Proposal for Digital Systems

For TOUCH New York

Reasoning

If TOUCH is not already using digital systems, I believe switching over to digital would be very beneficial.

Handwritten records can be difficult to retrieve and read. They may have cursive handwriting, or be mislabelled.

Everyone who volunteers should be able to access and read records easily; this would reduce the barrier for entry for volunteers.

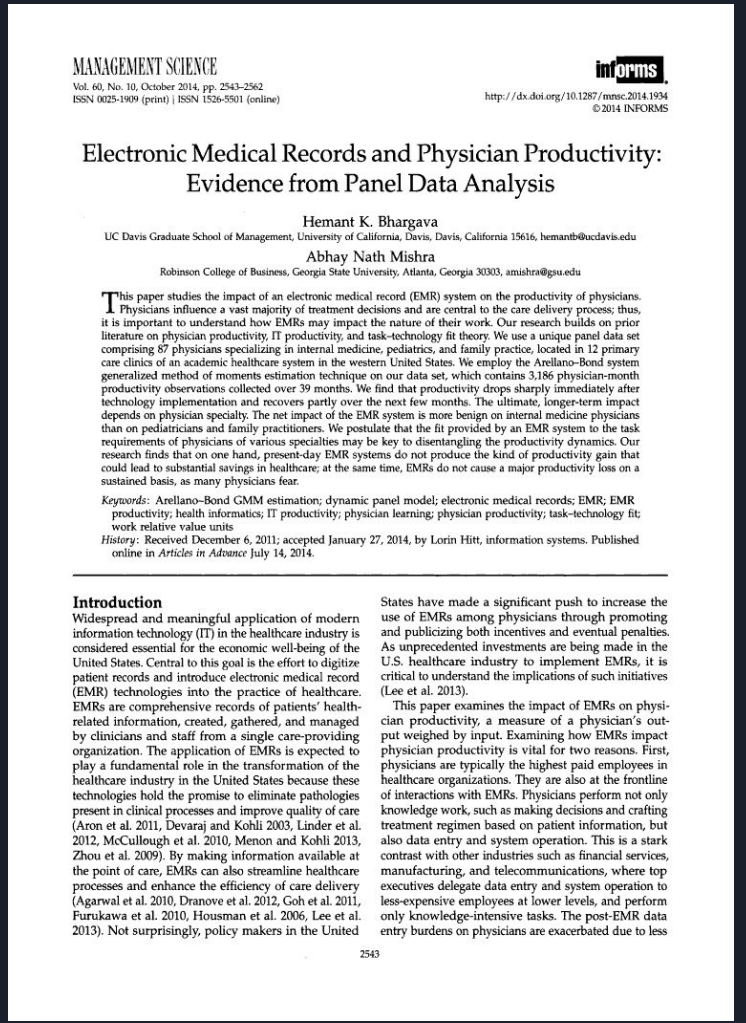
Digital systems can accomplish that.

Evidence

This academic journal article from Management Science shows that switching to a digital system does not have a long-term negative impact on productivity.

Though the study shows that “productivity drops sharply immediately after technology implementation”, it recovers in a few months.

I’m sure any loss in productivity can be mitigated with ample training. The Interfaith Emergency Food Pantry of Pleasantville stated that their difficulties with their new digital system were caused by the fact that training started late.



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Electronic Medical Records and Physician Productivity: Evidence from Panel Data Analysis

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This paper studies the impact of an electronic medical record (EMR) system on the productivity of physicians. Physicians influence a vast majority of treatment decisions and are central to the care delivery process; thus, it is important to understand how EMRs may impact the nature of their work. Our research builds on prior literature on physician productivity, IT productivity, and task–technology fit theory. We use a unique panel data set comprising 87 physicians specializing in internal medicine, pediatrics, and family practice, located in 12 primary care clinics of an academic healthcare system in the western United States. We employ the Arellano–Bond system generalized method of moments estimation technique on our data set, which contains 3,186 physician-month productivity observations collected over 39 months. We find that productivity drops sharply immediately after technology implementation and recovers partly over the next few months. The ultimate, longer-term impact depends on physician specialty. The net impact of the EMR system is more benign on internal medicine physicians than on pediatricians and family practitioners. We postulate that the fit provided by an EMR system to the task requirements of physicians of various specialties may be key to disentangling the productivity dynamics. Our research finds that on one hand, present-day EMR systems do not produce the kind of productivity gain that could lead to substantial savings in healthcare; at the same time, EMRs do not cause a major productivity loss on a sustained basis, as many physicians fear.

