Taking The Training Wheels Off For Doctors In Training

By Chuck Dinerstein, MD, MBA — June 6, 2018

Medical training involves both the learning of information and skills and because the practice of medicine can unintentionally harm individuals, supervision, and oversight. But as with riding a bike, to be truly autonomous, at some point, one has to remove the training wheels and act on their own. A study in JAMA Internal Medicine looks at the effect of closer supervision on medical error and autonomy. When residents care for hospitalized patients they participate in two team meetings, the first with supervising “attending” physicians who discuss patients and treatment plans; the second, without those supervisors, where the work of patient care is allocated, discussed and advanced – work rounds.

The study carried out at Massachusetts General Hospital internal medicine program over the course of 9 months. Attending physicians alternated between their regular supervision, formulating initial care plans and overseeing care versus "closer supervision," where they participated in work rounds. The outcomes were medical errors [1] and feelings of autonomy by the resident trainees. The attending physicians had a range of experience and were evidently primarily hospitalists, physicians who specialize in providing care for hospitalized patients. Patients were similar in both the normally and closely supervised groups.

- There was no statistical difference in the medical error rate between the regular and closely supervised patients, roughly 100 errors/1000 patient days.
- There was no difference in adverse events or near misses. [2]
- The degree of supervision had no effect on length of stay, deaths, emergent transfers to ICU (a measure of sudden deterioration) or where patients were sent after hospitalization (e.g., home or nursing facilities).
• Closer supervision did not change the length of work rounds, but the interns (the newbies) spoke less in the presence of their presence.
• Closer supervision made the residents feel less autonomous, less able to make independent decisions. When less supervised they felt as team leaders and more comfortable with their decisions.
• Closer supervision provided the attending with more insight into plans, rated the quality of the care higher while residents felt that the care was the same under both conditions.
• Both conditions were felt to be equally educational to both attendings and residents.

While other studies have found a reduction in errors with supervision, the field remains a mixed bag, so the finding here that greater supervision did not improve patient safety is a disappointment but not surprising. In a similar vein, the conclusion that the presence of the attending in work rounds had a chilling effect on the sense of autonomy and independence should also be no surprise. Personally, I believe that you must take your independence, which by definition cannot be given to you.

It turns out that teaching residents is a lot like taking those training wheels off the bike. Those protective instincts fighting with the need to let go; those ever so small wheel holding you back until you actually ride for yourself and your parents begin to disappear in the distance.

[1] Medical errors were defined as preventable adverse events where some degree of harm came to patients and near misses, where there was a failure in the process that did not result in patient harm. For example, ordering the wrong dosage of a medication is a near miss before the patient is given the medication and an adverse event afterwards.

[2] To allay fears, 88% of these adverse effects were temporary but required intervention (increased cost) only 11% resulted in prolonged hospitalization, 1% resulted in permanent harm or necessitated life-saving intervention.

Source: Effect of Increased Inpatient Attending Physician Supervision on Medical Errors, Patient Safety, and Resident Education  JAMA Internal Medicine DOI: 10.1001/jamainternmed.2018.1244