

Data Collection for HRSA Healthy Rural Hometown (HRHI) Grant - Overview:

Key Objective: Reducing Cardiovascular Disease Risk

The HRHI grant is focused on reducing risk of cardiovascular disease through food- and diet-related interventions. To understand how our programs connect to that goal we are tracking what patients are eligible for / offered the program, which patients accept the initial referral / enroll, and which patients participate in the program. We can then compare those groups to changes on a dashboard of CVD risk indicators built from the HRSA-selected tool: [ASCVD Risk Calculator](#).

The patient participation data collection is a (very) simplified version of the HRSA template for assessing impact of care coordination, [found here](#).

The ASCVD Risk Calculator, the tool assigned by HRSA to use in project evaluation in our cohort track, is an app that allows clinicians to work with patients to quantify CVD risk and assess how that risk changes with different possible medication plans. There is information about how it works and how it was created [here](#).

The problem with this tool is that it is not designed to be used with lifestyle interventions, like the food programs we are using. So, HRSA is allowing us to use an alternative methodology. The alternative methodology was created by reviewing background documentation on the ASCVD calculator, pulling what they highlighted as risk factors, then working with CMOs to translate those into ICD-10 codes. That set of information allowed Bi-State / VRHA to create options for flagging patient eligibility and also a "trends" dashboard to observe any movement in general indicators of risk (A1c, Cholesterol, Blood Pressure, etc), which can be compared by patient group.

This alternative methodology does not directly replace the ASCVD Risk Calculator as it doesn't return easily compared scores, but it does allow us to present a sense of changing risk and factors that go into it.

Key Objective: Implementing Evidence-Based Models

Each pilot location in the HRHI grant has a slightly different program design. However, we can refer to the literature on programs that successfully influence clinical indicators of diet-related chronic conditions through food access interventions to identify common program elements. Our data collection system will also track progress in these elements:

Information Management & Data Collection – including screening for food risk, connecting clinical elements, recording patient program participation in the EHR, providing primary care providers a full view into diet-related service engagement (aka closed loops), tracking progress to specific health goals and modifying the approach as need. Focus of Year 1 data collection system.

High Engagement in Nutrition Education / Nutrition Services – Year 1 includes a landscape level analysis of services and access across the state, and establishing data collection to track participation in evidence-based nutrition programs and RD services. Year 2 assessment will consider additional steps.

Medication Management – CVD risk dashboard will track statin prescriptions and aspirin for heart conditions (the prescriptions listed in the ASCVD Risk Estimator). Nutrition services (above) will track engagement with providers licensed to manage insulin prescriptions. We anticipate observational data collection only, no activities to directly influence this element.

Food Programs Options that Match Dietary Treatment Needs - including considerations around what food is provided, availability of meals-based programs for patients who cannot cook, length of food interventions, and participation rates in foundational federal nutrition programs such as SNAP and Older American's Act funded programs. The outreach activities in this grant support developing program options and will be reflected in narrative reporting.

Individual FQHC Report – Values are Dummy Numbers to Test Integration with EHR System

Patient Participation Tracker:

Patient Participation Tracker:				Following Pathways for "Eligible" Patients				Summarizing All Grant Years		
Active Medical Patients Recorded at start of each PY	Active Patients with Med Visit in Program Year	Active Patients with CVD Risk (Qlik filter, not FQHC attestation)	Patients Screen Positive for FI in Program Year	Eligible Patients (Med Visit in PY + FI Positive in PY + Cardio Risk)	Offered Food Intervention (Accepted + Declined + Consultation w/o Outcome Marked)	% of Offered Who Enroll in Food Intervention (# Accepted / Total # Offered)	Share of Current Participants "Eligible" Shows patients entering program through other avenues	Patients Currently Participating (enrolled=yes and "complete" is left blank) Enrolled in Any Year	Patients Assisted with Food Access ("complete" marked Y OR participated for 3+ months) Any Year	% Eligible Patients Engaged [(# Participating + # Complete / Total # Offered)]
BMI reading	Subset of Total Active	Subset of Total Active	Subset of Total Active	Absolute #	# Offered (PY)	Percent (PY)	# eligible; # not eligible (PY)	Enrolled Any Year; Active in Current PY	Total # Complete	Percent
13,584	8,184	5,367	33	25	2	100%	2; 15		0	100%

