So You’ve Screened Your Patients – Now What?

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About Integral Care

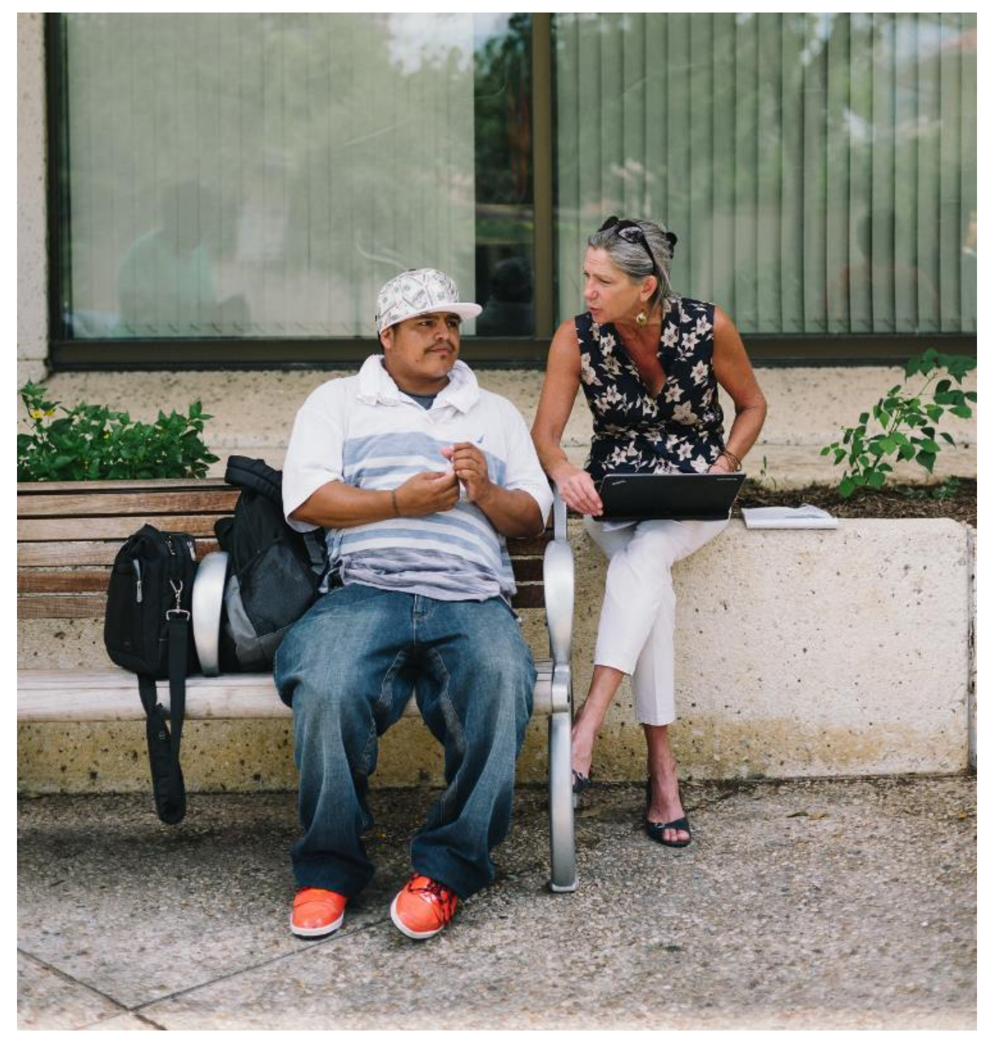
- Integral Care is the Local Mental Health Authority for Travis County as designated by state law
- We are **1 of 39** Community Mental Health Centers in Texas
- Integral Care supports adults and children living with:
  - **mental illness**
  - **substance use disorder**
  - **intellectual and developmental disabilities**

Our System of Care

- During Fiscal Year 2023, Integral Care served over **29,000** individuals and provided over **470,000** services across the Travis County community
- Currently, Integral Care employs over **1,000** staff across **45** locations in Travis County

What We Do - Provider

- Care Coordination
- 24/7 Crisis Response
- Integrated Behavioral Health
- Residential Services
- Homelessness and Housing Services
- Jail Diversion
- Substance Use Treatment
- Prevention and Wellness

