This is how 1st-year medical residents spend their training time

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Revealing data on how first-year medical residents spend their working hours suggests that interns can expect plenty of interaction with an electronic health record (EHR), but far less time in direct contact with patients or in educational activities.

The interns “in our study spend a small proportion of time directly engaged with patients,” according to the researchers. They found that over a 24-hour period, an average of 15.9 hours of intern time “was spent in indirect patient care, reflecting 66% of the day.”

The research findings were reported in “Assessment of Inpatient Time Allocation Among First-Year Internal Medicine Residents Using Time-Motion Observations,” published in JAMA Internal Medicine.

The study was designed to offer a “look in the mirror” at the current realities of training, said internist Krisda H. Chaiyachati, MD, MPH, one of the study authors and an assistant professor of medicine at the Perelman School of Medicine at the University of Pennsylvania.

Among those realities are technology advances that have “introduced much more data, much more information, much more ability to actually look back in the past for an individual patient record. You don’t have to ask the patient as much over time,” he said. “The flip side is the fact that there is probably a balance point when you do need to spend enough time with patients to diagnose diseases or practice the art of medicine.”

Anatomy of an intern’s day
The overall finding that two-thirds of an intern’s day was spent on indirect patient care was precisely broken down by time-and-motion observers who monitored 80 internal medicine residents, across 194 shifts, at six hospitals. It’s believed to be the largest study of its kind.

Here are the categories of activity and how much time the residents studied spent on them, on average::

- Interacting with the patient’s medical record or interns recording their work—10.3 hours.
- Communicating with core team members—5.9 hours.
- Communicating with nonteam members about patients—3.3 hours.
- Rounds—5 hours.
- Direct patient care—3 hours, which consisted mostly of communicating with patients, at 2.6 hours.
- Educational activities—1.8 hours, with most of the time, 1.1 hours, taken up educational conferences.
- Handing off patient-care responsibilities—0.8 hours.

In terms of percentages, direct patient care totaled 13% of the day and educational activities 7%. Rounds entailed 21%. The researchers also noted that “little time was spent viewing radiology images, electrocardiograms, or pathology results,” totaling 0.3 hours or 1% of residents' time.

**Good old days?**

In the 1990s, “25% of inpatient time was spent engaging with patients. Time-motion studies from 2010 to 2012 observed that the proportion had dropped to 9% to 12%,” the researchers reported.

Dr. Chaiyachati and his colleagues cautioned against a rush to judgment on the changes over time.

“Concluding that this distribution is a problem might be easy, reflecting an appealing and perhaps nostalgic view that the best way to care for patients and the best way to learn from them is with personal contact,” the study authors wrote. “A more agnostic view is that even if face-to-face engagement is essential, more may not be necessary given that so much of patient care now occurs in teams, is informed by diagnostic test reports, and is mediated through the work of others.”