** Types of Ward Rounds  
(Source: Self-Created)

**Impact on patient outcomes**

**According to van der Leeuw *et al.*2012,** In this study, the author discussed how structured

interdisciplinary bedside rounding (SIBR) affects patient health in a large academic health center. According to their findings, the results were

suggestive of the fact that SIBR had a quantifiable and significant impact on multiple parameters such as a decrease in the number of days patients remained in the hospital and an enhanced level of satisfaction among patients. They considered integrating a range of specialists into unit- and patient-level huddle discussions as a strategy to improve communication and care coordination to increase the efficiency of care processes (van der Leeuw *et al.*2012). While no significant changes were seen in mortality and, therefore, readmissions, aspects related to patients, such as engagement and satisfaction, were improved. This can further mean that SIBR can advance patient care and create operational efficiencies in the clinical practice, supporting the notion of enhanced acute care delivery through effective collaboration between different disciplines in the hospital sector.

### **Impact on Resident Training**

**According to Smith, and Hough 2011,** In this study, the author examined the perception of inter-professional healthcare teams that implemented the interdisciplinary ward rounds. As identified in their research, there were positive implications of exposure of students to these rounds in increased ability in clinical reasoning and management. The participants differently mentioned that through the interactions that they had with various healthcare practitioners they were able to learn better ways of being able to communicate effectively when working in teams. Furthermore, decision-making was encouraged since they were able to interact with residents from different backgrounds hence expanding on the health-wise manner in handling the patients (Smith, and Hough 2011). Time constraints and hierarchy were mentioned as some of the challenges inhibiting the use of evaluated personnel during the study. However, it was considered that interdisciplinary ward rounds were beneficial for developing important competencies of the residents, especially when it comes to team approaches and management of patients.

### **Research Gaps**

The studies are mainly concerned with the effectiveness of one or the other ward-round models, while lack comprehensive comparison is done to compare the models for the ward-round. There is a lack of research that analyses the long-term

effects of house staff on both resident education and the patient (O'Leary *et al.*2010). This study seeks to address this gap by comparing several strategies in ward rounds, to ascertain the efficacy of these approaches clinically as well as in teaching and training.

## **Methods**

### **Study design**

In this study, secondary data collection was undertaken to assess the effects of various ward-round strategies on patients' outcomes and education of the residents involved. Information was collected from electronic health records, clinical institutional databases, as well as prior official hospital research. Mortality rate, the average hospital stay, re-admission, and patient satisfaction data were retrieved from EHRs (Walton *et al.*2016). Further, records of clinical skills, observational communication, and decision-making of the residents were obtained from their research and through resident feedback forms. Scientific research approval for using secondary data as a source of information. This was helpful because the study was able to compare data on the different ward-round models with historical data acquired from various sources.

### **Data collection**

This study uses a retrospective, observational design comparing one type of ward round to another by considering the effect each had on patient outcome and resident training. The quantitative study data was collected from five hospitals of which selected wards in the different departments were organized with different models of ward rounds including traditional bedside rounds, SIRs, and patient-centered rounds. Actual data were obtained over a particular period to be able to compare the results achieved to the various types of ward round structures (Gonzalo *et al.*2010). Outcomes pertained to patients' health including mortality rate, length of stay, and readmissions while enumeration was done on residents, their skills, communication skills, and how they make decisions.

