County of Solano
Community Healthcare Board
Regular Meeting

February 15, 2023
12:00 pm – 2:00 pm
2101 Courage Drive, Fairfield, CA 94533
Room Location: Multi-Purpose Room

AGENDA

1) CALL TO ORDER – 12:00 PM

a) Welcome
b) Roll Call

2) APPROVAL OF THE FEBRUARY 15, 2023 AGENDA

3) PUBLIC COMMENT

This is the opportunity for the Public to address the Board on a matter not listed on the Agenda, but it must be within the subject matter jurisdiction of the Board. If you would like to make a comment, please announce your name and the topic you wish to comment and limit comments to three (3) minutes.

4) APPROVAL OF CONSENT CALENDAR

a) Approval of the January 18, 2023 Draft Minutes
b) Clinic Operations Reports (Written Monthly Reports, Proposed Plan)
   i) Staffing Update
   ii) Credentialing Update
   iii) HRSA Grants Update (UDS)
   iv) Grievances/Compliments
   v) Referrals
   vi) Finance
   vii) Major Project Updates
   viii) QI Update
   ix) Clinic Metrics (Clinic Health Services Managers)

5) PROJECT DIRECTOR / CLINIC OPERATIONS OFFICER REPORT

a) Health Center HRSA Project Officer Update – Dona Weissenfels
   i) Health Center Activities, Internal & External Update

6) BUSINESS GOVERNANCE

a) Review and approve the Family Health Services (FHS) Sliding Fee Scale Program Analysis – Janine Harris
   i) **ACTION ITEM:** The Board will consider approval of the FHS Sliding Fee Scale Program Analysis

b) Review and approve the Family Health Services (FHS) Sliding Fee Scale Policy Number: 100.03 – Janine Harris
   i) **ACTION ITEM:** The Board will consider approval of the FHS Sliding Fee Scale Policy Number: 100.03
c) Review and approve the 2023 Community Needs Assessment
   i) **ACTION ITEM:** The Board will consider approval of the 2023 Community Needs Assessment
d) Discuss recent changes at the Global Center for Success in Vallejo, a Family Health Services (FHS) Primary Care Outreach site. Request Board approval to close the location.
   i) **ACTION ITEM:** The Board will consider approval to close the Global Center for Success location in Vallejo. Medical Services will be provided via Mobile Medical Clinics when staffing levels improve.

7) UNFINISHED BUSINESS

a) Community Healthcare Board Self-Assessment Form – It was decided at the April 20, 2022 meeting to be revised by the Board Members. Status Update.

8) DISCUSSION

a) Open Topic: Community Health Center Week – August 2023, Planning

9) BOARD MEMBER COMMENTS

10) PARKING LOT (These items are postponed, until further notice.)

a) Compliance Training and Robert's Rules Review
b) Health Center Marketing Campaign & Website Design

11) NEXT COMMUNITY HEALTHCARE BOARD MEETING

DATE: March 15, 2023
TIME: 12:00 PM
LOCATION: 2201 Courage Drive
Fairfield, CA 94533

12) ADJOURN

13) CLOSED SESSION

a) HRSA Project Director Evaluation Discussion
b) Present Evaluation to HRSA Project Director

County of Solano
Community Healthcare Board
DRAFT

REGULAR GOVERNING BOARD MEETING MINUTES

Wednesday, January 18, 2023
In Person Meeting

Members Present:

At Roll Call: Mike Brown, Ruth Forney, Gerald Hase, Deborah Hillman, Don O'Conner, Sandra Whaley, Robert Wieda, and Brandon Wirth

Members Absent: Anthony Lofton and Tracee Stacy

Staff Present:

Gerald Huber, Dr. Bela Matyas, Dona Weissenfels, Dr. Michelle Stevens, Toya Adams, Noelle Soto, Anna Mae Gonzales-Smith, Rebecca Cronk, Nina Delmendo, Valerie Flores, Desiree Bodiford, Elise Lenox, Cheryl Esters, Krista McBride, Julie Barga, Danielle Seguerre-Seymour, and Patricia Zuñiga

1) Call to Order – 1:05 p.m.

a) Welcome

b) Roll Call

2) Approval of the January 18, 2023 Agenda

Motion: To approve the January 18, 2023, Agenda, with the change of moving Agenda item 6d to 5a.