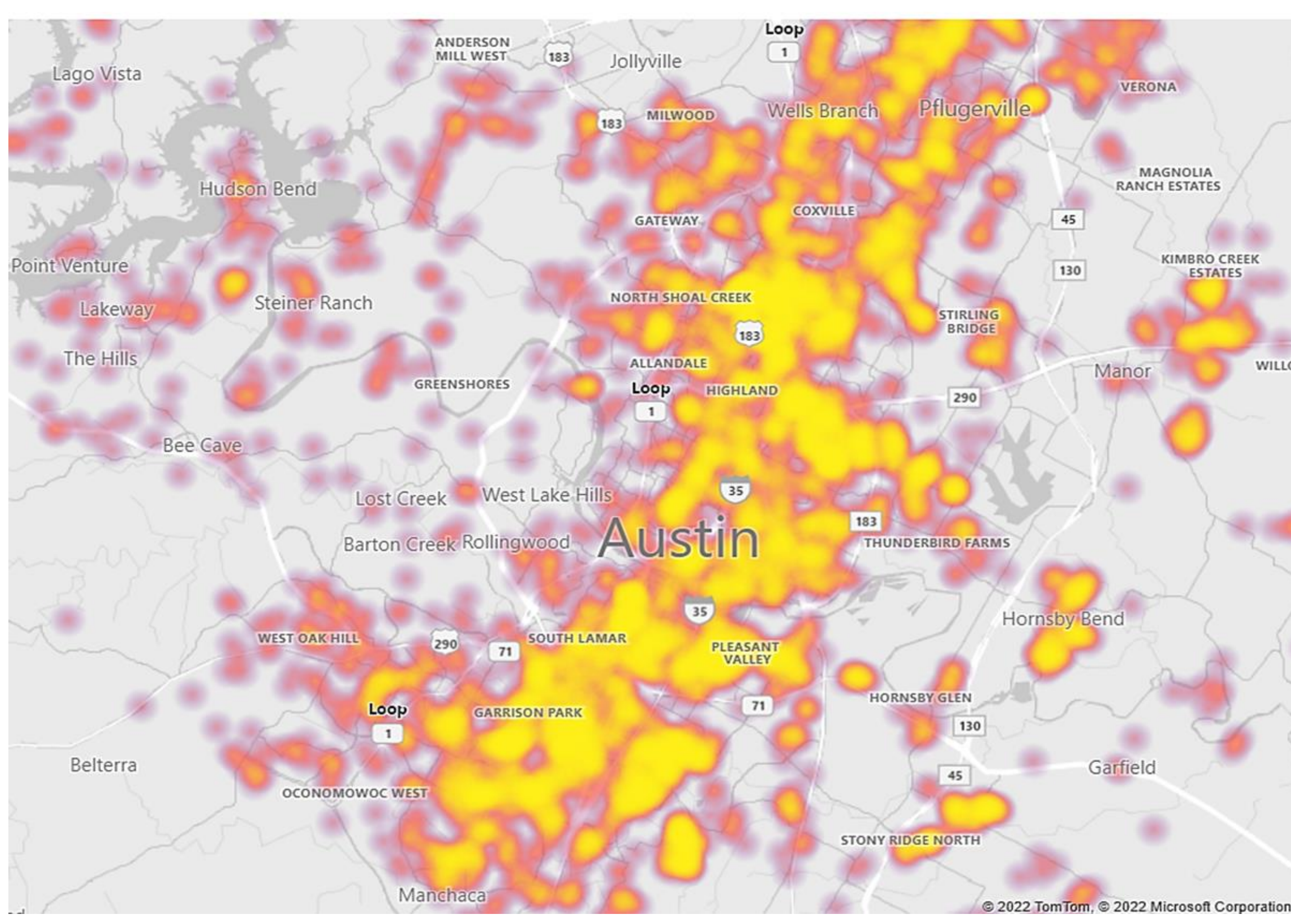


Our Travis County Footprint

Where we provide services:

- ✓ Over the phone
- ✓ Via telehealth
- ✓ On a street corner
- ✓ At home
- ✓ In jails
- ✓ In clinics and residential facilities
- ✓ In emergency rooms
- ✓ In schools

FY22 SERVICES DELIVERED IN THE COMMUNITY



How We Collect Data

Through our role as a **Local Mental Health Authority (LMHA)** and **Certified Community Behavioral Health Clinic (CCBHC)**, we are required to complete a variety of screenings and assessments.

Even our assessments have assessments. Then we assess the assessments of our assessments.

