Better Alert Management Needed for EHRs

Interoperability has its advantages with information sharing across networks helping improve efficiency in patient care. But it also comes as no surprise that there are also costs to being connected as has been shown by a study on emails connected to Electronics health Records (EHRs).

Researchers in Texas undertook a study on email overload and found that it can take doctors in primary care settings on average, an hour and seven minutes a day processing messages.

Researchers studied both Primary-care Physicians (PCPs) and doctors in other settings and published their finding in a JAMA research letter newsletter called “The Burden of Inbox Notifications in Commercial Electronic Health Records.” They found that more than “276,200 message notifications flooded the EHRs of 92 physicians in three group practices over 125 workdays”.

The researchers reported that PCPs received on average 77 notifications on a daily basis with 20.2 percent connected to test results across all departments.

Specialists fared a little better receiving 29 notifications a day. However, a higher percentage 35.7 percent was for test results that demanded a greater cognitive engagement from doctors.

The study concluded that a multi-pronged approach to handle the deluge of information such as “strategies to help filter messages relevant to high-quality care, EHR designs that support team-based care, and staffing models that assist physician in managing this influx of information” would present a more efficient way of processing emails.

“There's a lot more of a variety of messages in the EHRs than we expected,” said Dr. Daniel Murphy, corresponding author of the study, assistant professor of medicine at the Baylor College of Medicine and a researcher at the Center for Innovations in Quality, Effectiveness and Safety. "We don't really know if they impact care in a meaningful way or just take up providers' time.”

Hardeep Singh, fellow researcher and chief of health policy, quality and informatics at the Michael E. DeBakey Veterans Affairs Medical Center, said that there would likely be “more and more communication” between PCPs, specialists, nurses, labs, pharmacies and patients. Singh referred to the fact that the doctors’ EHR was "not designed for team-based care.”

Singh added that interoperability benefited healthcare, floods of message could add to medic burnout and impact on patient safety.

While some EHRs can extract and add electronic decision support to discrete data elements in incoming messages. But, by and large, users of the IT systems still must rely on human judgment in triaging most messages, Arnold said.