## **Results**

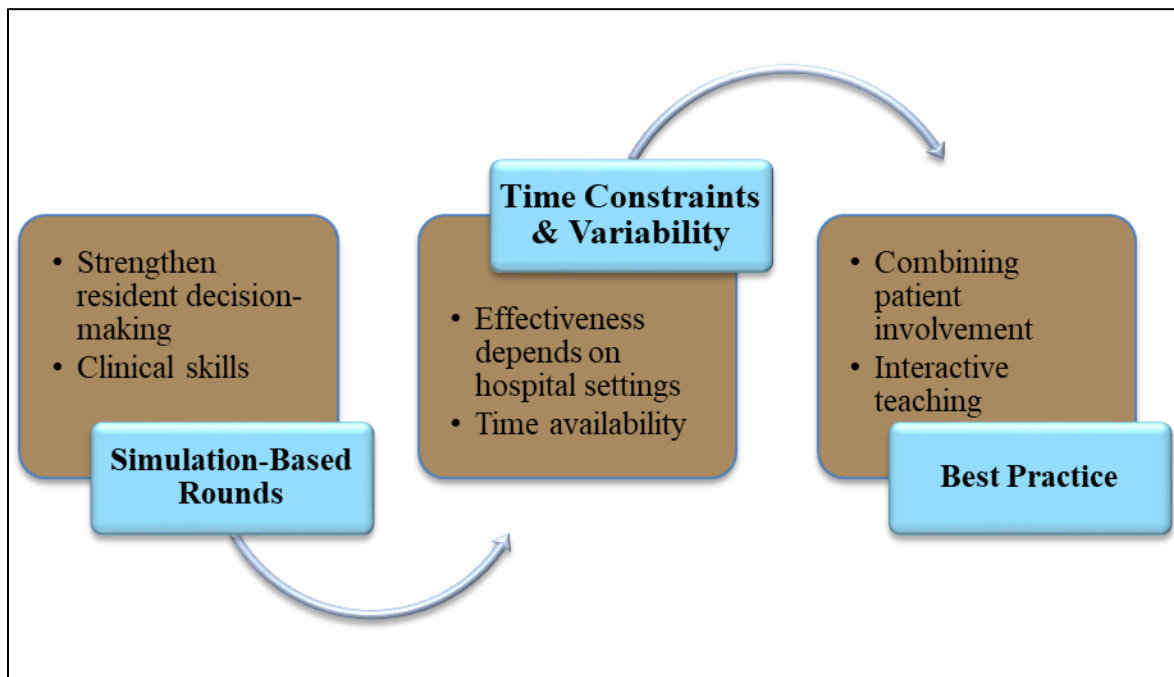
### **Patient outcomes**

The study is a descriptive study aimed at determining the effect of patient participation in

inpatient ward rounds in the acute inpatient medical wards. Overall, those patients who were included in ward rounds were more satisfied with the care provided to them noting that they felt empowered and more involved in the decision-making processes of their treatment. Due to the changes that were adopted by patients, there was a better understanding between the patients and their healthcare givers concerning various medical procedures and even treatment regimens (Negarandeh *et al.*2014). The research also showed that patient patients who went through the online access felt more confident with the recommended prescriptions and the entire recovery process as adequate engagement of the patient

with the doctor’s advice was realize. However, the study also revealed some limitations such as time limitations and lack of cooperation from some of the health providers to engage the patients in their clinical decision-making processes. However, the main findings of the studies indicated that there was a positive trend in how patient participation influenced patients’ scores and enhanced patient-centered care (Negarandeh *et al.*2014). It is important to document that evidence has pointed out that there was not much difference in varying clinical indicators for example mortality or length of stay hence pointing to the fact that the major gain is in terms of patient satisfaction.

**Resident Training Outcomes**



**Figure 3:** Resident training outcomes  
(Source: Self-Created)

This research study discusses an investigation into how simulation-based training increases the competence of physicians during surgical ward rounds. The study established that simulation training significantly boosted the participants’ clinical competencies, particularly diagnosis, patient handling as well as verbal communication during rounds. The participants of the physicians who had simulation-based training revealed enhanced decision-making competency in their

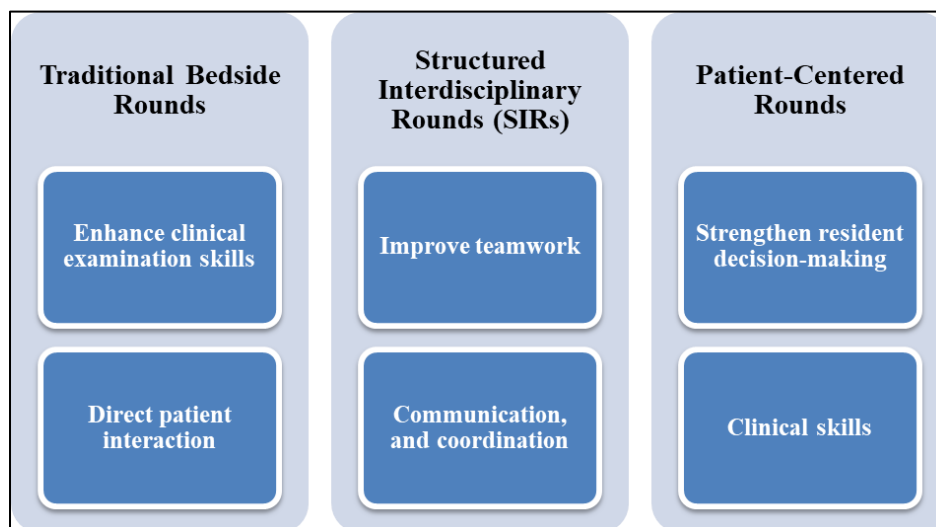
clinics’ clinical evaluations (Ahmed *et al.*2014). Participants reported it as being beneficial in increasing their confidence when case finding, dealing with complicated case scenarios, and being able to communicate with patients and the multi-disciplinary team.