Integral Care Screenings and Assessments

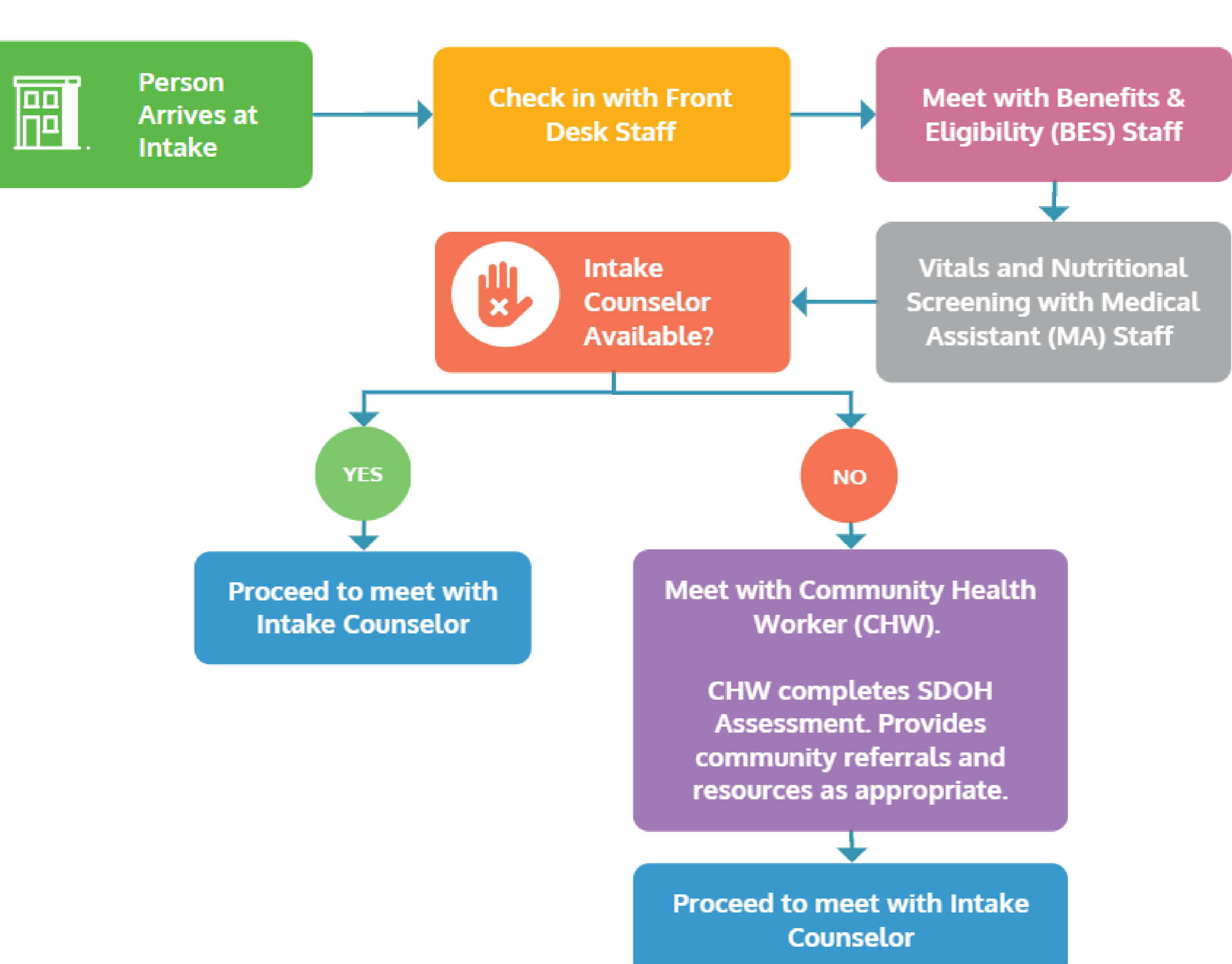
- Adult Needs and Strengths Assessment (ANSA)
- Child and Adolescent Needs and Strengths (CANS)
- Nutritional Screening
- Screening, Brief Intervention and Referral to Treatment (SBIRT)
- Patient Health Questionnaire (PHQ)
- National Outcome Measures (NOMS)
- Tobacco Use Assessment
- Quick Inventory of Depressive Symptomatology (QIDS)
- AIMS Scale
- Brief Addiction Monitor
- Psychiatric Evaluation
- Narrative Assessment
- Goal Attainment Scaling (GAS)
- AAFP Social Needs Screening Tool
- Columbia-Suicide Severity Rating Scale (C-SSRS)
- Medical Screening
- CAGE-AID
- CRAFFT
- Screening and Risk Assessment
- Diagnostic Rating Scale
- WHODAS 2.0
- Prodromal Questionnaire — Brief Version (PQ-B)
- Bipolar Rating Scale
- Edinburg Form
- Clinical Institute Withdrawal Assessment Alcohol Scale Revised (CIWA-AR)
- Women's Health History Form
- Positive/Negative Rating Scale
- HCBS Uniform Assessment

The SDOH Assessment

Integral Care utilizes **Community Health Workers (CHWs)** to provide support to individuals who present to our clinics for intake.

