

Your 4-Step Guide to Using Data to Address Food Insecurity

Access to nutritious food is one of the most critical social determinants of health facing individuals and families in our communities. The reality is the numbers flex with the socio-economic conditions of the day and can seem daunting. In 2021, 10 percent of households in the U.S. faced food and nutrition insecurity at least one time and 5.1 million households faced frequent and ongoing food insecurity.

PeaceHealth, a not-for-profit healthcare system with medical centers, critical access hospitals and medical clinics located in Washington, Oregon and Alaska, recently worked with Metopio to assess food insecurity in their communities. The heart of the assessment was driven by their mission to serve their communities and their desire to understand disparities related to food access.

Key Takeaways:

- **Combining publicly available data and their lived experience in the community**, leaders gained insights on opportunities to have a larger impact in minority communities they serve
- **The assessment brought a focus on Black, Indigenous and Communities of Color (BIPOC)** experiencing a higher rate of food insecurity and chronic diseases such as diabetes
- **Mapping gaps against existing relationships** helped the Community Health team identify and elevate specific partners and deploy hospital resources to reach those that need the most help

Here are the 4 steps that PeaceHealth took to better understand food insecurity:

STEP 1: Evaluate Criteria

Easy access to data across the team helps everyone make data-driven decisions

Metopio’s platform puts curated, verified data from publicly available sources at the fingertips of the PeaceHealth team. This is essential because answering questions about social determinants of health requires more than one data set.

The team wanted to understand racial disparities in food insecurity so they started their analysis with demographics to identify Hispanic or Latino communities. They went deeper with key variables that added depth to their analysis including:

- Transportation
- Primary languages spoken
- Rates of diagnosed diabetes
- Proprietary de-identified data associated with diabetes

The highlighted columns helped PeaceHealth leaders to add up the equation of food insecurity and its impacts.

Food Insecurity Assessment							
Insight created by Angie Grover (PeaceHealth), last changed Sep 1, 2022							Public
Part of the Food Access project							
Start typing to filter topics...							
Topic	Clark County, WA	98661	98663	98664	98665	98683	98684
Demographics <i>Hispanic or Latino</i> % of residents, 2020	11.68 ± 0.00	19.20 ± 0.00	13.88 ± 0.00	16.57 ± 0.00	14.77 ± 0.00	12.87 ± 0.00	14.39 ± 0.00
Very low food access % of residents, 2019	21.98 ± 0.00	7.34 ± 0.00	18.46 ± 0.00	4.57 ± 0.00	24.57 ± 0.00	4.17 ± 0.00	20.56 ± 0.00
Very low food access <i>Hispanic or Latino</i> % of residents, 2019	20.96 ± 0.00	8.94 ± 0.00	17.08 ± 0.00	1.35 ± 0.00	19.30 ± 0.00	3.05 ± 0.00	18.72 ± 0.00
No vehicle available % of households, 2016-2020	4.56 ± 0.40	6.10 ± 1.25	8.42 ± 2.47	2.66 ± 1.08	3.82 ± 1.13	7.26 ± 1.32	3.12 ± 1.39
Foreign born % of residents, 2016-2020	10.65 ± 0.00	16.13 ± 2.13	7.09 ± 2.23	13.11 ± 2.35	10.87 ± 1.86	14.56 ± 1.63	15.31 ± 2.10
Spanish primary language % of households, 2016-2020	6.09 ± 0.30	10.57 ± 1.57	7.63 ± 2.78	10.74 ± 3.63	9.02 ± 2.41	6.41 ± 1.44	8.34 ± 2.47
Diagnosed diabetes % of adults, 2019	8.8 ± 0.0	9.5 ± 0.0	9.1 ± 0.0	10.2 ± 0.0	9.3 ± 0.0	9.6 ± 0.0	8.7 ± 0.0

