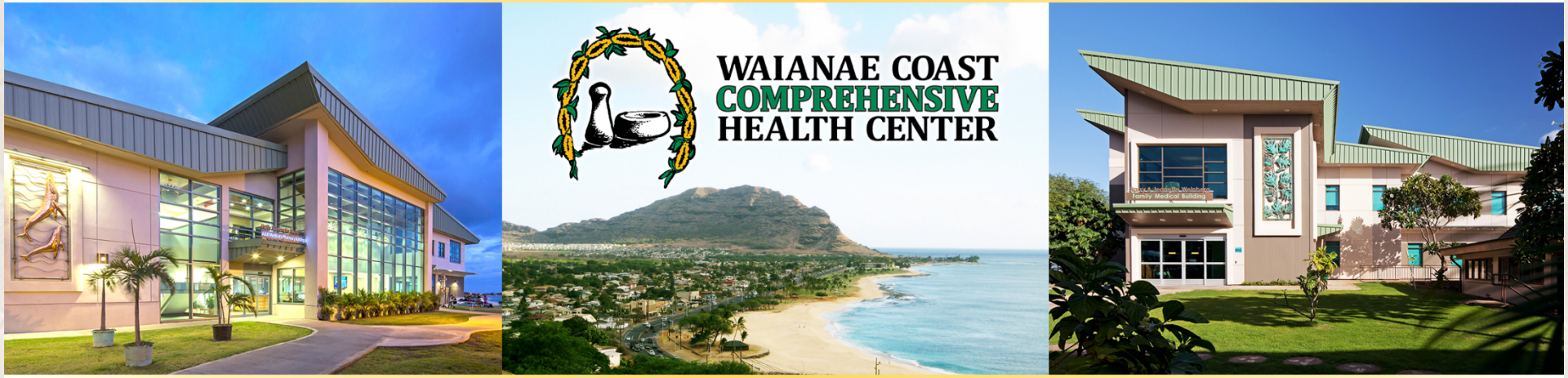
Using Data to Identify Social Determinants of Health



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AANHPI Health Summit
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WAIANAE COAST COMPREHENSIVE HEALTH CENTER

- Established 1972 as a community-driven response to the lack of health care providers available on the Waianae coast.
- The largest and oldest of Hawaii's 14 community health centers.
- In 2015, served nearly 35,000 patients through 196,326 encounters from the main clinic and its satellite sites in Nanakuli, Kapolei and Waipahu.
- Largest employer on the Waianae coast with nearly 635 employees – most of them residents of the community.

THE WAIANAE COAST PRIMARY AREA

- Highest number of households in the state receiving financial aid and food stamps
- Highest number of obese adults, adults with diabetes and adult smokers
- Highest cancer and heart disease mortality

2009 State of Hawaii Primary Care Needs Assessment Data Book
(Hawaii State Department of Health, January 2010)

EDUCATION DATA

- Though improving over the past 3 years, the two high schools in the Waianae School complex have high drop out rates (22%) and relatively low on-time graduation rates (74%)

- Chronic absenteeism (missing >15 days per year) though also improving averages 27% for Waianae complex Elementary Schools