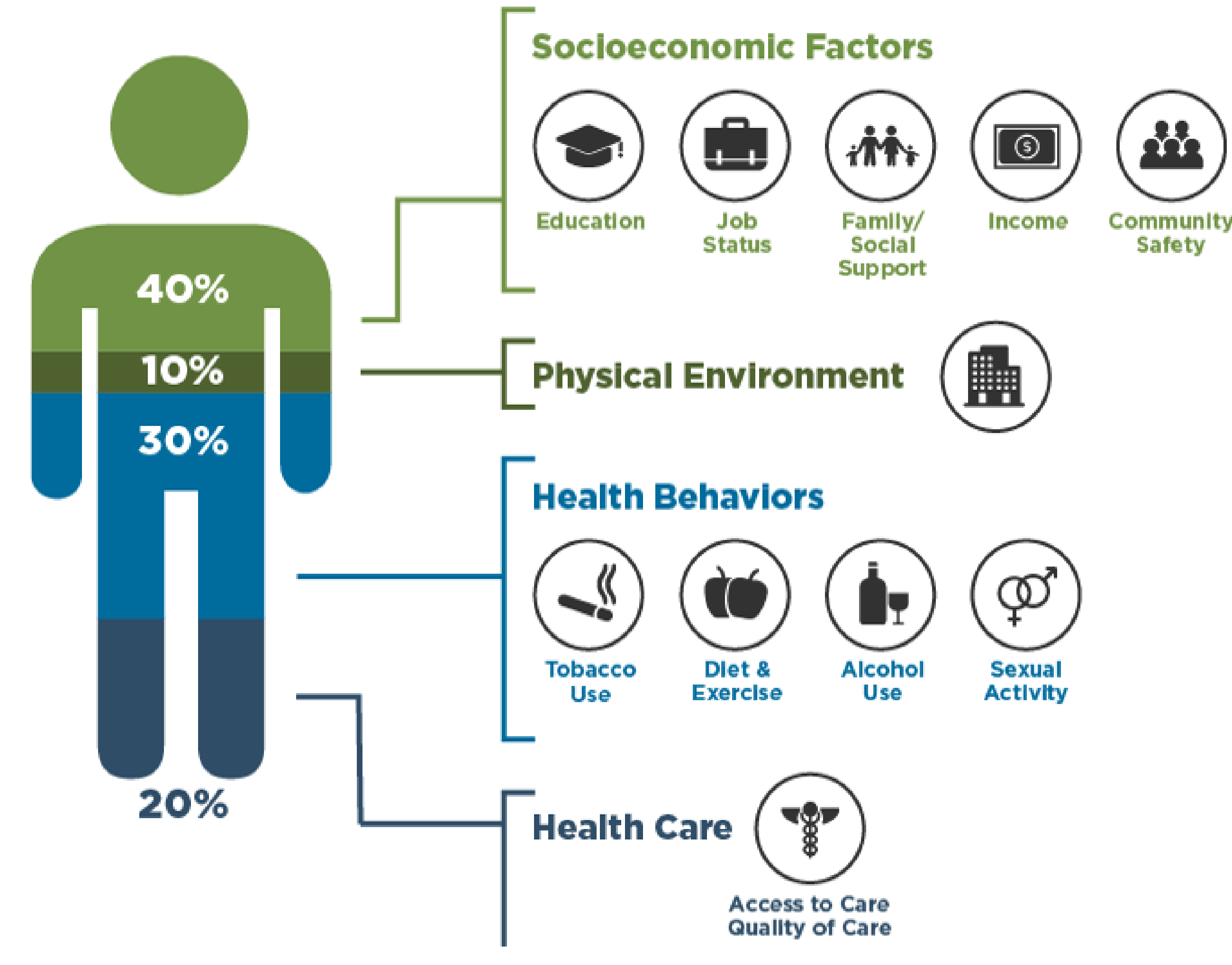
CHWs complete the **AAFP Social Needs Screening Tool,** then provide resources and referrals while the person waits for an intake clinician.

CHWs play a vital role in improving access to healthcare in their communities. They act as a bridge between providers and their communities, working to improve health outcomes, particularly in underserved or historically marginalized populations.



Why We Screen for Non-Medical Drivers of Health

- Decades of research has established, and continues to reestablish, that **80% of health outcomes are based on non-medical factors** such as income, food access, race, and geography, with only 20% dependent on clinical care.



From Collecting Data to Using Data

- **2019:** Integral Care receives SAMHSA grant to expand system of care
  - Launches "Amplify Care through CCBHC", creating population management methodology to assist with data management and monitoring
- Coincided with the Texas shift away from **Delivery System Reform Incentive Payment (DSRIP) program**, which had helped to incentivize use of standardized data collection practices and screening tools

Grant Planning

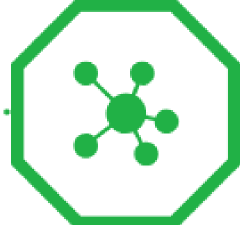
- Provide data to support funding and staffing requests
- Identify population that will benefit

Risk Stratification

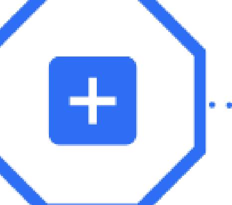
- Who is at greatest highest risk of negative health outcomes?
- Identify patient actionable care gaps

Return on Investment

- What are the costs avoided at the individual and community level?
- Sustainability planning



Population Health



Health Disparities

- How do we identify and address health disparities?
- Measure changes through Health Disparities Report Card

Evaluation and Outcomes

- Measure utilization changes over time as a result of intervention

Population Profiles

- Who are we serving?
- What are the unique needs of the population?

