



### REVIEWER'S REPORT

**Manuscript No.: IJAR- 57918**

**Title: Rate of Venous Thromboembolism Risk Assessment and Caloric Requirement Calculation in Patients within 24-Hours after Admission at a Tertiary Care Hospital of Maldives.**

**Recommendation:**

Accept after minor revision

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality			✓	
Clarity			✓	
Significance	✓			

**Reviewer Name: Dr.Bilquees Hamza**

### *Detailed Reviewer's Report*

The manuscript addresses a highly relevant, practical, and cross-disciplinary domain of hospital medicine: the systematic implementation of safety and nutritional screening protocols within acute care settings. Specifically, the study investigates the compliance rates of clinical staff regarding two major pillars of inpatient preventative care: venous thromboembolism risk assessment and initial daily caloric requirement calculations within the first twenty-four hours of hospital admission. Hospital-acquired venous thromboembolism remains one of the leading causes of preventable in-hospital morbidity and mortality worldwide, often occurring silently due to immobilization, surgical trauma, or acute systemic inflammation. Concurrently, hospital-associated malnutrition is a well-documented driver of delayed wound healing, increased infection rates, prolonged mechanical ventilation dependency, and elevated readmission rates.

By pairing these two distinct clinical safety markers into a single quality improvement project, the authors highlight how standardized admission checklists can simultaneously address distinct physiological vulnerabilities. The geographic setting of the study—a public tertiary care facility in Addu Equatorial Hospital, Maldives—adds significant value to the literature, offering localized insights into clinical governance and protocol adherence within an island nation's healthcare infrastructure.

Methodologically, the study is framed as a classic two-phase clinical audit and quality improvement initiative incorporating a structured pre-intervention baseline audit, a targeted intervention phase, and a

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post-intervention re-audit to measure compliance shifts. The temporal window for the project ran from March 2, 2026, to May 10, 2026, representing a compact timeline suitable for a rapid-cycle quality improvement loop. The intervention strategy was appropriately multifaceted, utilizing a combination of dedicated clinical staff education, the physical distribution of pocket guides outlining standardized risk scoring models, and the deployment of structured clinical reminders placed within admission charts.

The baseline audit exposed a profound gap in initial care, revealing that venous thromboembolism screening was performed in only 6.7% of the sampled admission files, while formal nutritional caloric calculations were completely absent at 0% compliance. Following the five-week intervention period, the re-audit demonstrated exceptional statistical improvement, with thromboembolism risk screening rising to 86.7% and caloric requirement calculations increasing to 66.7%. The data processing was managed using appropriate statistical testing for categorical pre-and-post-compliance shifts, providing a clear mathematical validation of the project's short-term success.

The central thesis of the manuscript is grounded in modern clinical governance theory, arguing that passive guidelines are inherently insufficient to change baseline clinician behavior without active, structured, and system-level reminders embedded directly into daily workflows. The authors demonstrate that the initial near-total failure to assess thromboembolism risk and calculate nutritional targets was not due to a lack of medical knowledge among the staff, but rather the result of a fragmented admission process that lacked accountability and standardized documentation tools.

By introducing physical pocket guides and chart reminders, the intervention successfully lowered the cognitive burden on admitting physicians and nurses, transforming an easily forgotten task into a mandatory step of the administrative admission sequence. The paper argues that sustained improvements in hospital-wide safety metrics require moving away from ad-hoc individual diligence toward highly structured, institutionalized operational pathways that force compliance at the point of patient entry.

**In-Depth Recommendations for Manuscript Improvement****Standardizing the Scoring Tools and Nutritional Equations**

The primary recommendation to elevate the manuscript's scientific rigor requires the explicit naming and standardization of the clinical tools utilized during the project. The current draft notes that risk assessments and caloric calculations were completed, but it fails to specify the exact algorithms or equations the clinicians were instructed to use. For the venous thromboembolism portion, the authors must clarify whether the intervention deployed the Caprini Risk Assessment Model, the Padua Prediction Score, or Geneva risk criteria. Different scoring systems utilize vastly different risk stratification cutoffs,

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which directly dictate whether a patient receives pharmacological or mechanical prophylaxis. Similarly, regarding the nutritional calculations, the text must state whether staff utilized the Harris-Benedict equation, the Mifflin-St Jeor formula, or simplified weight-based equations such as twenty-five kilocalories per kilogram per day. Providing these precise details is critical to allow international readers to replicate the quality improvement protocol in their own institutions.

