# ICU PHYSICIANS' ATTITUDES, BARRIERS, AND PREFERENCES FOR CLINICAL DECISION SUPPORT SYSTEM IMPLEMENTATION: A CROSS-SECTIONAL SURVEY FROM A TERTIARY CARE CENTER IN BANGLADESH

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**Background:** Clinical decision support systems (CDSS) hold promise for improving guideline adherence and reducing errors in resource-constrained intensive care units (ICUs), yet physician acceptance remains critical for success. This study independently assessed ICU physicians' attitudes, barriers, and preferences toward clinical guidelines to inform locally relevant CDSS development at Dhaka Medical College Hospital (DMCH). **Methods:** The cross-sectional survey (December 2024–January 2025) purposively sampled 40 ICU physicians (mean age 33.6 years; residents 30%, specialists/intensivists 30%) using a structured, validated questionnaire with 5-point Likert scales. Domains included guideline attitudes, implementation barriers, format preferences, and CDSS readiness. Descriptive statistics (means, standard deviations, frequencies) characterized responses; correlations assessed barrier-readiness relationships ($p<0.05$) using R for data analysis. **Results:** Among 40 ICU physicians, readiness for CDSS adoption was high (mean score 4.24±0.41/5.0), with 90% agreeing guidelines improve care quality and reduce errors; top barriers included lengthy guidelines (n=11, 27.5%), lack of rapid access (n=11, 28%), and time pressure (n=9, 22%), while format preferences favoured web-based systems (n=16, 40%) and flowcharts/algorithms (n=24, 60%) for priority scenarios like sepsis (n=32, 80%) and mechanical ventilation (n=28, 70%); experience showed 52.5% (n=21) had guideline training versus 22.5% (n=9) prior CDSS exposure, with barriers-readiness correlation r=-0.12 (p=0.46). **Conclusion:** Bangladeshi ICU physicians embrace CDSS but need fast, flowchart-driven tools that bypass access delays and lengthy formats. Prioritizing sepsis and ventilation pathways in web format will drive guideline adherence gains proven in similar resource-limited settings.

**Keywords:** Clinical decision support systems (CDSS), Intensive care unit (ICU), Guideline adherence

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