Hawaii Public Schools School Year 2014–2015 Strive HI School Performance Report

TOP 4 FACTORS INFLUENCING HEALTH

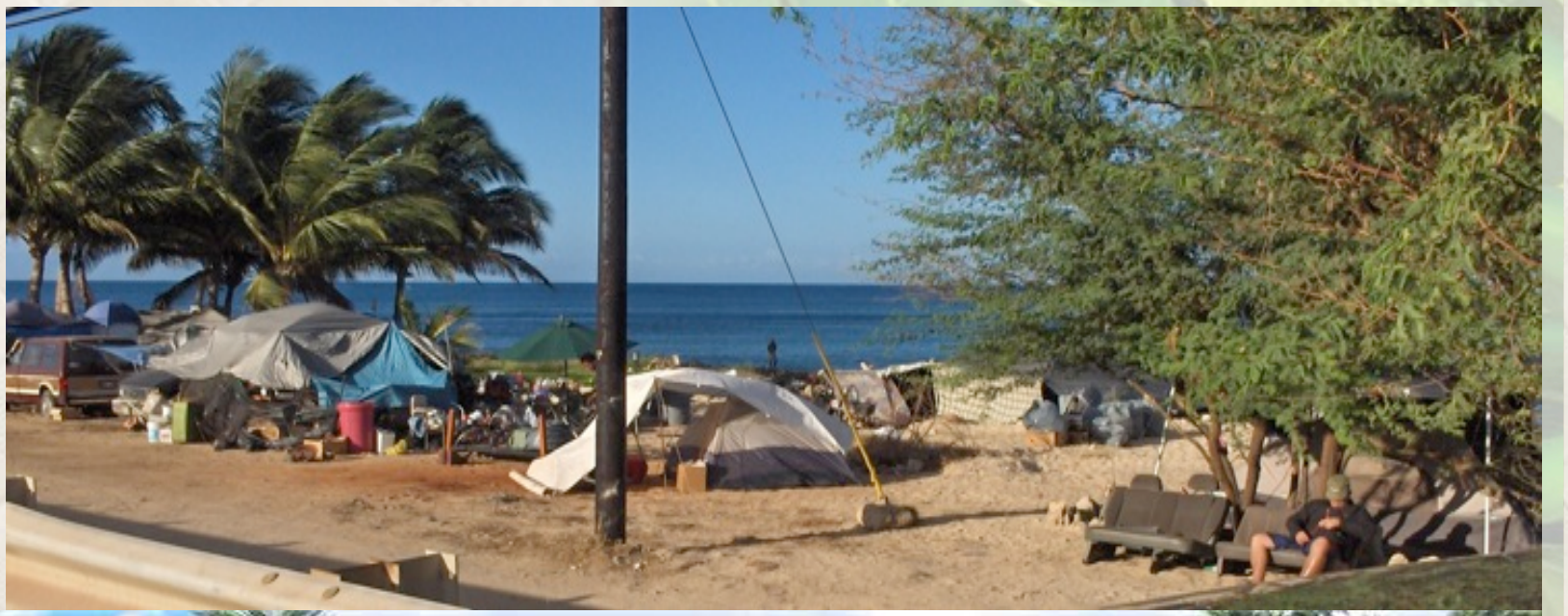
Whether or not someone:

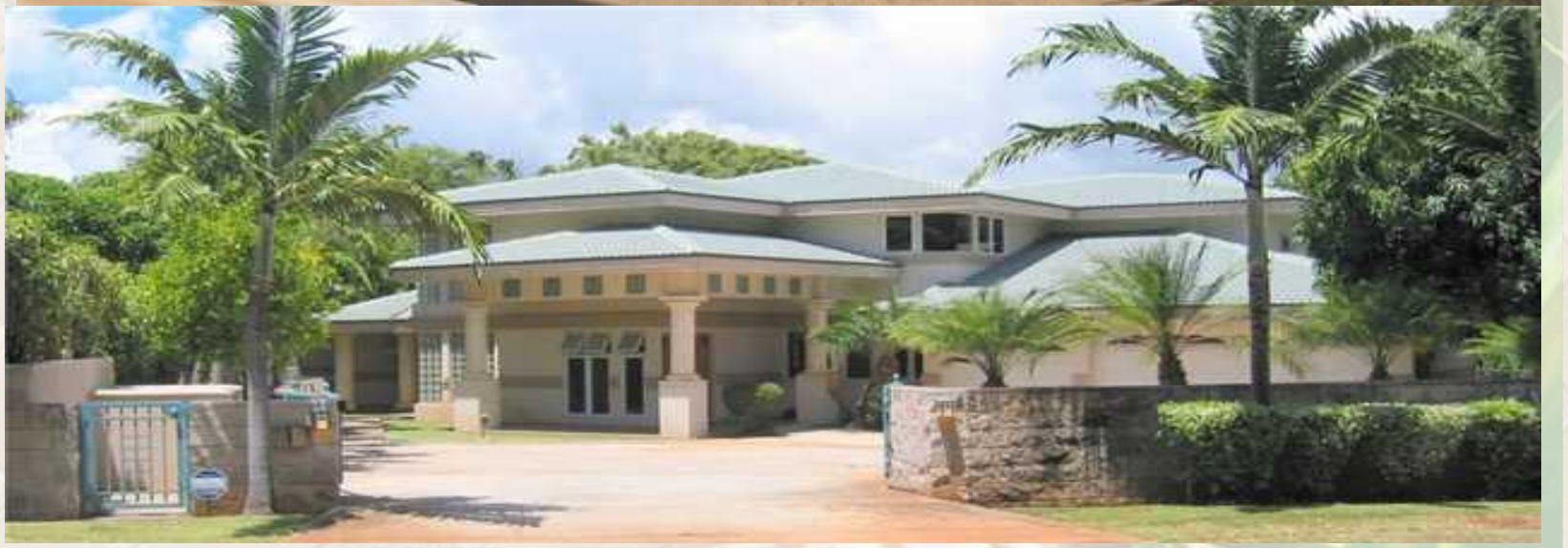
- ✓ Lives in poverty or experiences income insecurity
- ✓ Finishes high school
- ✓ Engages in physical activity
- ✓ Smokes

"Poorer people live shorter lives and are more often ill than the rich. This disparity has drawn attention to the remarkable sensitivity of health to the social environment."