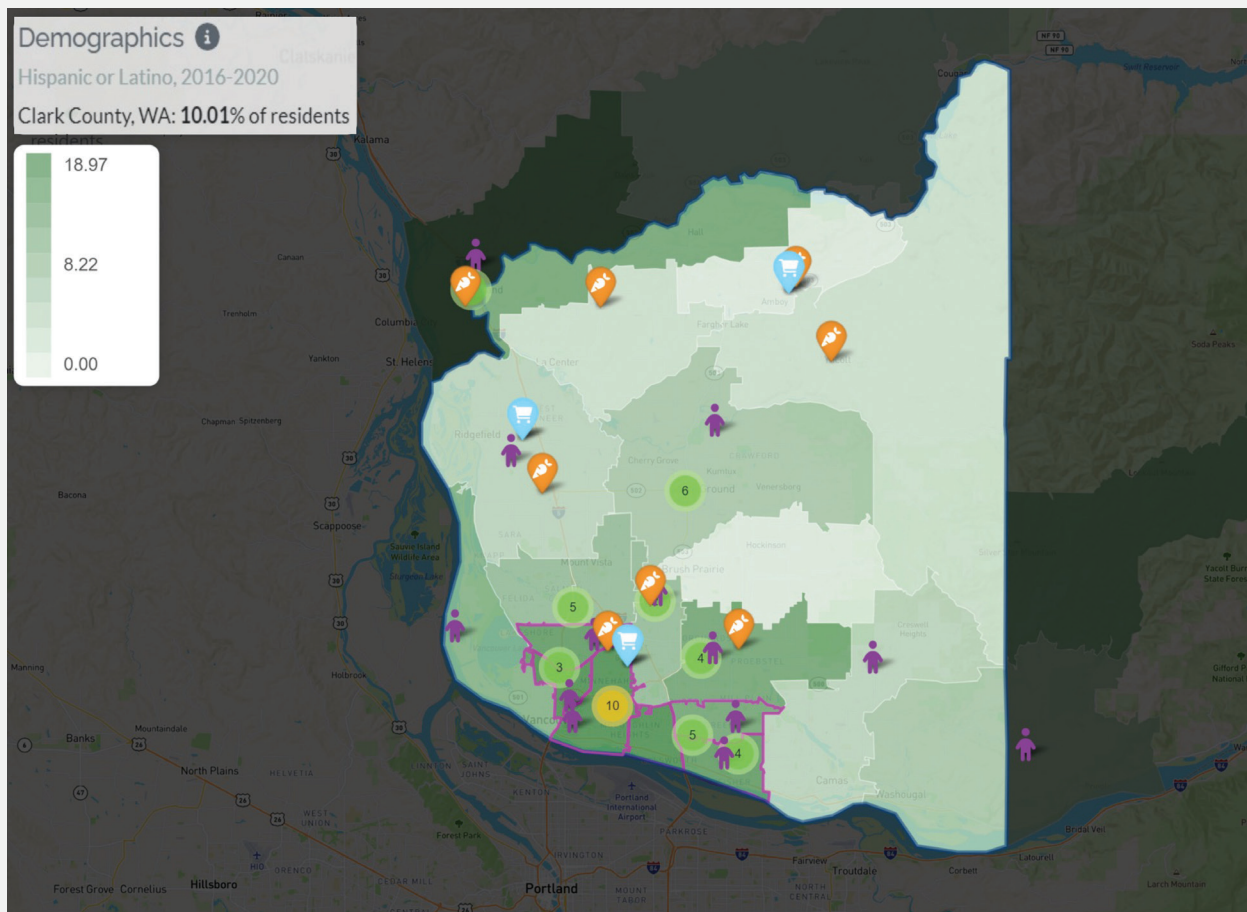
Step 2: Map The Results

Priority areas mapped with existing resources demonstrate gaps

When PeaceHealth leaders overlaid their key variables along with their resources, they created a dynamic decision-making process. This visualization creates a quick and easy way to understand impacts in both rural and urban communities.

