

**Submission Id:** 5452

## **Title**

*Patient Co-Investigator Refinement of the Collaboration Oriented Approach for Controlling High blood pressure (COACH) app*

## **Priority 1 (Research Category)**

Hypertension

## **Presenters**

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## **Abstract**

Context: Co-production of patient-centered digital interventions can help improve usability, effectiveness, and understandability. COACH is a patient-facing digital application connected to the EHR that uses guideline-supported messaging and visualizations to help patients control blood pressure. To refine COACH for a planned multi-site clinical trial, we embedded people with lived experience (patient co-investigators) in our research team. Objective: To ensure that COACH patient decision support will meet the information needs of its intended users, primary care patients with hypertension. Study Design/Analysis: Review of COACH by two patient co-investigators with hypertension, qualitative description of discordance between patient needs and initial proposed language. Setting: Midwest and Pacific Northwest academic health centers. Population: Patients with hypertension. Intervention: Patient Co-Investigator review of COACH. Outcome Measures: Mismatch between clinician/researcher proposed messaging and that favored by people with lived experience of self-managing hypertension. Results: Three principles guided edits to COACH patient-facing messages: 1) parsimony [reduction of repetitive/unnecessary words], 2) health literacy [effective communication with plain language and no jargon], and 3) clarity [ensuring each communication had a single goal with a specific action step when indicated, removing equivocal language or that which suggested uncertainty]. For example, one heading read, "Consider a diagnosis of Stage 2 hypertension". Given that patients are unable to provide their own diagnoses, the recommendation was to change the text to read, "Possible diagnosis of ...". Similarly, a message, "You had multiple high blood pressure readings recently. These readings suggest you have stage 2 hypertension, a treatable condition of high blood pressure. Please discuss next steps with your care team." The patient team recommended that COACH specify a clear direction to the patient (i.e., call the clinic, send a message to care team via COACH app, make an appointment, discuss with care team at next appointment). Feedback based on patient experience and supplemented by results from separate patient focus groups indicates that patients wanted COACH to give them clear directives about next steps. Conclusions: We anticipate patient co-investigator refinement will lead to a COACH intervention that better meets the needs of its intended audience, people with hypertension.