Wilkinson & Marmot, 2003. WHO

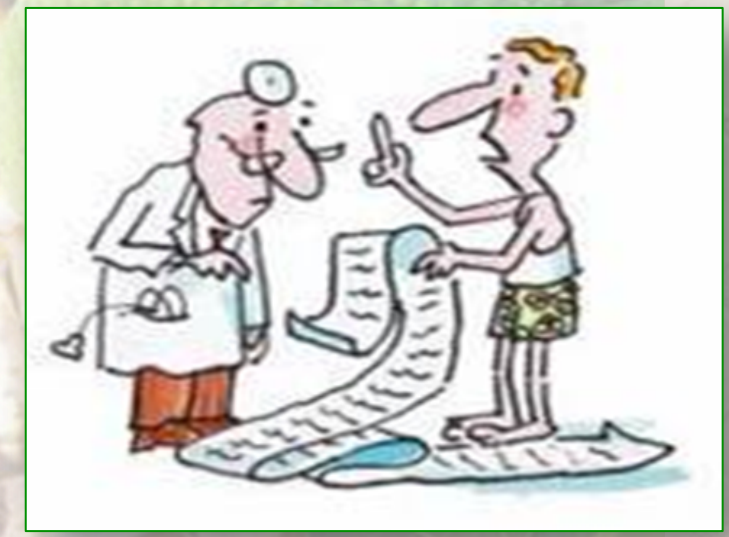
NOT ALL BEACH FRONT HOMES ARE THE SAME





WCCHC's MOST COMPLEX PATIENTS

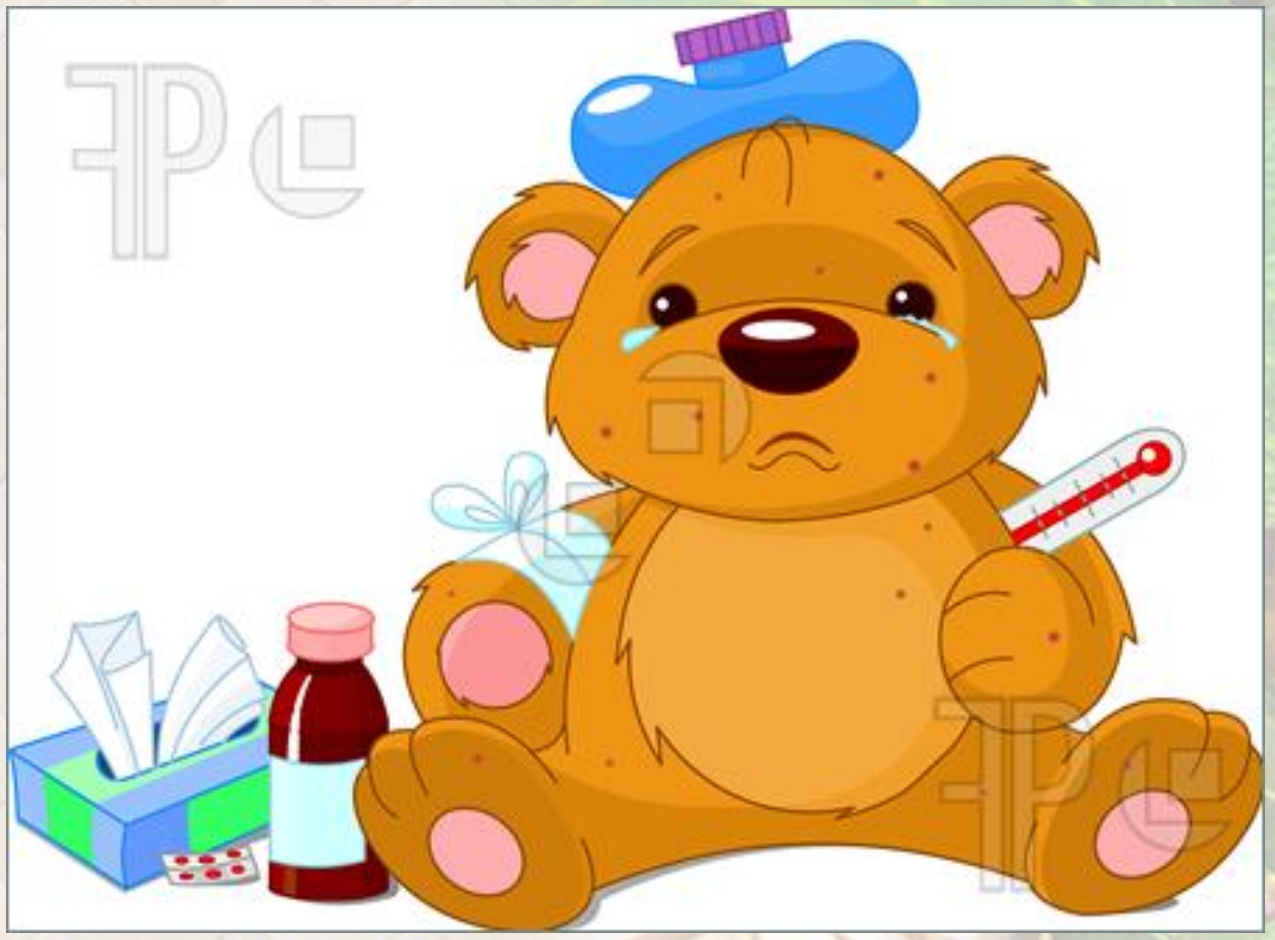
- Two or more chronic disease diagnosis with depression or another behavioral health diagnosis and socioeconomic based health disparities.
- Greater than 50% of the patients seen in our Adult Medicine Clinic last year fit this definition.



