



Handoff Protocol Fidelity

Characteristics of Adherence to Standardized Protocols in OR-to-ICU Handoffs

Patient care handoffs are a critical transition point. Evidence suggests that standardized protocols during handoffs improve communication, teamwork, professionalism, and even patient outcomes. But the factors underpinning adherence to standardized handoff protocols are not well specified, which hampers efforts to implement standardized practices.

A study featured in the August 2023 issue of *The Joint Commission Journal on Quality and Patient Safety (JQPS)* studied operating room (OR)-to-intensive care unit (ICU) handoff standardization to identify contextual factors associated with handoff protocol fidelity.







THE STUDY:

The Handoffs and Transitions in Critical Care (HATRICC) study, conducted from 2014–2017, involved the creation and implementation of a standardized protocol for OR-to-ICU handoffs in two mixed surgical ICUs. The study used fuzzy-set qualitative comparative analysis (fsQCA) to characterize combinations of conditions associated with fidelity to the HATRICC protocol. Conditions were derived from post-intervention handoff observations yielding quantitative and qualitative data.




THE RESULTS:

Using a total of 50 handoff observations in the analysis, the study characterized, at the individual handoff episode level, **four conditions to explain high fidelity** to the HATRICC protocol.

1	2	3	4
 <p>Whether the patient was newly admitted to the ICU</p>	 <p>The presence of an ICU provider</p>	 <p>Observer ratings of attention-paying by the handoff team</p>	 <p>Whether the handoff took place in a quiet environment</p>

High Fidelity Combinations

None of the conditions alone were sufficient for high fidelity. Rather, **three combinations equated to viable pathways** for fidelity to HATRICC protocols:

<p>PATH 1:</p>  <p>Ordering provider present + Attention high</p>	<p>PATH 2:</p>  <p>Patient new to the ICU + Ordering provider present + Quiet environment</p>	<p>PATH 3:</p>  <p>Patient new to the ICU + Attention high + Quiet environment</p>
<p>This configuration of conditions was shared by 92% of the handoffs in the solution and uniquely covered 56%</p>	<p>This configuration of conditions was shared by 40% of the handoffs in the solution and uniquely covered 4%</p>	<p>This configuration of conditions was shared by 40% of the handoffs in the solution and uniquely covered 4%</p>

These three combinations explained 93.5% of the cases demonstrating high fidelity.



The study found that multiple combinations of contextual factors were associated with fidelity to the handoff protocol. Handoff protocol implementation efforts should consider multiple fidelity-promoting strategies that support the various conditions associated with fidelity.

To learn more about this study, visit:
[https://www.jointcommissionjournal.com/article/S1553-7250\(23\)00092-2/fulltext](https://www.jointcommissionjournal.com/article/S1553-7250(23)00092-2/fulltext)