

I-PASS Simulated Handoff Curriculum for Second Year Medical Students

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We developed an I-PASS (Illness severity, patient summary, action list, situational awareness & contingency planning, synthesis by receiver) simulated curriculum for medical students at the end of their second year and implemented it in July 2025. A handoff curriculum was not previously in place for this student population but was hypothesized to be high-yield, as these students already had some exposure to clinical rotations and other communication tools.

Our goal was: By the end of the session, students will have achieved cognitive proficiency in the I-PASS handoff framework. Our objectives included to be able to: 1) Summarize all 5 components of I-PASS. 2) Test their knowledge on an objective checklist completed by an observer while performing a simulated role-playing I-PASS handoff scenario, with the goal of addressing 80% of checklist items. 3) Evaluate self-efficacy with I-PASS via self-reported post-session survey compared to pre-session, with the goal of improving by an average of 1 point. 4) Perform patient handoffs throughout clinical training consistently utilizing the I-PASS tool.

IRB exemption was granted. In July 2025, we implemented eight 50-minute sessions (20-25 second year medical students per session) in the simulation center consisting of a lecture and example, optional pre- and post-survey (with informed consent), and small group role-playing handoff scenarios with facilitators, who filled out objective observer checklists.

Participants addressed an average of 95% of objective I-PASS checklist items during their simulated hand-off role-playing scenarios. Pre- and post-session self-reported self-efficacy overall improved by an average of 1-2 point (out of 5 total points). Of the students who completed the surveys, 69% were ages 26-35, 29% were ages 15-25, and 2% were ages 36-45. 33% were non-Hispanic/Latino/Latina Caucasian, 22% were East Asian, 17% were African American, 17% were Hispanic/Latino/Latina Caucasian, 10% were South Asian, 7% were Other, 6% were Middle Eastern or North African, and 1% were Other American Indigenous. 60% identified as female, 41% identified as male, and 2% identified as gender-fluid.

The simulated handoff curriculum was an effective tool to improve medical student cognitive proficiency in the I-PASS handoff framework. This is important because ineffective handoff communication contributes to up to 80% of serious medical errors, and I-PASS is an evidence-based tool used widely across specialties that consistently leads to a decrease in patient errors in the literature. Future implications include the importance of having a handoff framework, such as I-PASS, included in electronic medical record handoff sections to supplement the verbal handoff. Limitations include non-response bias, with a minority of participants not completing the optional surveys.

I	Illness severity	☐ Appropriately verbalizes “stable”, “watcher”, or “unstable” patient status
P	Patient summary	☐ Includes patient’s age, sex, gender identity if pertinent, and relevant history ☐ Includes current working diagnoses and any pertinent review of systems (including relevant physical exam findings, labs, and diagnostic imaging results) ☐ Mentions significant signs & symptoms, time frame of major complaints, and ongoing assessment (including current patient status and interventions eg. oxygen requirement quantity, access status, supplemental fluids, antibiotics, relevant pain meds) ☐ Discusses suggested plan for the patient
A	Action list	☐ Verbalizes list of key action items (“To Do List”) for physician taking over care (eg. pending studies, exams, consults) ☐ Includes any pertinent timelines (eg. perform X task at 1600)
S	Situational awareness & contingency planning	☐ Mentions any pertinent language preference, social, or other factors ☐ Communicates pertinent recent changes or noteworthy context about the patient’s care ☐ Discusses possible anticipated problems that could occur during the next shift and interventions that would be needed (“If”/“Then” statements) – ok if stated in the action list section
S	Synthesis by receiver	☐ Verbalizes a concise, focused patient summary ☐ Verbalizes an accurate patient summary that demonstrates active listening skills (including most likely diagnosis, next steps/action list, working disposition)
	Organization	☐ Handoff performed with I-P-A-S-S components in correct order ☐ Appropriately prioritizes key information, concerns, or actions ☐ Does NOT transfer erroneous information or omit important details ☐ Does NOT engage in a tangential or unrelated conversation ☐ Optimally paced; efficient but not rushed

Figure 1. Objective I-PASS Handoff Checklist

Based on an I-PASS handoff objective checklist used in a 2021 BMJ Open Quality pediatric ED successful QI study.

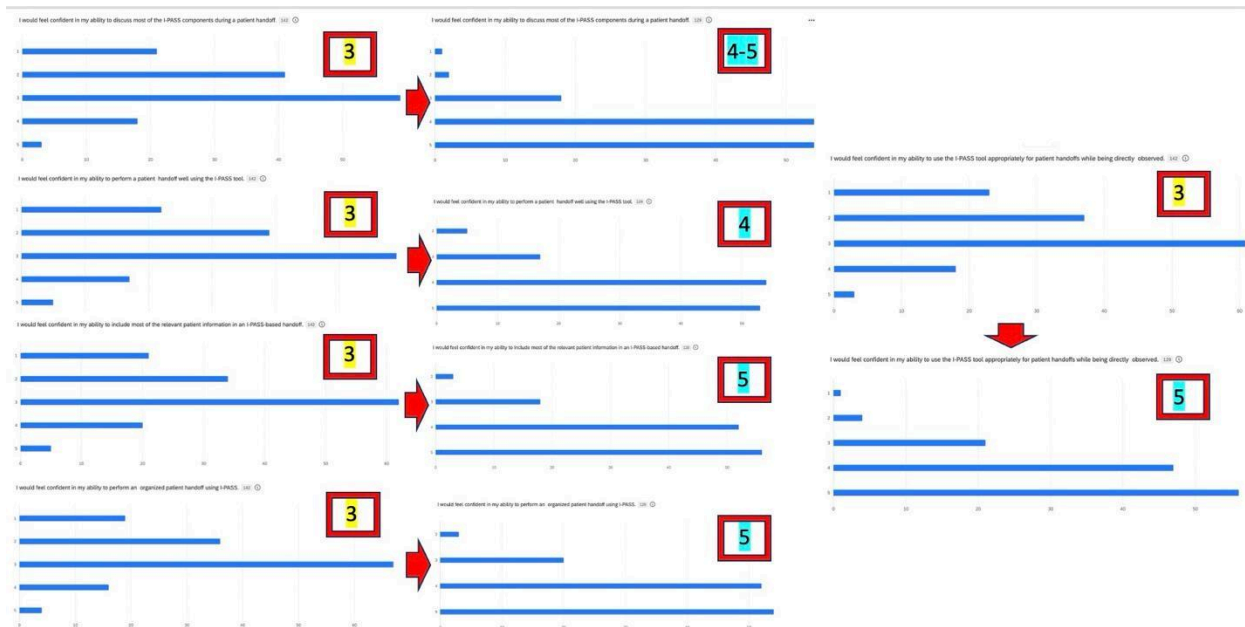


Figure 2. Pre- versus Post-Survey Results

Self-reported self-efficacy (rated on a scale of 1-5) improved by an average of 1-2 points.

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