OUR VALUE IS IN PROVIDING COMPREHENSIVE, INTEGRATED MEDICAL CARE TO OUR PATIENTS

- Highly complex patients receive fragmented medical care at best and over-utilize emergency rooms and hospitals.
- They consume more resources, take more time to manage effectively and contribute to physician frustration.
- CHCs are the ideal patient-centered healthcare home because of the integrated services they provide.

HOW DO WE PROVE OUR PATIENTS ARE SICKER THAN "THE AVERAGE BEAR"?



NEW MEDICAID CONTRACTS

- Patient Centered Healthcare Home pilot project with Medicaid payer, AlohaCare.
- Purpose was to identify complex patients and develop cost-saving methods while maintaining or improving quality of care.
- Recognized that SDoH played a significant role in defining the complexity of these patients.

PARTNERSHIP WITH ALTRUISTA HEALTH

- A population management, predictive modeling and care management program
- Stratifies patients into various risk levels based on:
  - ✓ Probability of complications
  - ✓ Cost
- Uses a combination of:
  - ✓ Payer claims data
  - ✓ EHR data
  - ✓ Pharmacy claims

ALTRUISTA HEALTH GUIDING CARE

- Has the capacity to incorporate SDoH and psychosocial factors to produce a holistic risk score.
- These more holistic risk scores would then dictate the level of intervention needed.
- Intention is for those with moderate to high risk scores to be referred to a care coordinator for more thorough assessment and care plan development.

RISK SCORES

- Measure the impact that social determinants may have on the health of an individual, panel, or patient population.
- Based on an algorithm that quantifies the relative impact each social determinant factor has on patients' risk for poor outcomes.
- The value of the risk score can be associated with the relative amount of additional resources required to support those patients compared to patients with a lower risk profile

RISK SCORES *(cont.)*

- At the patient level, risk scores should function as "risk profiles" such that the information is useful to patients.
- At the population level, the algorithm quantifies the relative impact that social barriers have on the population's disparate health outcomes and its resultant predisposition to higher healthcare utilization and higher cost.