In this map:

- The darker the color, the higher the percentage of Hispanic or Latino residents.
- The ZIP codes highlighted in pink have the highest Hispanic or Latino population and the highest percentage of residents in poverty not on SNAP. The mapped resources include —
 - Grocery store locations (in blue and represented by clustered green numbers)
 - Food pantries with hours of operation (in orange represented by clustered yellow numbers)
 - PeaceHealth trained nutritionists that could be deployed in a community (in purple)
- This map makes it easy to see in southeast Vancouver, there are limited food pantry partners.



Step 3: Get Specific

With Census tracts and all of these assets, find opportunities for action

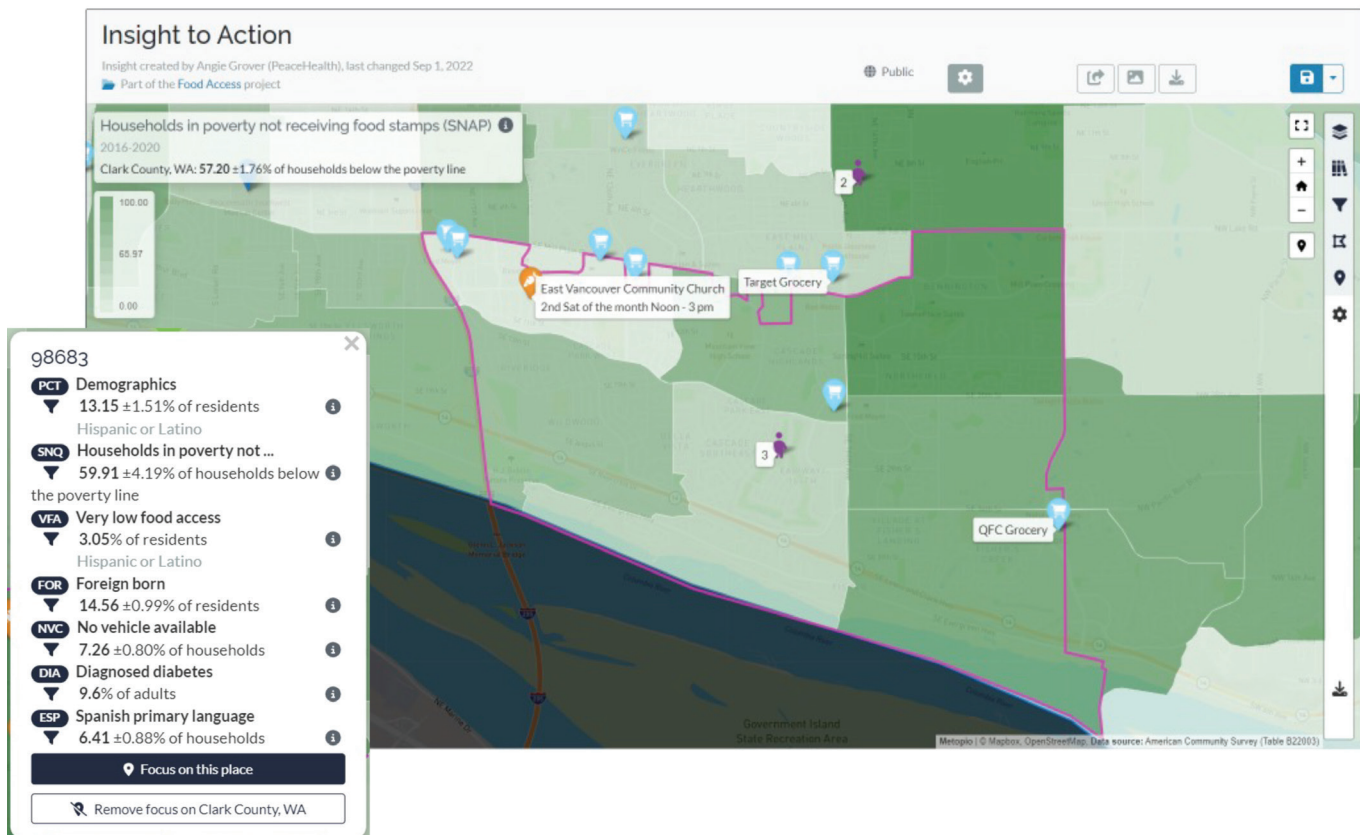
By selecting one of the ZIP codes that met their criteria, PeaceHealth could get even more granular. The ZIP code data shows the criteria we are using while the map is at the Census tract level. PeaceHealth has one food distribution partner in this ZIP Code (98683) - the East Vancouver Community Church.

