

Promoting Health Equity with Electronic Health Records

By Kevin M. Sherin, MD, MPH, MBA, Health Officer & Director of Florida Department of Health in Orange County and Ericka Burroughs-Girardi, MA, MPH, Health Equity Coordinator

There is little doubt that Electronic Health Records (EHRs) have revolutionized healthcare delivery resulting in increased healthcare quality and patient satisfaction. Still, EHRs' potential is yet to be fully realized. While we can easily see the benefits of EHRs as they relate to healthcare safety and efficiency, more attention should be given to EHRs' potential to promote health equity.

Health equity, as described by the Centers for Disease Control and Prevention (CDC), is achieved when everyone has the ability to achieve his or her full health potential withstanding social position or other circumstances socially determined.¹ Health equity is generally a priority for most local health departments, including the Florida Department of Health in Orange County, because the populations we usually serve have suffered from socioeconomic and health inequities. Chronic conditions, such as diabetes, hypertension, and a number of cancers are overwhelming prevalent in socioeconomic challenged populations. Further, HIV, tuberculosis, hepatitis and other infectious disease rates are higher among the populations we generally serve at local health departments. Therefore, we have a vested interest in adopting strategies that will change the trajectory. The EHR is one such strategy.

One effective way of achieving health equity is to minimize cultural and linguistic barriers that may impede patient-clinician communication. At first glance, it may seem that EHRs would not have a place in facilitating communication. However, consider that some patients, particularly those with limited English proficiency, may not be able to fully articulate their medical history. In some cases, it would be culturally inappropriate for a clinician to ask a patient certain questions, particularly if a gender difference exists. Other patients cannot recall their medical history or are simply embarrassed to share it with yet another clinician. With an EHR, a clinician can easily access a patient's medical history without burdening the patient to share details of their history, which may even be unrelated to their current appointment. In fact, one study that included 60 clinicians, found that providers were better able to focus on the patient because they spent less time shuffling through stacks of papers seeking information about their patients' medical history.²

Access to accurate medical information also increases opportunity for health equity. A 2012 Pew Research Center study³ found that not only are African Americans and Latinos more likely to own a smartphone compared to Whites, they use them more than Whites to access health information. While the specific reasons African Americans and Latinos are using their smartphones to access health information should be explored further, the common denominator is the potential for patient-clinician communication electronically. An EHR can link medical conditions to supportive educational material

¹ <http://www.cdc.gov/chronicdisease/healthequity/index.htm>

² O'Malley, Ann S. et al., (2010) Are Electronic Medical Helpful for Care Coordination? Experiences of Physician Practices. *Journal of General Internal Medicine*, Vol. 25 (3): 177-85.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2839331/>

³ Fox, S. and Duggan, M. (2012) Mobile Health 2012. *Pew Internet & American Life Project: A Project of the Pew Research Center*. <http://pewinternet.org/Reports/2012/Mobile-Health.aspx>

that the clinician can email to the patient or text a link, for example, before the patient even leaves the office. Additionally, the clinician can remain engaged with the patient even if the patient is transient for periods of time like farmworkers.

Yet another way that the EHRs is important to health equity is by prompting clinicians to screen patients whose medical history places them at increased risk for disease. For example, EHRs proved to be particularly effective in prompting physicians to order Hepatitis B Virus (HBV) screening for their patients of Asian ancestry.⁴ An HBV induced cancer called hepatocellular carcinoma is so prevalent in Asians that the CDC recommends that all Asian born individuals be tested for HBV. Given that perinatal infection of the virus is common, it is recommended that Asian Americans be screened for HBV as well. However, many Asian Americans are unaware of this recommendation. The EHR prompt to the physicians resulted in an increase from 19% to 50% of patients being screened, effectively mitigating this health disparity among Asian Americans. It is easy to see how these prompts could be used to remind physicians about specific screening or vaccinations for other population groups impacted by health disparities.

Lastly, EHRs provide opportunity for us to maximize resources to achieve health equity. For example, EHRs allow us to aggregate population data easily so that we are better able to track emerging “hot spots.” With health departments’ persistent shrinking budgets, it has become even more critical that we strategically allocate health promotion resources in the disparate communities we serve. By identifying these hot spots, we can pour much of those limited resources into communities in need of targeted health promotion efforts.

In summary, the potential of EHRs are boundless. Fortunately, the Health Information Technology and Clinical Health Act of 2009 is facilitating increased use of the EHR in clinical settings providing care to medically underserved populations. While achieving health equity is a challenge unlikely to be met for some time, the EHR is a strategy proving to be quite helpful in dissolving those barriers, such as communication, information access, and health disparities, which often obstruct the path to health equity.

⁴ Leeyen Hsu, B.S., et. al. (2013) Electronic Messages Increase Hepatitis B Screening in At-Risk Asian American Patients: A Randomized, Control Trial. *Digestive Diseases and Sciences*, Vol. 58 (3): 807-14.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3578075/>