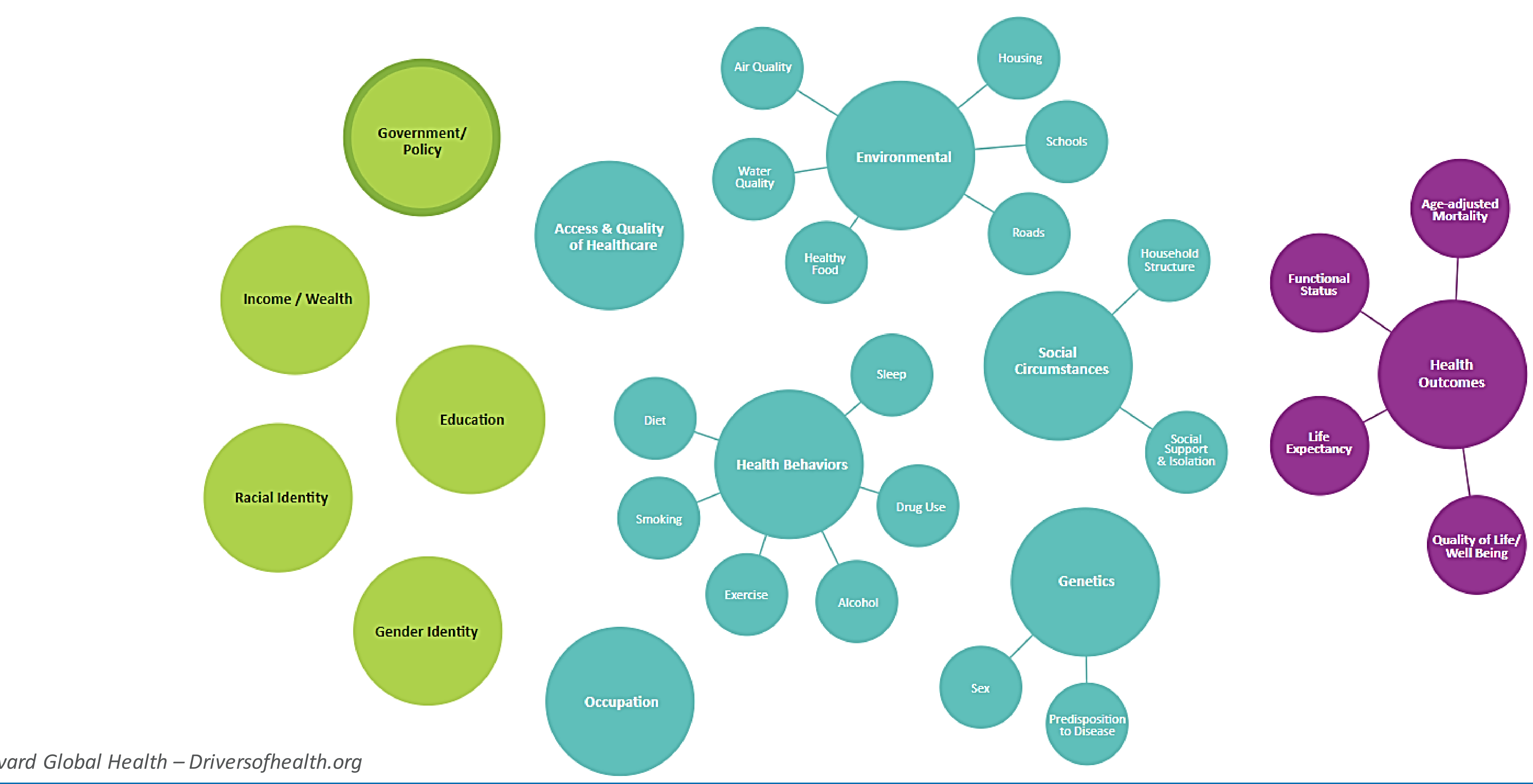
Targeted Referrals

- Provision of referrals using risk stratification algorithm
- Deployment of Community Health Workers

Exploratory Data Analysis

- Cleaning and extraction of data through custom SQL queries

Drivers of Health



Harvard Global Health – Driversofhealth.org

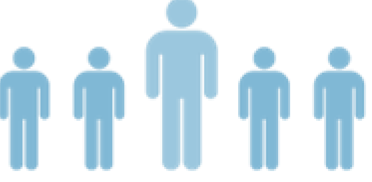
Integral Care Health Data

LIFE EXPECTANCY

On average, between 2016 and 2021, Integral Care clients died 23 years earlier than the general United States population, with users of tobacco dying 25 years earlier

2 out of 3 Integral Care clients do not have access to health insurance

97% of Integral Care clients have an income of less than 200% of the federal poverty level



1 in 5 individuals served by Integral Care are experiencing homelessness

40% of individuals served by Integral Care have an active substance use diagnosis

Health Disparities Report Card

Integral Care utilizes data from our EHR to produce an annual Health Disparities Report Card. It is used to proactively identify disparities across our system and address identified needs and gaps. The report card currently reviews 24 different health indicators:

- Schizophrenia
- Oppositional Defiant Disorder
- Conduct Disorder
- Post-Traumatic Stress Disorder
- Clozapine Access
- Homelessness
- Tobacco Use
- Food Deserts
- Psychiatric Inpatient Hospitalization
- Justice Involvement - Parole/Probation
- Justice Involvement – Arrests
- Death Rate (All Cause)