Keywords: Arellano–Bond GMM estimation; dynamic panel model; electronic medical records; EMR; EMR productivity; health informatics; IT productivity; physician learning; physician productivity; task–technology fit; work relative value units
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Introduction

Widespread and meaningful application of modern information technology (IT) in the healthcare industry is considered essential for the economic well-being of the United States. Central to this goal is the effort to digitize patient records and introduce electronic medical record (EMR) technologies into the practice of healthcare. EMRs are comprehensive records of patients' health-related information, created, gathered, and managed by clinicians and staff from a single care-providing organization. The application of EMRs is expected to play a fundamental role in the transformation of the healthcare industry in the United States because these technologies hold the promise to eliminate pathologies present in clinical processes and improve quality of care (Aron et al. 2011, Devaraj and Kohli 2003, Linder et al. 2012, McCullough et al. 2010, Menon and Kohli 2013, Zhou et al. 2009). By making information available at the point of care, EMRs can also streamline healthcare processes and enhance the efficiency of care delivery (Agarwal et al. 2010, Dranove et al. 2012, Goh et al. 2011, Furukawa et al. 2010, Housman et al. 2006, Lee et al. 2013). Not surprisingly, policy makers in the United States have made a significant push to increase the use of EMRs among physicians through promoting and publicizing both incentives and eventual penalties. As unprecedented investments are being made in the U.S. healthcare industry to implement EMRs, it is critical to understand the implications of such initiatives (Lee et al. 2013).

This paper examines the impact of EMRs on physician productivity, a measure of a physician's output weighed by input. Examining how EMRs impact physician productivity is vital for two reasons. First, physicians are typically the highest paid employees in healthcare organizations. They are also at the frontline of interactions with EMRs. Physicians perform not only knowledge work, such as making decisions and crafting treatment regimen based on patient information, but also data entry and system operation. This is a stark contrast with other industries such as financial services, manufacturing, and telecommunications, where top executives delegate data entry and system operation to less-expensive employees at lower levels, and perform only knowledge-intensive tasks. The post-EMR data entry burdens on physicians are exacerbated due to less

Examples of Software Services that Provide Digital Recordkeeping to Food Pantries

- Feeding Westchester provides digital sign-in and recordkeeping systems to food pantries, they may be able to provide their services to TOUCH.
- BosWell is a free web-based service that aims to make it easy for food pantries to keep digital records, and connect clients of food pantries to healthcare providers (Many low-income people are covered by Medicaid, but do not know how to access healthcare)
- There are other software services for food pantries that are not free, such as Pantry Saver and Food Pantry Helper.

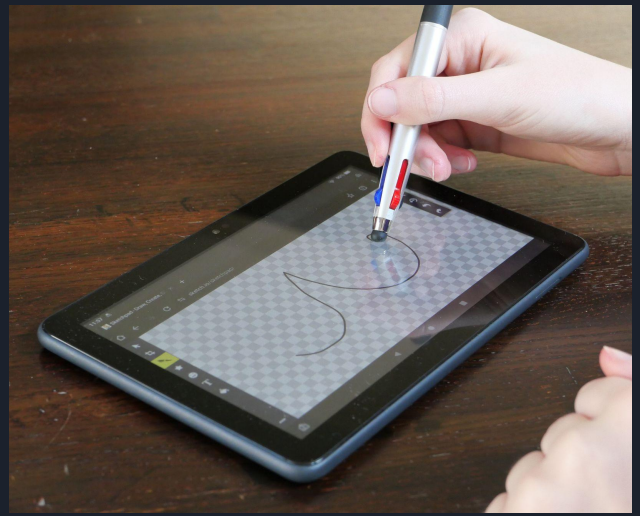
Other Ideas for Implementation: Data Input

Some people may think that “digital system” means typing instead of handwriting. This thought can be frightening to those who feel uncomfortable with a keyboard.

Fortunately, there are other ways of inputting data that don’t involve using a keyboard, and should be much more intuitive.

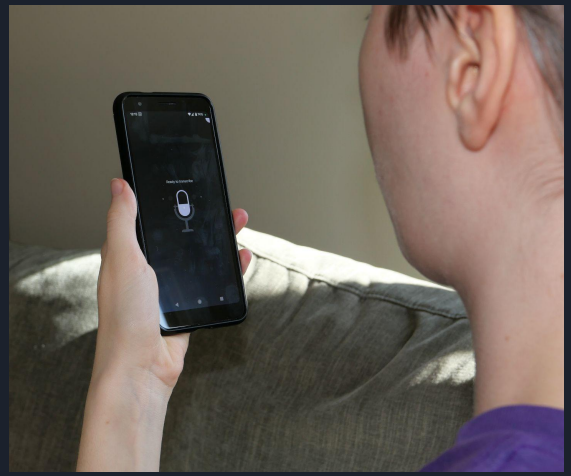
Data Input: Touch Screen and Pen

One can use a tablet with a touch screen compatible pen. A tablet can turn handwriting into plain text via OCR (optical character recognition). Passive pens are simple and inexpensive; a pack of ten touchscreen-pens costs only $6.



Data Input: Speech-to-Text

Another option is speech-to-text. Any smartphone or tablet with a microphone likely already has access to this technology. With speech-to-text, you can simply speak into a microphone and have your words transcribed into text.



Thank you!