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Increasing Food Insecurity Screening, Coding, and Referral Among Emergency Department Providers

by Jenny Watkins, BSN, CCRN, DNP-c

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Background

Food insecurity (FI) is adversely associated with many chronic physical and mental health conditions in both adult and pediatric populations, including heart disease, obesity, diabetes, and anxiety. The correlated poor health outcomes and high treatment costs indicate FI as a valuable focus for quality improvement. Prior to the Covid-19 pandemic, 1 in 9 Vermont residents were already experiencing FI.

This project operated in the Emergency Department (ED) of a designated Critical Access Hospital and Federally Qualified Health Center that provides health services to 17 rural towns in central Vermont. No formal food insecurity screening (FIS) process existed in this department. ED providers were targeted through educational intervention.

Available Knowledge & Rationale

Referenced research supports screening for FI in ED encounters, as a setting common to high-risk and vulnerable patient populations largely affected by social determinants of health such as FI. This project utilized the Hunger Vital Sign (HVS), a 2-question validated FI screening tool, chosen here for its brevity, efficacy, and strong evidence base. Use of the electronic medical record (EMR) has been shown as successful in identifying and referring FI patients. Therefore project participants were asked to use the HVS in their patient encounters, document positive screens in the EMR with FI billing code Z59.4- Lack of adequate food and safe drinking water, and enter a FI referral to the facility's Community Health Team (CHT) for follow-up care.

Purpose & Aims

This project intended to increase ED providers' knowledge, value, and confident utilization of FIS with the HVS, FI billing code Z59.4, and subsequent referral to the CHT.

Aims included: identify existing facility resources, develop and deliver provider education, and collect and analyze data pre and post-intervention.

Methods & Measures

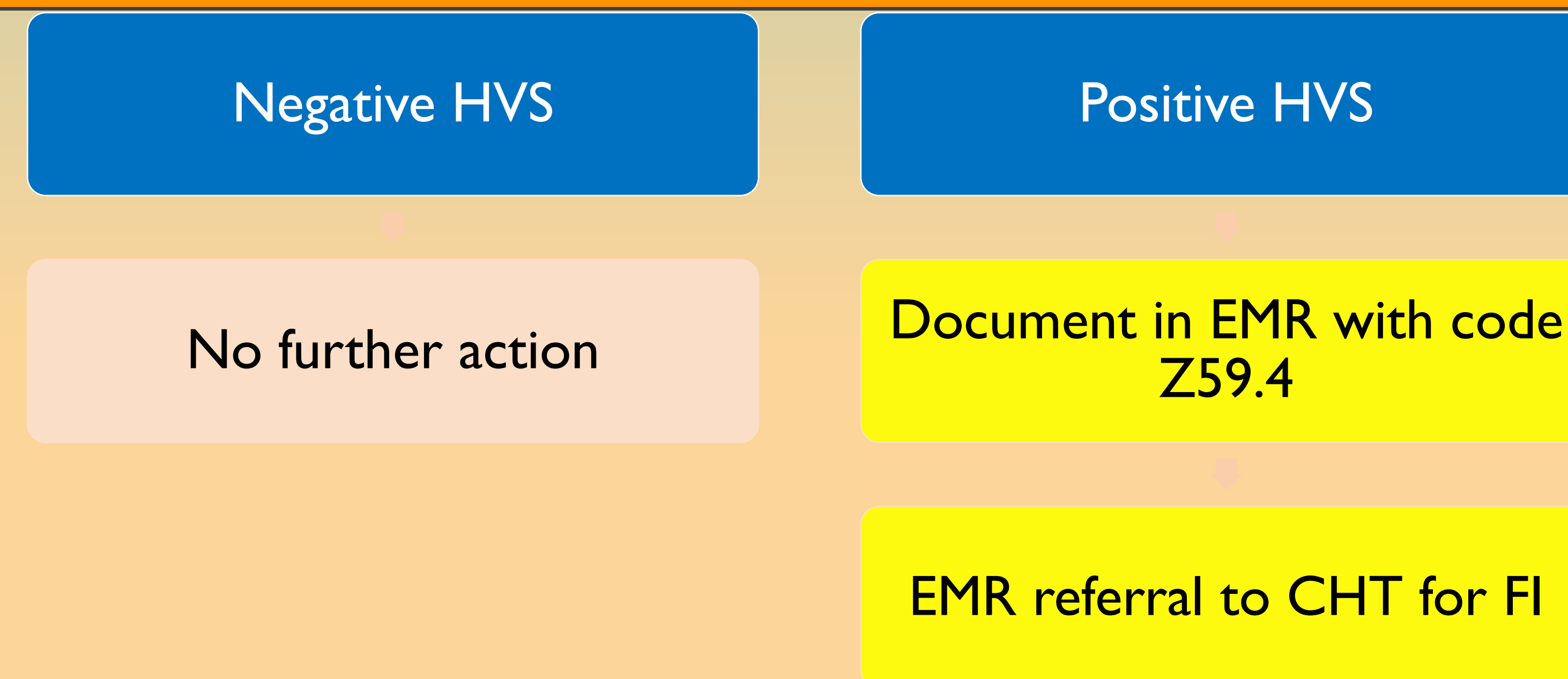
A Continuing Medical Education (CME) presentation was developed and delivered to facility providers; participants were surveyed by Likert scale at beginning and end. Scores of 'Agree & 'Strongly Agree' were used as a measure, with higher scores correlating to success of intervention.