- Suicide death rate
- Overdose Death Rate
- Heart Disease Death Rate
- Diabetes
- Hypertension
- Asthma
- Obesity
- HIV
- Cannabis-related disorders
- Alcohol-related disorders
- Opioid-related disorders
- Stimulant-related disorders

Health Disparities Report Card

Largest Race/Ethnicity Disparities - FY23

Indicator	Population With Highest Rate	Highest Rate	Reference Group with Lowest Rate	Lowest Rate	Disparity Ratio	Disparity Grade
Schizophrenia	Black/African-American	323.0	More than One Race	143.5	2.3	Requires intervention
ODD/CD	Black/African-American	8.6	Non-Hispanic White	2.5	3.5	Requires urgent intervention
Post-Traumatic Stress Disorder	Alaskan Native/American Indian	382.4	Asian	114.2	3.3	Requires urgent intervention
Clozapine Access*	Hispanic or Latino	1.8	Non-Hispanic White	5.5	3.1	Requires urgent intervention
Homelessness	Alaskan Native/American Indian	300.0	Asian	56.0	5.3	Requires urgent intervention
Tobacco Use	Alaskan Native/American Indian	352.9	Asian	99.2	3.6	Requires urgent intervention
Residence in a Food Desert	Hispanic or Latino	20.4	Non-Hispanic White	17.5	1.3	Little or no disparity
Psychiatric Hospitalizations	Non-Hispanic White	54.4	Black/African-American	40.0	1.4	Little or no disparity
Parole or Probation	Black/African-American	58.7	Hispanic or Latino	43.4	1.4	Little or no disparity
Arrests	Black/African-American	267.6	Asian	78.9	3.4	Requires urgent intervention
Deaths (All Cause)	Non-Hispanic White	8.0	Hispanic or Latino	3.0	2.7	Requires major intervention
Suicide	Non-Hispanic White	0.8	Hispanic or Latino	0.3	2.7	Requires major intervention
Overdose Deaths	Black/African-American	2.0	Hispanic or Latino	0.3	6.7	Requires urgent intervention

Health Disparities Report Card

Largest Race/Ethnicity Disparities - FY23, cont.

Indicator	Population With Highest Rate	Highest Rate	Reference Group with Lowest Rate	Lowest Rate	Disparity Ratio	Disparity Grade
Heart Disease Deaths	Non-Hispanic White	0.9	Hispanic or Latino	0.2	4.5	Requires urgent intervention
Diabetes	Black/African-American	67.8	Non-Hispanic White	35.4	1.9	Requires intervention
Hypertension	Black/African-American	169.9	Asian	56.0	3.0	Requires urgent intervention
Asthma	Black/African-American	68.2	Hispanic or Latino	22.8	3.0	Requires urgent intervention
Obesity	Black/African-American	35.6	Non-Hispanic White	20.5	1.7	Needs monitoring
HIV	Black/African-American	17.7	Hispanic or Latino	7.8	2.3	Requires intervention
Cannabis-related disorders	Black/African-American	169.5	Asian	50.9	3.3	Requires urgent intervention
Alcohol-related disorders	Alaskan Native/American Indian	254.9	More than One Race	97.1	2.6	Requires major intervention
Opioid-related disorders	Non-Hispanic White	69.4	Black/African-American	18.7	3.7	Requires urgent intervention
Stimulant-related disorders	Alaskan Native/American Indian	215.7	More Than One Race Reported	99.3	2.2	Requires intervention

Health Findings

Looking at different health indicators allows us to identify strategies to promote health equity. It also provides a data driven approach to grant applications, programming, advocacy, and policy changes. Findings from past reports have included the following:

- Black and Hispanic clients served by Integral Care were more likely to reside in a food desert than any other race/ethnic group.
- Heart disease has been the leading cause of death among Integral Care clients for the past 8 years.
- Rates of death among those with an Essential Hypertension diagnoses were highest within designated food deserts
- Death by suicide was 13.5x higher among Transgender clients compared to the group with the lowest rates (cisgender females).
- Black/African-American clients had the overall highest rates in each major chronic disease category, with Hypertension being the most prevalent medical diagnosis.
- Clients whose primary language was Arabic had the highest rates of PTSD, at a rate 7.3x higher than the reference group.
- Integral Care clients living unsheltered accounted for 1 out of every 3 client deaths
- Rates of stimulant related disorders were 2.6x higher among Alaskan Native/American Indian clients compared to any other race/ethnicity group.

How are These Findings Tied to NMDOH?

- Prior research has demonstrated that racial and ethnic minority groups often have fewer options to access healthy foods. Of Texas' 258 counties, 58 are considered Food Deserts according to USDA criteria. (Sansom & Hannibal, 2021; CDC, 2017).
- Hypertension, a leading cause of heart disease, is more common and poorly controlled among individuals living in poverty. (CDC, 2022).
- In Travis County and in the U.S., Black Americans have the highest rates of obesity of any race/ethnicity group. Contributing factors include inequities in stable and affordable housing, income, access to affordable and healthy food, and safe places to be physically active (Office of Minority Health, 2020; Austin Public Health, 2019).
- Lesbian, gay, bisexual, transgender, queer, or questioning youth living in the South U.S. are more likely to consider or attempt suicide than LGBTQ+ young people in other regions of the United States (Trevor Project, 2021).
- Traditionally underserved populations in the U.S., particularly rural and American Indian/Alaska Native (AI/AN) communities, are disproportionately impacted by the opioid and amphetamine epidemics and have a higher risk for substance use disorders. (Mitton, Jackson, Ho, & Tobey, 2020).