However, they were only able to serve the community one day every month for three hours. The gap is evident when we look at this limited resource in addition to the number of residents who qualify for SNAP and don't receive it.

PeaceHealth was able to reduce risk and increase impact by using this information to leverage their resources and tailor a plan that reflected the needs of the community.

Action steps:

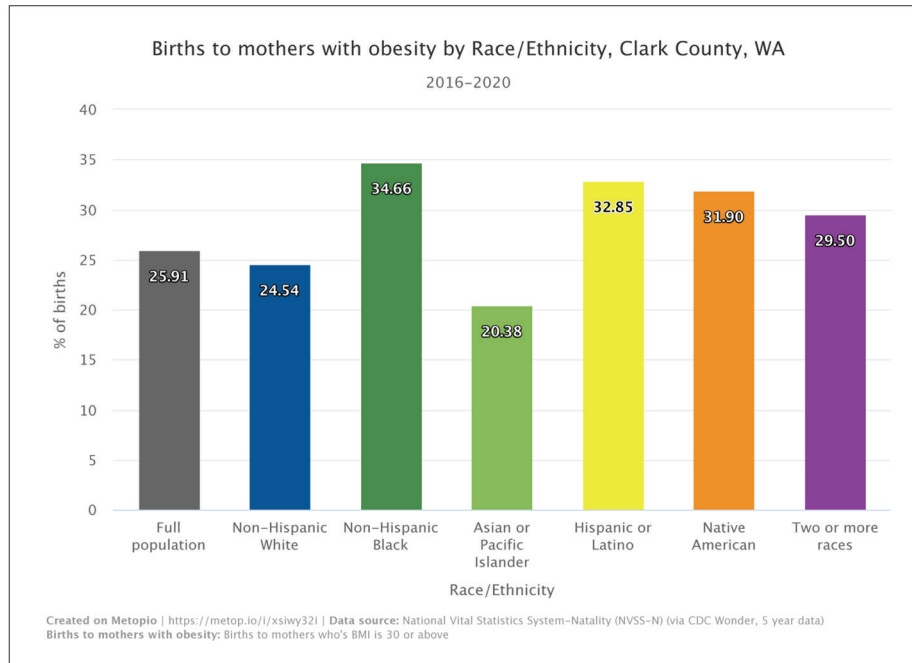
- Bi-lingual case worker at pantry to sign up for SNAP
- Outreach to community regarding eligibility and assistance for benefits
- Mobile pantry with SNAP services or expanded Meals on Wheels
- PeaceHealth volunteer shopping assistance at grocery store



Step 4: Identify Impact

Food insecurity drives poor patient outcomes and is correlated with chronic disease

Addressing the social determinants of health means making the community healthier. Tackling food insecurity is correlated with obesity, diabetes, coronary heart disease amongst other chronic illnesses. PeaceHealth will continue to track this data in the short and long-term as they work on supporting these communities in new ways.



Here, PeaceHealth looked at how increasing the number of BIPOC families with access to healthy food could also support other positive outcomes.

- Births to minority mothers who are obese is 30% higher than the non-Hispanic white population.
- The American College of Obstetricians and Gynecologists lists possible impacts of births to obese mothers as —
 - Gestational diabetes or hypertension
 - Preeclampsia
- And the risks to the babies is even more severe with increased likelihood of —
 - Birth defects
 - Macrosomia
 - Pre-term and still birth

PeaceHealth has started the journey to fighting food insecurity with data. Is your organization ready to get started as well? Metopio can help. Please visit metop.io to learn more and schedule time with our team.

