

Electronic Health Record-Assisted Community Health Worker Coaching for Medication Adherence: Adaptation of an Evidence-Based Intervention

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Background

- Prescription antihypertensive medications play a critical role in controlling high blood pressure among patients with hypertension. However, adherence is often poor.
- Community health workers (CHWs) could play an important role in efforts to deliver culturally- and literacy-sensitive interventions to promote medication adherence among patients with hypertension who are not adherent to their medication regimen.
- However, limited data exist on strategies to best integrate CHWs into the patient's clinical team to deliver evidence-based care.
- Electronic health records (EHRs) may facilitate this integration and support care delivery.
- The BP Control project uses the EHR to facilitate the delivery of an evidence-based antihypertensive medication adherence coaching intervention by CHWs while integrating CHWs into the clinical team.
- This work describes the co-production methodology used for developing the BP Control intervention.

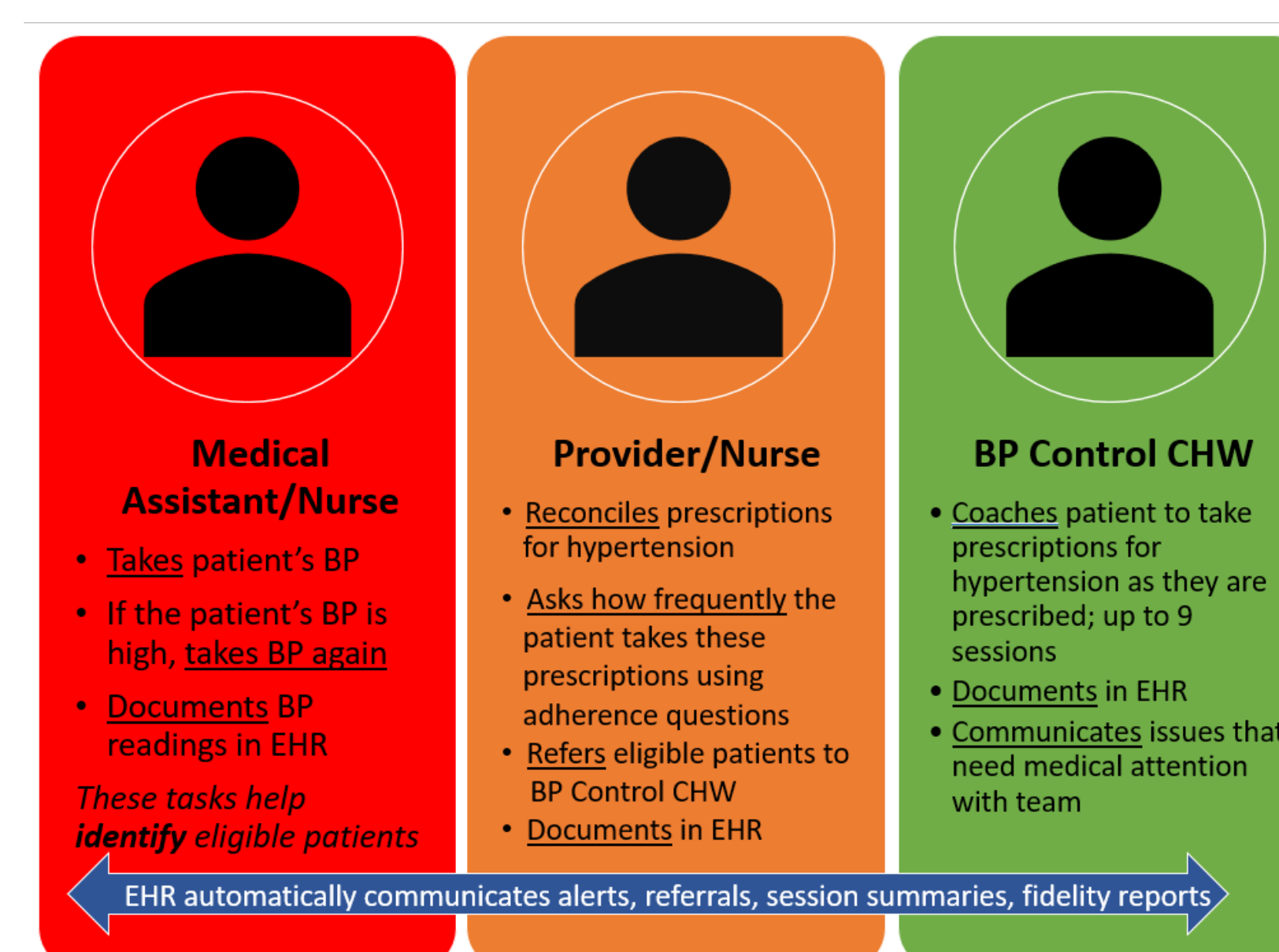
Methods

- The project used a co-production methodology by which the Practice Facilitator worked with the Implementation Team to identify challenges and opportunities common and unique to each health center and ensure shared expertise and decision-making in adapting, rolling out and implementing the intervention. This was accomplished through 90-minute virtual meetings held bi-weekly or more often as needed.
- The Implementation Team included a medical champion (physician), an operations champion, CHW and CHW supervisor, and information technology (IT) staff from each health center; a nursing supervisor from one center; and a Practice Facilitator from the Prevention Research Center at UMass Chan Medical School.
- A CHW Coaching Protocol Adaptation Sub-Team, a subset of the Implementation Team comprised of the CHWs and CHW supervisors and the Practice Facilitator, adapted the CHW coaching component. Also using a co-production methodology, this team reviewed the original evidence-based coaching protocol; outlined basic competencies (knowledge and skills) required for its delivery, developed a training curriculum; worked with an IT consultant to embed the protocol into the EHR (i.e., "prompts", fields for documentation of coaching sessions); and pre-tested the system to improve functionalities.