The ED EMR was queried for the 4 weeks prior and following intervention implementation, using the remaining two measures: code Z59.4, and CHT referrals including code or mention of FI.

Intervention

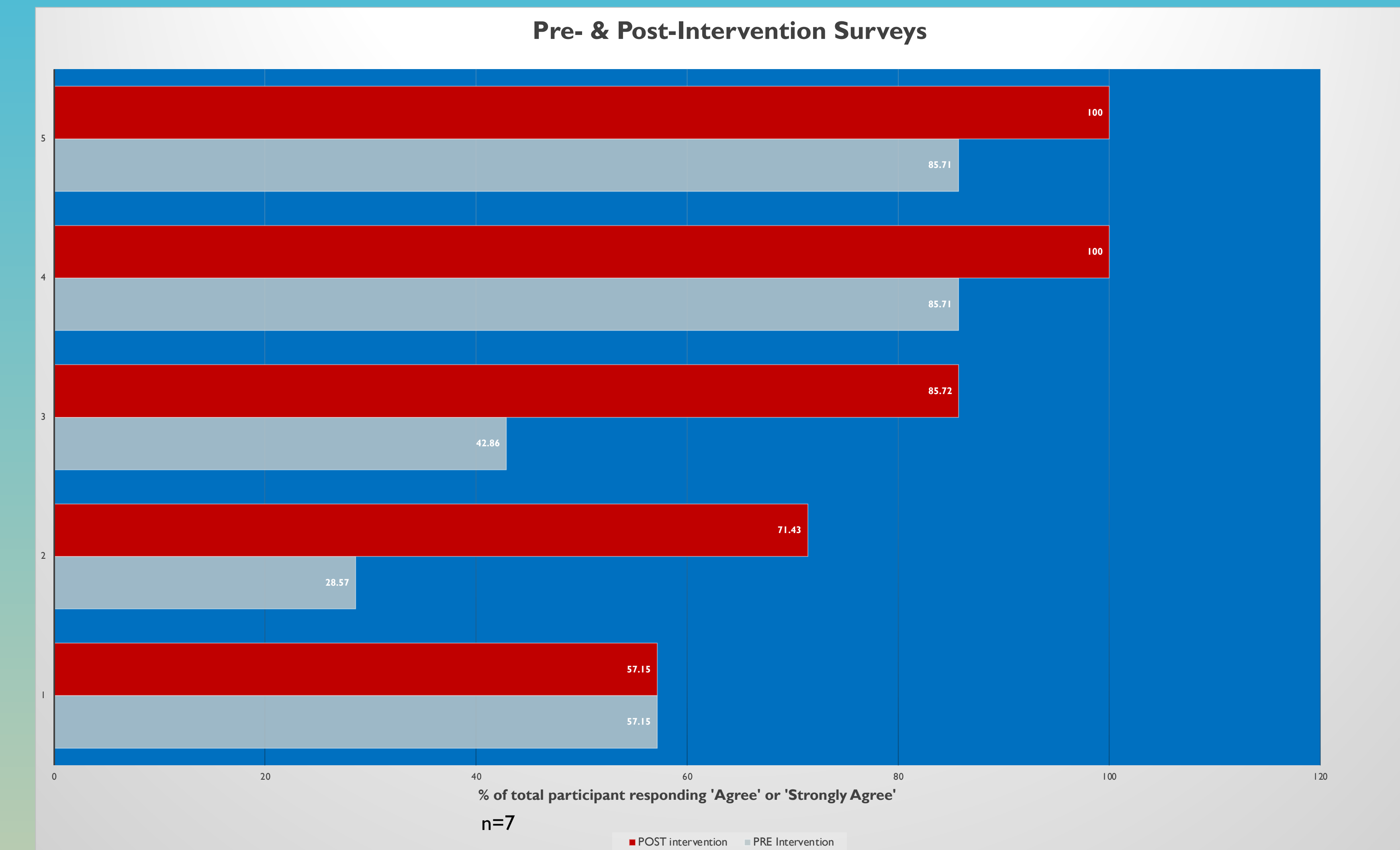
Foci of the CME included: Local FI prevalence, FI resources available within the facility and greater region, evidence-based imperatives for ED screening with the HVS, provider coding with Z59.4, and CHT referral.

**ALL ED ENCOUNTERS:
FIS WITH HVS!**



Results

A 150% increase in provider's comfort using a preferred method of FIS, 100% increase in value for coding FI, and 16.7% increases for confidence referring FI patients, and knowledge of FI resources, were seen. No increase or change found in provider use of FI coding or associated CHT referral.



Conclusion & Discussion

This project saw clear increases in provider knowledge, value, and confidence in FIS, coding, and referral. However no changes were seen in providers' EMR documentation of these processes, leaving no utilization data.

A significant limitation was inability to have the HVS integrated into the ED EMR within project timelines, leaving impetus on the individual provider to perform recommended FIS and subsequent actions. Project strengths included robust existing FI resources within the facility and community, and participation of many kind people addressing the issue.

Recommended next steps are assessment of barrier(s) to ED provider utilization of processes taught through intervention, in order to identify and mitigate.

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