### **Discussing the Clinical Relevance of Prophylaxis and Nutritional Interventions**

While the results section documents a impressive increase in chart compliance percentages, the paper experiences an analytical drop by focusing almost entirely on the administrative act of checking boxes, rather than evaluating actual clinical outcomes. To turn this into a truly impactful medical paper, the authors must expand the discussion section to address what happened *after* the forms were filled out. The manuscript should discuss whether the increased completion of thromboembolism risk sheets led to an appropriate rise in the prescribing rates of low-molecular-weight heparin or sequential compression devices. Furthermore, the authors should comment on whether the calculation of caloric targets resulted in timely nutritional interventions, such as early enteral feeding initiation or personalized dietary adjustments for malnourished patients. Connecting document compliance to actual therapeutic actions will bridge the gap between administrative auditing and bedside patient care.

### **Addressing Long-Term Sustainability and Electronic Record Transitions**

A major limitation of the current study design is its short duration, tracking post-intervention compliance immediately after a highly visible educational campaign. In quality improvement literature, it is well known that compliance rates frequently decay over time as the initial enthusiasm of a project fades and staff revert to baseline habits. The authors should incorporate a paragraph in the discussion that critically evaluates the long-term sustainability of their intervention at Addu Equatorial Hospital. They should propose strategies to prevent compliance decay, such as appointing permanent nurse-led auditing champions or establishing monthly feedback loops where performance metrics are shared with department heads. Crucially, given that the intervention relied on paper chart reminders, the authors should discuss how these protocols can be permanently digitized and integrated into electronic health records via mandatory, hard-stop drop-down menus that prevent an admission file from being closed until the risk metrics are entered.

### **Expanding the Critique of Sample Size and Localized Barriers**

The methodology reveals that the project evaluated a relatively small number of admission charts during the audit phases. The authors need to explicitly address the limitations associated with this small sample size, acknowledging how it might amplify or distort compliance percentages and restrict the generalizability of the findings across different shifts or medical specialties. Additionally, the paper

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would benefit from a more detailed description of the localized institutional barriers encountered during the intervention phase. The text should explore specific human resource challenges, such as chronic nursing shortages, rapid staff turnover, or language barriers among multinational clinical teams, which may explain why caloric calculations lagged behind thromboembolism screenings in the post-intervention phase.

#### **Standardizing Reference Metadata and Complete Bibliographic Details**

A meticulous typographical audit of the concluding reference bibliography reveals formatting omissions and incomplete citations across multiple entries. For example, citation 15 and citation 18 are missing essential metadata components, including specific digital object identifiers, volume indices, issue designations, or complete page ranges. The authors must thoroughly review the entire bibliography to ensure that every single cited source is uniform and conforms perfectly to a single, standardized international medical style sheet, such as Vancouver or AMA. This uniformity is an absolute requirement for the paper to be indexed properly in major biomedical databases like PubMed or Scopus.

#### **Eradicating Typographical Anomalies and Processing Remnants**

The draft copy contains a few minor processing anomalies and layout artifacts generated during the document compilation process. Notable examples include an isolated, unanchored two-letter text marker left in the margin on page 1, compressed line spacing across major transition zones, and minor alignment shifts directly preceding the bibliography. Manually resolving these formatting issues is necessary to ensure the manuscript possesses the flawless visual and typographic appearance required for formal peer-reviewed publication.

#### **Editorial Recommendation**

This manuscript is recommended for **publication with minor revisions**. The authors have delivered a highly practical, methodologically clear, and clinically valuable quality improvement project that addresses two vital aspects of inpatient safety. By demonstrating that a low-cost intervention combining targeted staff education with structural chart reminders can drastically improve compliance metrics in a tertiary care setting, this work provides an actionable template for hospital administrators across developing healthcare networks.

The underlying logic of the audit cycle is sound, the statistical shifts are highly compelling, and the focus on clinical governance is appropriate. Once the authors explicitly define the scoring models and mathematical equations used, expand the discussion to address protocol sustainability and electronic health record integration, and clean up the incomplete bibliographic metadata, this manuscript will be an excellent and highly practical addition to the journal's clinical management portfolio.