



# Improving an Evidence-Based Medication Review Program with Technological Efficiencies and Cost-Savings



## Background

Health Quality Innovators (HQI) facilitates the Blue Bag Initiative (BBI), a long-standing intervention that supports medication reviews and reconciliation at hospital discharge and in the community. BBI involves pharmacists and empowers patients to be more engaged with their safe medication utilization to avoid unnecessary hospital stays and adverse drug events.

## Opportunity

This program includes data collection and reporting by participants. The previous collection process involved multiple people and many steps, and a monthly report for participants. The process took at least three weeks to complete, between data submission and report receipt.

## Improvements

HQI developed a new automated, secure data collection and report portal. Through this web-based portal, bulky email reminders and communication processes for data entry were no longer needed and report generation was streamlined to 24 hours.

Brief informational and how-to videos, accessible on the portal, were developed to help potential and existing participants become familiar with the program and processes.

Pilot testing was conducted with three BBI participants. All participants received individual orientation sessions to transition their access to the portal.

BBI participants receive access to program data on an interactive dashboard within 24 hours of data entry vs. a static data report after one month.

## Overall Program Impact

Program to-date data from November 2019-December 2023:

**15,333**

patients received

a Comprehensive Medication Review (CMR)

**10,544 (69%)**

CMR patients

with a potential Adverse Drug Event (pADE) identified

**8,893 (58%)**

patients were able to state

the purpose and timing of their medications after CMR

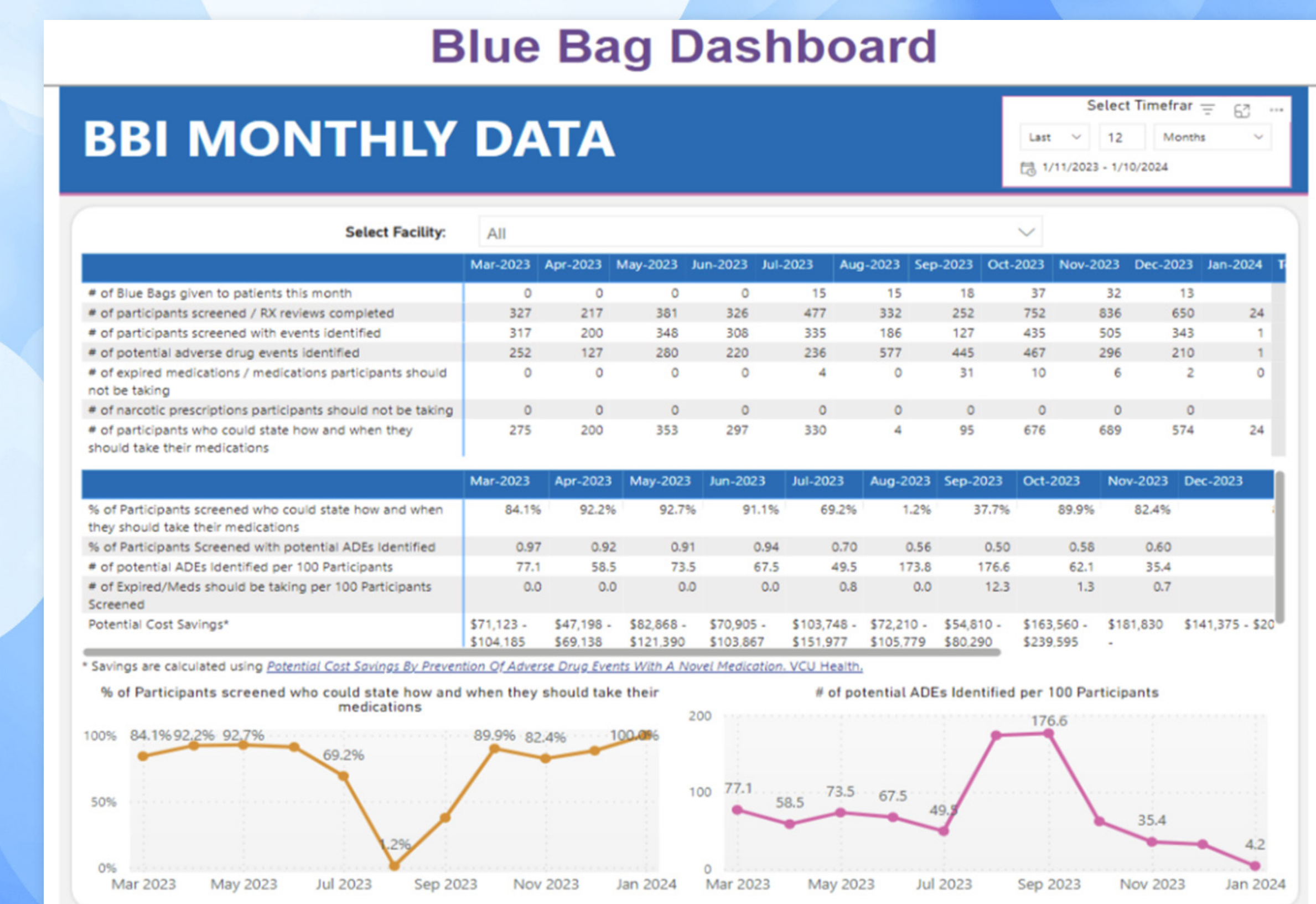
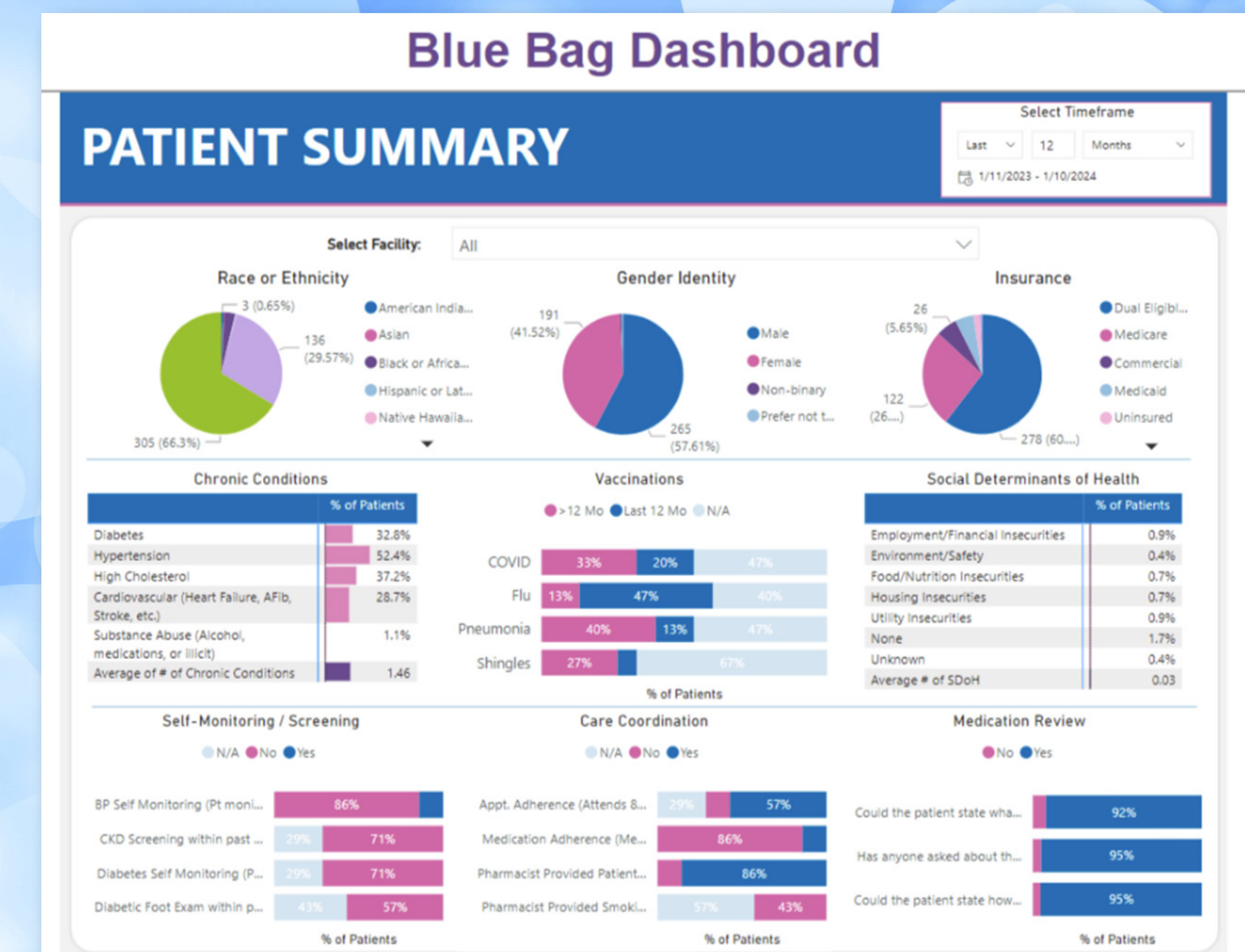
These reviews showed cost-savings attributed to avoidable ADEs between

**\$3,334,928 - \$4,884,246<sup>1</sup>**

The BBI is one of HQI's disparity reduction interventions.

<sup>1</sup> Savings are calculated using Potential Cost Savings by Prevention of Adverse Drug Events with A Novel Medication. VCU Health.

## Blue Bag Initiative Participant Portal



## Blue Bag Initiative Overview and Introduction



Scan to View the Learning Module

"HQIN is a valuable asset to my pharmacy practice. In addition to providing timely and applicable literature regarding current trends in pharmacy practice, Cindy and her team support my institution by providing patient resources in the Blue Bag program, allowing easy documentation of my daily activities and up-to-date cost savings to share with organization leadership." - BBI Participant

**For more information, contact:**  
Cynthia L. W. Warriner, BS, RPh, CDCES  
Senior Pharmacist Consultant  
**Email:** cwarriner@hqi.solutions

This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW/HQI/QIN-QIO-0705-01/09/24



**Quality Improvement Organizations**  
Sharing Knowledge. Improving Health Care.  
CENTERS FOR MEDICARE & MEDICAID SERVICES



HEALTH QUALITY INNOVATORS