

Perceptions of the Effects Of Electronic Health Records On Staffing, Workflow, & Productivity in Community Health Centers



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BACKGROUND

- Significant Federal investments under the Health Information Technology for Economic and Clinical Health Act of 2009 and the Affordable Care Act have motivated many community health centers (CHCs) to implement electronic health records (EHRs) in recent years.
- Because CHCs are known to use flexible and innovative staffing models, their uptake of EHRs creates a unique opportunity to study how the implementation of new technology intersects with staffing changes to influence care delivery.

RESEARCH OBJECTIVES

- To understand how CHCs' implementation of EHRs has changed staffing models, staff roles, and workflows
- To understand the mechanisms by which EHRs influence staff productivity, coordination between providers, and quality of care

METHODS

Qualitative exploratory study:

- Conducted telephone interviews with 17 staff members (including clinicians, support staff and administrators) at 6 CHCs to understand their perceptions of how EHRs influence staff roles and workflow; productivity; and coordination and quality of care.
- Audio recorded the interviews with participants' permission, transcribed the recordings, and imported the transcripts into ATLAS.ti for coding and thematic analysis.

PRINCIPAL FINDINGS

CHCs add and expand staff roles after EHR implementation

- Many CHCs hired new staff members, mostly in support roles such as licensed practical nurses (LPNs), medical assistants (MAs), or quality improvement (QI) staff.
- Some CHCs hired information technology (IT) staff, while others outsourced IT support tasks to external networks or EHR vendors.
- EHRs enabled CHCs to upgrade involvement of (e.g.) LPNs and MAs in workflows using EHR tools like standing orders and medication lists, enabling "every person [to] work at the top of their license".

EHRs improve coordination within CHCs

- Informants reported that EHRs made it easier to find and share information, medication lists, and behavioral and dental health records within CHCs.

EHRs have limited impact on coordination with outside providers

- Sharing patient information with outside providers remained a significant challenge for CHCs even with EHRs, resulting in manual entry and use of add-on products to facilitate communication.

EHRs help to enhance quality of care and population health in CHCs

- Informants viewed documenting care in EHRs as enhancing quality of patient care—identifying patients in need of preventive care and motivating workflow or staffing changes to improve quality of care.

EHRs contribute to reduced productivity in CHCs

- Informants reported productivity declines due to frequent EHR software updates, extra clicking and navigation required to input information into the EHR, and extensive quality reporting requirements.

CONCLUSIONS & IMPLICATIONS FOR PRACTICE

- As their use of EHRs grows, CHCs are finding creative ways to adapt staff roles and models to use them to improve coordination and quality of care.
- Many new staff roles are designed to take advantage of EHR functions to reduce provider burden (e.g. upgraded MA or LPN roles) or improve population health and quality tracking (e.g. new QI staff). Other roles are designed to manage new challenges introduced by the EHR (e.g. new IT staff or scribes).
- Our study suggests that EHR data can be useful in fostering team-based approaches to care by making providers more willing to delegate tasks to other providers or staff members.
- As EHRs become more embedded in practice over time, they could become a valuable new tool for CHC leaders to analyze the contributions of different staff members and optimize their staff configurations.

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