DISCUSSION

The Doctors Company supports the integration of the EHR into physician office practices (currently at 80 percent) and hospitals (currently at 90 percent) and believes this has great potential to advance both the practice of good medicine and patient safety. However, there are always unanticipated consequences when new technologies are rapidly adopted—and the EHR is no exception.

Many EHR-related problems could have been avoided if the federal government had developed vendor standards for EHR use and interoperability and required beta testing in the healthcare environment to ensure usability and safety before the HITECH Act mandated its widespread adoption in 2009. However, the impetus for the rapid implementation of EHR use was to enable the transition from a volume-based (fee-for-service) payment system to an outcome-based (pay-for-performance) payment system—not to optimize productivity, workflow, and communication. Physicians and other healthcare workers played a minimal role in the initial design of the EHR, and their subsequent workplace experience and concerns have been largely ignored. Optimization of the EHR beyond the current model (digitization of the written medical record) will likely take many years and involve redesigning workflow, creating standardized protocols, using artificial intelligence, and applying big data techniques to healthcare, etc.1

The 2011 Institute of Medicine report, Health IT and Patient Safety: Building Safer Systems for Better Care, concluded that the information needed to analyze and assess health IT (HIT) safety and use was not available and that our understanding of the benefits and risks of EHRs was anecdotal. The report recommended creating a government agency that would systematically and uniformly collect data to investigate harm and safety events related to HIT. In 2015, the Office of the National Coordinator for Health Information Technology (ONC) developed a plan to create a Health IT Safety Center to minimize EHR-related patient safety risks through the collection and analysis of event data reported by users. However, if implemented, the Health IT Safety Center is unlikely to include an online mechanism for users to report EHR-related adverse events in “real time” when they occur.

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Typically, the EHR is a contributing factor in a medical malpractice claim rather than its primary cause. In Study 2, user factors (conversion issues, discrepancy between free text and templates, copy-and-paste issues, data entry errors, alert issues, user fatigue, workarounds, etc.) contributed to 58 percent of EHR-related claims and system factors (systems technology and design issues, data routing problems, inappropriate drop-down menu responses, failure of alerts, alarms, and clinical decision support [CDS], etc.) contributed to 50 percent. Some claims contain both system and user factors.

Of all claims closed by The Doctors Company from January 2007 through June 2014 (7.5 years), 0.9 percent (97 claims) had EHR-related contributing factors. In this follow-up study of all claims closed from July 2014 through December 2016 (2.5 years), 1.6 percent (66 claims) had EHR-related contributing factors. This is a relatively small increase over Study 1 and may not be statistically significant, considering that the data have not been adjusted for the increased utilization of EHRs during the time frame covered in Study 2. It is reassuring that the incidence of EHR-related claims has remained low over a 10-year time frame (2007