

“The Positive Impact of Medical Students on Academic Medical Center QI Initiatives”  
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**Aim:** In April 2016, the University of North Carolina School of Medicine began the inaugural iteration of a longitudinal quality improvement and patient safety curriculum for fourth year medical students. Eight students were paired with a physician mentor and an ongoing hospital QI project with two primary goals: 1) provide students with a robust and hands-on education in QI best practices, 2) provide hospital QI teams with a resource to help drive forward ongoing initiatives. As part of this program, a fourth year medical student joined the UNC Pediatric Emergency Department Code Sepsis Improvement Initiative (PEDCSI QI) team.

**Methods:** The medical student role was to develop a fishbone diagram of factors leading to non-adherence by observing workflows and interviewing stakeholders. The medical student was then tasked with identifying potential areas for improvement and developing a key driver diagram for improving adherence. A stakeholder survey was also developed to gain insight on provider management decision making in regards to key metrics.

**Results:** Through the use of a medical student at the UNC PED, the team was able to determine significant barriers to successful implementation of critical clinical actions and has since formulated and requested appropriate and measurable changes. These improvements will be monitored for impact while the team continues to look for other potential improvements.

**Discussion:** Medical students have the ability to play an important and unique role in hospital quality improvement initiatives through their ability to function as a member of the improvement team while not serving as a member of the care team. As a result, medical students are removed enough to take a high-level view of processes and initiatives while simultaneously serving as an informed member of the improvement team. This dynamic allows medical students to objectively assess a situation, identify areas for change, and develop appropriate plans of action. Additionally, medical students are often viewed as a “non-threatening” participant to all parties and are thus able to ask questions in the spirit of education, which can lead to a greater understanding of underlying problems.

**Future Directions:** The UNC QI curriculum will expand to twelve new students in the second iteration, with two students from the original cohort staying on to serve as teaching assistants and peer mentors. Through the opportunities provided by this program, medical students will continue to play important roles in UNC QI initiatives and will carry these skills into their graduate medical training.