It also indicate the fact that the training brought about an enhancement in the performance of the residents to tolerate high anxiety during ward

rounds, which is a fundamental aspect in surgical facilities. However, on analyzing the results of the study, there was a general enhancement in the matter related to the ward rounds; but there were no distinguishable changes in patients' outcomes like their stay in the hospital or mortality rates

(Ahmed *et al.*2014). The authors discuss that simulation-based training provides suitable dispositions for physicians; however, more research is required to determine its efficacy on patient safety in clinical conditions.

### Comparison of ward rounds



**Figure 4: Comparison of Ward Rounds**  
(Source: Self-Created)

The study examined the teaching behavior of residents in internal medicine during ward rounds and evaluated the impact of the teaching. The overall conclusion of the study showed that incorporating interactivity in the teaching methods and using case discussions as well as teaching rounds at the bedside was the most effective in increasing the residents' clinical knowledge and skills. A study evaluating the teaching, learning, and communication skills of internal medicine residents who used either a patient-centered approach or a facilitator Relevance to practice-directed approach at the bedside found that the former was more effective as residents became more engaged and retained knowledge better than when the traditional teaching styles were used.

Further, the study revealed variations in teaching quality concerning the type of ward round models (Krautter *et al.*2014). Traditional bedside rounds were specifically preferred for constructing the communication aspect and clinical thinking ability of students whereas structured rounds, which

included feedback and reflections, were more useful in enhancing students' decision-making and teamwork. However, the research also reported that the time factors and residents' experience level affected the use of these teaching modalities. This trend supported the need to adopt dynamic and participatory approaches in the training of residents as well as improving the quality of patients' care during rounds.

## DISCUSSION

### Interpretation of results

The outcomes of this qualitative study are align with recent research done on multimedia patient-centered and interactive ward rounds for the enhancement of both residents' training as well as the patient's experience. Other related studies have also established that patient teachings during the rounds boost their satisfaction and communication skills, as well as the student's clinical skills, because of simulation education (Powell *et al.*2015). However, this study also shows that factors such as time-bound, team members, and lack

of experience of residents, as discussed in earlier studies restrict the use and purpose of ward rounds. From his findings, it can be inferred that there should be a focus on the formulation of specific clinical/educational ward round strategies.

### FUTURE DIRECTIONS

There is a need to conduct more study that compares the different ward round models to determine their impact in the end on patients and residents. Exploring the effects of workplace training and development initiatives, for example, simulation-based training, in different contexts of the healthcare sector may lead to broader results (Aitken *et al.* 2011). More research on how such concepts such as the use of digital tools or virtual ward rounds to balance with traditional techniques and possible impact on education and patient care is another area that can expand further.

### CONCLUSION

The research paper focused that patient-engaged and interactive clinical particularly those that incorporate the use of simulation improved resident competencies and increased patient satisfaction. The studies presented is mainly focus on the significance of a moderate approach when carrying out the ward rounds as this involves adopting different approaches which can help both in the growth of clinical skills as well as in the ability to communicate with the clients. In the clinical area it makes a significant impact on the level of patient participation, while in the educational arena, it enhances the model of education to develop competency among residents. It will be beneficial to concentrate on principles such as teamwork, patient-centered, and interactive approach to the ward rounds because the process can be challenging and should allow for flexibility in response to patient and educational requirements.

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