Integral Care

Development of Data Profiles: Housing as a Driver of Health

Integral Care conducted an analysis to identify elevated risks among individuals experiencing homelessness. Among the findings included that those experiencing homelessness comprised 50% of all total emergency department visits, inpatient admissions, and EMS encounters among Integral Care clients, despite only comprising 19% of the total Integral Care client population.

Encounter Type	Total Visits: Clients Experiencing Homelessness	Total Visits: Integral Care Total Population	% of Total
Medical Inpatient Admission	741	2,004	37%
Emergency Room	8,157	16,125	51%
EMS	5,657	10,655	53%
Psychiatric Inpatient Admission	767	2,151	36%
Total	**15,322**	**30,935**	**50%**

ICC data for date range 9/1/2020-8/31/2021 was used for medical/EMS/ER data and may be underrepresented due to the opt-in nature of the ICC

Return on Investment: Housing Intervention

Housed Cohort (N= 41 individuals housed for one year at Integral Care Terrace at Oak Springs)				
Total	**Baseline**	**Intervention**	**% Reduction**	**Costs Avoided**
Arrests	25	10	-60%	$ 3,255.00
Private Psychiatric Inpatient Admissions	2	0	-100%	---
Private Inpatient Psychiatric Bed Days	12	0	-100%	$ 25,791.00
EMS Encounters	101	142	41%	$ (35,916.00)
Emergency Room Visits	101	49	-51%	$ 72,800.00
Medical Inpatient Admissions	20	8	-60%	---
Medical Inpatient Bed Days	139	29	-79%	$ 528,000.00
Total Costs Avoided (12 Months)				$ 593,930.00
Average Costs Avoided per Housed Individual (41 Clients)				$ 14,486.10

N= 41 formerly homeless individuals moved into Terrace at Oak Springs between 11/14/19 and 3/9/2020. Encounters in the 12 months prior to and following move in date.

Return on Investment: Housing Intervention

Program Impact (Terrace at Oak Springs, Housed) - *6 Months*

Housed Cohort (N= 50 individuals housed at Terrace at Oak Springs)			
Encounter Type	**Total Reduction**	**Cost per Unit**	**Cost Savings in Intervention Period**
Arrests/Bookings	15	$ 211.00	$ 3,165.00
Forensic Inpatient Bed Days	0	$ 567.28	$ -
Private Inpatient Psychiatric Bed Days	1	$ 2,149.25	$ 2,149.25
EMS Encounters	43	$ 876.00	$ 37,668.00
ER Visits	38	$ 1,400.00	$ 53,200.00
Inpatient Medical Bed Days	50	$ 4,800.00	$ 240,000.00
Total Cost Savings			$ 336,182.25
Average Cost Savings per Participant			$ 6,723.65

