What medical students should understand about quality improvement

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As a medical student stepping into the clinical setting with fresh eyes that veteran physicians entrenched in the day-to-day delivery of care no longer have, you may be able to spot changes that can be made to improve the quality of care patients receive and find ways to make the system more efficient for everyone.

An education module offered via the AMA Ed Hub™ helps medical students—and residents and physicians who may not have received training during their medical school years—better understand quality improvement (QI), how to measure it and make sustainable QI changes.

The AMA Ed Hub is an online platform that consolidates all the high-quality CME, maintenance of certification, and educational content you need—in one place—with activities relevant to you, automated credit tracking and reporting for some states and specialty boards.

The free online module, “Quality Improvement,” is one of six modules part of the Health Systems Science Learning Series. Another seven modules will be released as part of the series in early 2020.

How do you measure quality?

According to the module, these are four types of quality measures that provide a framework to understand and assess quality in health care.

**Structural measures.** These reflect the underlying design of the health care system; for example, looking at patient access to a primary care physician.

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Process measures. These are activities health care providers carry out to deliver services and services provided as part of preventative care and managing chronic diseases. For example, assessing the percent of women receiving mammograms according to national screening guidelines.

Outcome measures. Patients’ health statuses based on the health care they received, for example, blood pressure readings, body mass indexes and death.

Balancing measures. Determining whether changing one part of the system positively or negatively impacts another part of the system. For example, discovering walk-in primary care hours reduce the number of emergency department visits.

The module also familiarizes physicians-in-training with six sources from which they can obtain the data they need to measure and analyze: administrative data, patient record data, registries focused on specific populations, surveillance data, survey data and direct observation.

How do you improve quality?

Once you understand where you can find data, there are several methods to go about defining a problem and creating a solution: model for improvement, plan-do-study-act, lean and Six Sigma. Each is explored in greater depth in the module.

No one method is better than another when it comes to QI and different projects may be better suited to one method than another. The underlying principles of analysis, measurement and review are part of each methodology.

No matter which method is used, physicians, nurses and the administrative staff need to be part of the process and embrace the solutions so that changes are sustainable and not seen as a “flavor-of-the-month” initiative.

More help to study health systems science

The AMA also recently released the Health Systems Science Review book, published by Elsevier. The AMA is working with the National Board of Medical Examiners to develop a standardized exam, which is expected to be available later in 2020.

The review book complement’s the AMA’s 2016 Health Systems Science textbook, which outlines a
formal method to teach students how to deliver care that meets patients’ needs in modern health systems. More than 4,000 copies have been sold worldwide, and it is being used in over 30 medical and health professions schools. Both books are available for purchase at the AMA Store.