FI Screening Tracker:

Active Patients with Med Visit in PY	Patients w/ Med Visit Screened for HVS
# - Subset of Total	Percent (PY)
8,184	4%
# Patients HVS Positive in PY	% Positive Rate
# - Subset of Total Screened	Percent (PY)
33	9%

Patient Timeline:

% with Current FI Screen Available at Office Visit?	Days from HVS Screen to Care Coordination Services (HVS+ and CHT visit)
[(Patients w/ Med Visit in PY + FI Screen Results within previous 90 days) / Patients w/ Med Visit in PY]	Patients seen within 6 weeks (ACO / HEDIS "timely follow up"); Patients seen within 48 hours (AHC Model Measure)
4.4%	6; 2

Biomarkers: % of Patients with Test in Past 12 Months

	BMI	A1c	Blood Pressure	Cholesterol
Active Patients	67%	17%	67%	20%
Active Patients with CVD Risk	80%	29%	80%	33%
Patients Participating in Food Intervention with CVD Risk	100%	76%	100%	47%

Biomarkers: Patient change in biomarker tracking pre- and post-enrollment comparison

Graph: Percent with test each quarter and total Year To Date A1C	Graph: Percent with test each quarter and total Year To Date Blood Pressure	Graph: Percent with test each quarter and total Year To Date Cholesterol
---	--	---

Combined FQHC Patients – Following Trends in Clinical Indicators per ASCVD Tool

Patient Participation Tracker:

Active Patients with Med Visit in Program Year	% Active Patients with CVD Risk	% Patients with Med Visit Screened for FI Risk in PY	% Patients Screen Positive for FI in PY	Eligible Patients (Med Visit in PY + FI Positive in PY + Cardio Risk)	Eligible Patients - % (# Eligible / # with Med Visit)	Eligible Offered Food Intervention (Accepted + Declined + Consultation w/o Outcome Marked)	% of Offered Who Enroll in Food Intervention (# Accepted / Total # Offered in PY)	Total Patients Engaged [# Participating + # Complete]
Subset of Total Active	% in PY	% in PY	% of Patients Screened	Absolute # Meeting Three Criteria	% of Patients with Med Visit Eligible (PY)	# Offered (PY)	Percent (PY)	# of Patients Across All Grant Years

HbA1c Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

HDL Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

Systolic Blood Pressure Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

BMI Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

Other Interventions:

	Eligible	Enrolled
Statin Rx (newly active)	# and %	
Metformin Rx (newly active)		
Aspirin for CVD (newly active)		
Change in Smoking Status (converts to 'former')		

PY2: Add Closed Loop on MNT Referrals and Participation in Self-Management Programs.

PY3: Add Medication Therapy Management and Quality Review of Rx Data

Quarterly Reporting from Participating FQHCs – Project Implementation

LHP
\$ of any additional funding secured. (see below for in-kind)
\$ Value of donated goods
Volunteer hours
of patients reporting improvement / satisfaction
patient health education sessions offered
patients attending education sessions (quarterly - patients may duplicate)
of meals distributed (to all patients)
Total \$ value of food distributed (CSAs, Food Staples Boses, Grocery Gift Cards etc)
LRHC
of pounds of fresh food distributed (to all patients)
of patients reporting improvement / satisfaction
\$ of any additional funding secured. (see below for in-kind)
\$ Value of donated goods
Volunteer hours
NOTCH
\$ value of credit cards / coupons redeemed
patient health education sessions offered
patients attending education sessions (quarterly - patients may duplicate)
of patients reporting improvement / satisfaction
Patients Received SNAP Assistance
\$ of any additional funding secured. (see below for in-kind)
\$ Value of donated goods
Volunteer hours

Narrative Reporting:

1.Has your organization experienced any changes in key staff related to this project? If so, please describe.

