Health Workforce Policy Brief
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Do Years of Experience with Electronic Health Records Matter for Productivity in Community Health Centers?

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BACKGROUND

As CHCs increasingly become the "go to" source of primary care for underserved populations, they are also rapidly adopting electronic health records (EHRs). Anecdotal evidence and perceptions suggest that EHRs may negatively impact productivity—a concern at a time when CHCs are expanding their patient capacity. This study investigates whether EHRs negatively impact overall productivity and, if so, whether the impact of technology differs by the type of provider.

METHODS

Authors primarily used the 2012 Uniform Data System (UDS) to obtain detailed information about patient and facility characteristics of CHCs. To obtain the years of experience with an EHR system, the authors supplemented the EHR data collected by UDS with responses from a 2010/2011 survey called, "Readiness for Meaningful Use and HIT and Patient Centered Medical Home Recognition Survey."

FINDINGS

As of 2012, less than 10% of CHCs remained without an EHR system. Most of the growth occurred between 2010-2011, which correlates with capital infrastructure investments to CHCs under American Recovery and Reinvestment Act (ARRA) of 2009, and the provider incentive payments under the Health Information Technology for Economic and Clinical Health (HITECH) of 2009 enacted under ARRA.

Physician productivity significantly improves in CHCs with an HER compared to CHCs without an EHR. The greatest gain in productivity is for physicians in CHCs with three to four years of EHR experience. However, the smallest gain is among CHCs with five or more years of EHR experience. One potential explanation may be that the newer EHR systems may benefit providers more than the older EHR systems. Nurses experience a notable negative productivity impact in the early years of EHR adoption, although the trend is not statistically significant.

KEY FINDINGS

1. Extending the role of Regional extension centers (RECS) into clinical practice may help nurses and other medical staff to concentrate more of their time on clinical work and prevent some of the observed loss of productivity.

2. CHCs may not have the resources to hire enough staff to maintain EHRs, and may be diverting nurses and medical assistants away from the task they are trained for--clinical care. Future staffing models need to ensure a mix of workers that allows all staff members to be used where they have the most impact on productivity and cost-effective care.

3. This study finds some evidence that not all EHR systems are the same when it comes to ease of use and impact on productivity. Further research is needed to better understand what features of EHR systems may be a barrier to nurse productivity.

CONCLUSION

Authors' findings suggest that overall EHRs do not negatively impact productivity in CHCs, and in fact may improve productivity in the long-run. Physicians experience the most significant and positive productivity boost with the adoption of EHRs a few years into having a system. The productivity of nurses and other medical personnel are negatively affected by the adoption of EHRs especially in the early years of adoption. The attention of these workers may be redirected towards the implementation and management of EHRs. This redirected attention may be contributing to the overall drop in productivity among CHCs with EHR systems. Also, productivity improvements may be masked by shifts towards quality improvements (Miller and West 2007). Attention should be paid as to whether nurses are diverted away from clinical duties to manage administrative tasks related to EHRs, and whether staffing levels are sufficient in the implementation of EHRs.

POLICY IMPLICATIONS

Given implementation challenges, HRSA may want to consider funding regional extension centers (RECS) to provide ongoing support once CHCs begin using EHRs in clinical practice. Extending the role of RECs into clinical practice might help nurses and other medical staff to concentrate more of their time on clinical work and prevent some of the observed loss of productivity. Second, CHCs may not have enough resources to hire the necessary staff to maintain EHRs, and may be diverting nurses and medical assistants away from the task they are trained for--clinical care. Future staffing models need to ensure a mix of workers that allows all staff members to be used where they have the most impact on productivity and cost-effective care. Finally, this study finds some evidence that not all EHR systems are the same when it comes to ease of use and impact on productivity. One popular system in particular, NextGen, seems to be correlated with decreased productivity among nurses. Further research is needed to better understand what features of NextGen or other EHR systems may be a barrier to nurse productivity.