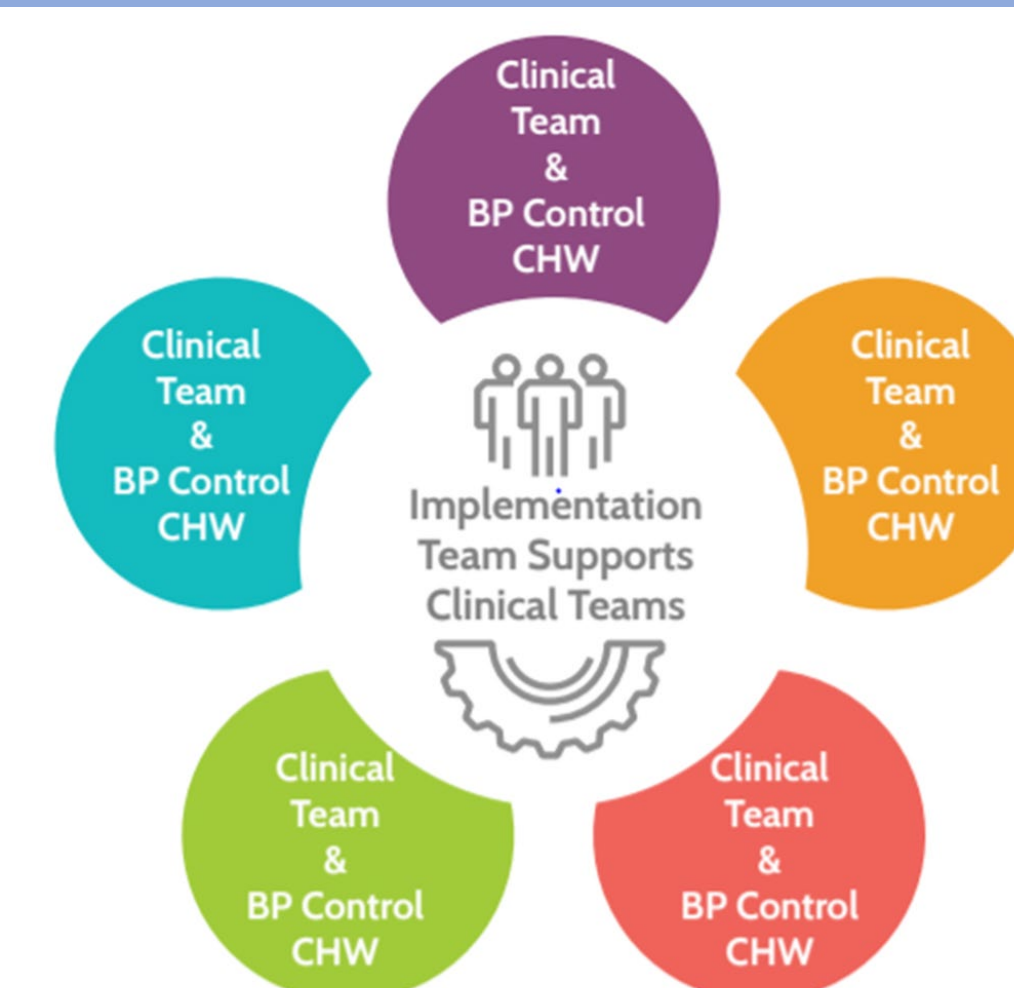
Five Components of BP Control



Overview of Clinical Team Tasks



Implementation Team Supports



Findings

Implementation Team Decisions

- This team created alerts, prompts, and fidelity reports for measurement of blood pressure, medication reconciliation, medication adherence screen, & referral to CHWs.
- This team identified information that should be part of the CHW coaching EHR templates and training, such as patient's antihypertensive medications, last blood pressure readings, and types of concerns to communicate to providers.
- The team membership involved leaders from key positions with the authority to make decisions. A key lesson learned was the importance of including Quality Assurance staff. The implementation team was re-shaped to include this position.

CHW Coaching Protocol Adaptation Sub-Team Decisions

- This team created prompts to guide the coaching session, document patient responses, and generate patient call lists and fidelity reports. It decided which essential patient data to include in EHR coaching fields, such as blood pressure readings and antihypertensive medications prescribed.
- This team created EHR prompts for CHW-initiated messaging to referring providers, and created a template for automated letters to patients with their medication adherence plans created during the session.

The associated CHW training curriculum then included:

- Basic knowledge about hypertension, components of hypertension management, and the importance of adherence
- Behavioral counseling skills (5As, motivational interviewing)
- Access to intervention prompts and documentation in the EHR

The training curriculum was implemented via didactic sessions, videos, and role-plays to build skills.

Implications for D & I Science

Future implementation teams will benefit from a co-production methodology with representatives from medical, operations, quality assurance, and IT, aided by a practice facilitator. Quality assurance members are essential for continuous improvement.

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Contact