2.Please briefly update on milestones in Program Implementation, including any new elements or discontinued elements (with date and reason).

3.Have you engaged new (since last report) community partners to support this work? If so, briefly list the partner & role. Note: The spreadsheet requests dollar estimates of additional resources raised / donated and volunteer hours provided in match. If there was a significant contribution by an external organization not easily quantified, please reflect it here.

4.Have you participated in any trainings or workshops related to this project? Please indicate topic, date, and organization. Please also indicate if you were the host / organizer.

5.Have you developed any materials in support of your program that you would like to share with the full group? Please include as links / attachments with a brief description.

6.Is there additional support from Bi-State Primary Care Association that would be helpful to your program? Please list. (Example – training on a particular topic, subject matter expert you'd like brought in, background on a certain topic, etc.)

7.Notes on Program Implementation: Additional details not captured on Excel sheet.

- **LRHC:** # of Patients enrolled prior to HRHI data collection (only HRHI-attributed patients go on the Excel Sheet); # of Pounds of Food Distributed per Week; Additional screening or assessment results (beyond HVS – if applicable)
- **LHP:** Break down of # of Participants and food distributed by food program type (Note any relevant start and end dates – for example CSA share schedule)
- **NOTCH:** See separate notes regarding Summer 2022 pilot project reporting.

Single FQHC Report – QUESTIONS WE'RE TRYING TO ANSWER

Patient Participation Tracker:

Patient Participation Tracker:				Following Pathways for "Eligible" Patients				Summarizing All Grant Years		
Active Medical Patients Recorded at start of each PY	Active Patients with Med Visit in Program Year	Active Patients with CVD Risk (Qlik filter, not FQHC attestation)	Patients Screen Positive for FI in Program Year	Eligible Patients (Med Visit in PY + FI Positive in PY + Cardio Risk)	Offered Food Intervention (Accepted + Declined + Consultation w/o Outcome Marked)	% of Offered Who Enroll in Food Intervention (# Accepted / Total # Offered)	Share of Current Participants "Eligible" Shows patients entering program through other avenues	Patients Currently Participating (enrolled=yes, and "complete" is left blank) Any Year	Patients Assisted with Food Access ("complete" marked Y OR participated for 3+ months) Any Year	% Eligible Patients Engaged [(# Participating + # Complete / Total # Offered)]
Sets Baseline (patients w/ BMI)	Had opportunity to be offered program	Risk of concern per HRHI Grant	Risk of concern per HRHI grant	How many patients might have participated	Was program offered to patients who might be interested?	What was the level of interest in the program?	Shows patients entering via other avenues.	Program capacity measure – will need to match capacity to # active	Total # Complete – anticipate that biomarker change happens at end not beginning.	Another measure of patient interest, over time not in moment offered

FI Screening Tracker:

Active Patients with Med Visit in PY	Patients w/ Med Visit Screened for HVS
Denominator	How many are being screened – check against screening policy
# Patients HVS Positive in PY	% Positive Rate
# - Subset of Total Screened	Can compare to other food insecurity estimates

Patient Timeline:

% with Current FI Screen Available at Office Visit?	Days from HVS Screen to Care Coordination Services (HVS+ and CHT visit)
Is it possible for the PCP to review current FI results with patient at the visit? (We can't know if they did, but can know if it wasn't possible). Date of Med visit plus 90 days prior is based on FQHC screening policies.	Measure of care coordinator capacity. Preliminary data from the AHC Model project review suggests waiting more than 2 days for follow up reduces rate of completion, but that data included ED patients in set.