Comparison Group Costs (Top 50 PSH Waitlist)- 6 Months

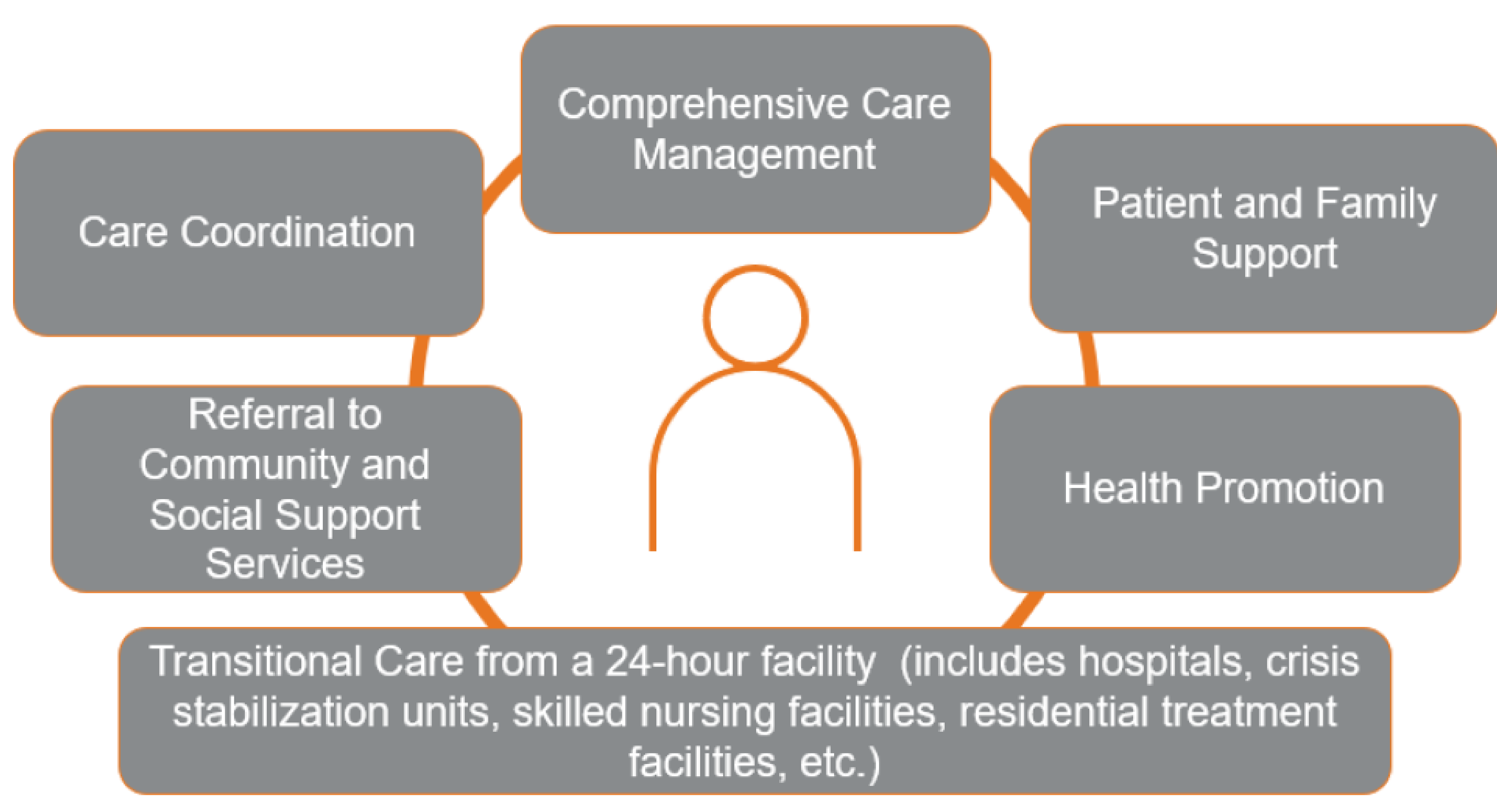
Waitlisted Cohort (N= 50 individuals on PSH prioritization waitlist)			
Encounter Type	**Total Reduction**	**Cost per Unit**	**Cost Savings in Intervention Period**
Arrests/Bookings	(5)	$ 211.00	$ (1,055.00)
Forensic Inpatient Bed Days	0	$ 567.28	$ -
Private Inpatient Psychiatric Bed Days	(11)	$ 2,149.25	$ (23,641.75)
EMS Encounters	10	$ 876.00	$ 8,760.00
ER Visits	(22)	$ 1,400.00	$ (30,800.00)
Inpatient Medical Bed Days	15	$ 4,800.00	$ 72,000.00
Total Cost Savings			$ 25,263.25
Average Cost Savings per Participant			$ 505.27

Pre and Post Utilization: Comparison

6-Month Cohort (N= 41 participants served by City ACT between 9/1/21 and 2/28/22)				
Total	Baseline	Intervention	Reduction	% Reduction
Arrests	14	23	+9	+64%
Forensic Inpatient Admissions	1	0	-1	-100%
Forensic Inpatient Bed Days	195	0	-195	-100%
Private Psychiatric Inpatient Admissions	16	6	-10	-63%
Private Psychiatric Inpatient Bed Days	108	46	-62	-57%
EMS Encounters	100	50	-50	-50%
Emergency Room Visits	159	84	-75	-47%
Medical Inpatient Admissions	15	9	-6	-40%
Medical Inpatient Bed Days	112	23	-89	-79%

Total Cost Savings (6 Months)	$ 821,143.10
Average Cost Savings per Person (41 Clients)	$ 20,027.88

Valued Based Care Intervention



Return on Investment: Value Based Care Team Intervention

6-Month Cohort (N= 90 participants served by Value Based Care Team between 6/1/21 and 12/31/21)				
Total	**Baseline**	**Intervention**	**% Reduction**	**Costs Avoided**
Arrests	28	18	-36%	$ 2,200.00
EMS Encounters	170	56	-67%	$ 107,274.00
Emergency Room Visits	249	66	-73%	$ 256,200.00
Medical Inpatient Admissions	29	6	-79%	---
Medical Inpatient Bed Days	211	71	-66%	$ 672,000.00
Total Costs Avoided (6 Months)				$ 1,037,674.00
Average Costs Avoided Per Person (90 Clients)				$ 11,529.71

N= 90 clients served by Value Based Care Team between 6/1/21 and 12/31/21. Encounters in the 6 months prior to and following first service date.

Conclusion

1 Collect Accurate Demographic Information

2 Administer Validated Screenings and Assessments

3 Stratify Data to Identify Disparities and Risk Indicators

4 Develop and Assess Interventions to Close Care Gaps

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