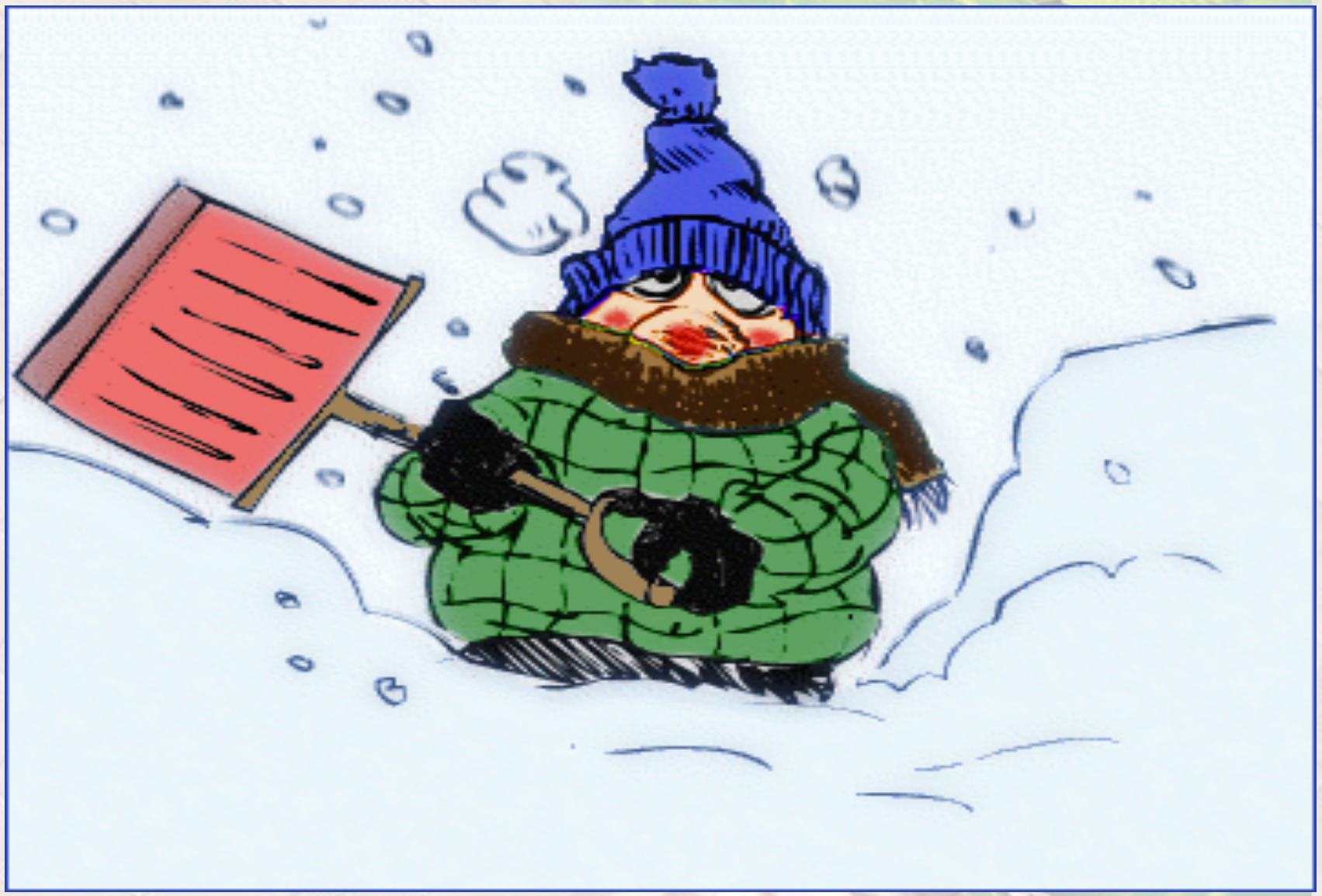
ASSESSING SDoH WILL ALLOW CHCs TO:

- Comprehensively address patient health needs.
- Predict which patients are at risk for chronic disease, poor outcomes and preventable utilization of costly health care services.
- Work with payers to ensure that CHCs model of care is adequately reimbursed.
- Evaluate the impact specific interventions (e.g. enabling services) have on patient health.

WORKFLOW PROCESS TO CAPTURE SDoH DATA

- Capture data without having to develop another tool
- EHR – Social and family history templates and ICD10 codes
- Use enabling codes – fine tuned over 10 years
- EPM – General demographics and UDS tabs
- "No wrong door" – everyone is an agent of change
- Create redundancy
- Pull SDoH information from existing EHR data

NOTHING IS SIMPLE




Then the stars aligned!

WCCHC EXPERIENCES IN COLLECTING PRAPARE DATA

- Administered the survey to a cohort of 500 non-pregnant adults on Medicaid with either diabetes or cardiovascular disease.
- RN care coordinators administered the survey.
- Time it took to administer the survey varied from 15 minutes to an hour.
- Care coordinators trained to address concerns raised during course of administering survey.