Using this Data for Community Engagement / Assessment:

- Did the patients screened with HVS match the practice policy for screening?
- Did the referral / offer of services following a positive screen match the policy?
- How many patients are lost to follow up between screening and care coordination? Does this match the time between showing initial interest and receiving services?
- Are patients interested in the food intervention? If not, why not – are there other services that they would be interested in?
- What are the drop off rates between enrolling and completing the food program?
- For patients entering the program through other routes (the eligible v. not-eligible enrolled patients) what are those avenues?
- How does the % positive rate compare to other data sources for food insecurity?
- Are PCPs involved in reviewing patients' FI screen results? (This answers in the negative – med visits that did not have results available to review so we know they would not have)

Using this Data for Cost Savings Estimate / Business Case:

- How many patients does the program need to serve at one time, and is this increasing?
- Are the positive HVS rates and/or patients interested in a referral increasing? Are the days from HVS screen to receiving care coordination services increasing (capacity measure)?
- Have changes to workflows and/or changes to common practices with PCPs led to more involvement from multiple staff people?

Single FQHC Report – QUESTIONS WE'RE TRYING TO ANSWER

Using this Data for Cost Savings Estimate / Business Case:

- Increased patient engagement in preventive care is both a cost (higher utilization of PCP services), a revenue a (reimbursement for those services), and a future TCOC reduction.
- After OCV publication of details on blood pressure quality measures, we can start to track those as well (it will be a "timely follow up" measure).
- Will want to discuss with Lauri if the readings frequency needs to be controlled for when we compare trendlines in the different cohorts (in the combined FQHC dashboard, next page).

Biomarkers: % of Patients with Test in Past 12 Months

	BMI	A1c	Blood Pressure	Cholesterol
Active Patients	BMI reading happens at every med visit, so this shows active w/in 12 months (vs. Ever)			
Active Patients with CVD Risk	Visit frequency with patients at CVD risk		If self-monitoring recorded with blood pressure, this could deviate from BMI readings.	
Patients Enrolled in Food Intervention (ever)	Will go down from 100% if previous enrollees don't do annual med visit			

Biomarkers: Tracks whether patients have change in biomarker tracking post-enrollment

Tests whether participation in the food program is correlated with patients increasing their engagement in monitoring relevant clinical indicators of risk.

Combined FQHC Patients – QUESTIONS WE'RE TRYING TO ANSWER

Patient Participation Tracker:

- See notes on the individual FQHC pages, this version takes key benchmarks and combines across the FQHCs to make relative comparison

HbA1c Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

HDL Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

Systolic Blood Pressure Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

BMI Line Graph: Trends over Program Year for Active Medical Patients; Eligible Patients who never enrolled; Eligible Patients Currently Participating

At end of grant period, will add a before / after lookback for everyone who completed or participated for 3+ months.

The previous biomarker tracking systems (individual FQHC dashboard) were process focused, looking at available data and changes in patient engagement. These combined charts are outcomes focused, tracking changes in patients enrolled in interventions and in comparison cohorts.

Cost Savings Estimation: We based the CSE model on *process* measures, not outcomes. We do not necessarily expect to see improvements over the time of the grant period, because it takes a long time to set up the evidence-based systems. If we observe better outcomes in enrolled patients before the full model is set up, it would likely be due to early adopter / selection bias vs a replicable approach that reaches a large # of patients.

Other Interventions:

	Eligible	Enrolled
Statin Rx (newly active)	# and %	
Metformin Rx (newly active)		
Aspirin for CVD (newly active)		
Change in Smoking Status (converts to 'former')		

These measures are observational, they are a prelude to doing data quality review in PY3 and adding in a medication management measure. See below.

PY2: Add Closed Loop on MNT Referrals and Participation in Self-Management Programs.
PY3: Add Medication Therapy Management and Quality Review of Rx Data

See the "Notes on Data to Add & Limitations" document for where we stand and timeline on these future dashboard items.