Motion by: Sandra Whaley and seconded by Robert Wieda

Discussion: A request was made by Dona Weissenfels, to move Agenda Item 6d to 5a, scheduled to be presented by Dr. Michelle Stevens, because she is covering in the Fairfield Pediatrics Clinic and has patients scheduled, due to staff shortage.

Ayes: Mike Brown, Ruth Forney, Gerald Hase, Deborah Hillman, Don O'Conner, Sandra Whaley, Robert Wieda, and Brandon Wirth

Nays: None

Abstain: None

Motion Carried.

3) Approval of the December 21, 2022 Minutes

Motion: To approve the December 21, 2022 Minutes

Motion by: Mike Brown and seconded by Ruth Forney

Discussion: None

Ayes: Mike Brown, Ruth Forney, Gerald Hase, Deborah Hillman, Don O'Conner, Sandra Whaley, Robert Wieda, and Brandon Wirth

Nays: None

Abstain: None

Motion Carried.

4) Public Comment

No public comment.

5) Project Director/Clinic Operations Officer Report

a) ~~6a)~~ This agenda item 6a was approved by the Board to be moved to 5a.

The Board will consider approval of submission of the Partnership HealthPlan (PHP), Unit of Service Health Equity Grant – Dr. Michelle Stevens

i) ACTION ITEM: The Board will consider approval of submission of the Partnership HealthPlan (PHP), Unit of Service Health Equity Grant

- Dr. Stevens reviewed the Partnership HealthPlan (PHP), Unit of Service Health Equity Grant guidelines and the grant submission. Please reference handouts, titled, "*Primary Care Provider – Quality Improvement Program 2022 Quality Measure Highlight, Unit of Service – Health Equity Grant, Measure Description*", and "*Solano County Family Health Services 2022 Quality Measure Highlight, Unit of Service – Health Equity Grant Submission Proposal*".

Motion: To approve the submission of the Partnership HealthPlan (PHP), Unit of Service Health Equity Grant

Motion by: Robert Wieda and seconded by Deborah Hillman

Discussion: A request was made by Dona Weissenfels, to move Agenda Item 6d to 5a, scheduled to be presented by Dr. Michelle Stevens, because she is covering in the Fairfield Pediatrics Clinic and has patients scheduled, due to staff shortage.

Ayes: Mike Brown, Ruth Forney, Gerald Hase, Deborah Hillman, Don O'Conner, Sandra Whaley, Robert Wieda, and Brandon Wirth

Nays: None

Abstain: None

Motion Carried.

b) ~~a)~~ Health Center Operations Update – Dona Weissenfels

i) Health Center Activities, Internal & External Update

- Dona notified the Board that there was water damage to the Fairfield Adult Clinic on January 2, 2023. She was advised it would take thirty (30) to sixty (60) days to repair. The clinic was temporarily closed to patients, but patients continued to be seen at the Fairfield Pediatrics clinic. As of yesterday, the clinic was reopened to patients.

- Dona notified the Board of a break-in at the Fairfield Dental Clinic. Food was taken from the refrigerator and the safe was stolen. Security has been increased and staff were notified to be aware of their surroundings when they arrive and leave the clinics.
- Dona mentioned that the Solar Project at the Vacaville location was completed and the parking situation was resumed back to normal. The Shuttle services went well. She mentioned that they have begun solar projects at the Vallejo and Fairfield locations.
- Dona announced that the California Department of Health Care Services (DHCS) is offering a Workforce Stabilization Program, to make payments to clinic staff. The application is due January 27, 2023 and 150 people are eligible to receive $1000.00 each. This is a work in progress, and she was happy that the State recognized staff needs for stabilization.
- Dona mentioned the 2023 Community Needs Assessment was completed and hoped to present a summary at the future Board Meeting. It was a huge document and is the foundation of the Strategic Plan in preparation for the Operation Site Visit (OSV).
- Dona also mentioned that John Gressman and Deanna Drake with Facktor Health are working on an operational assessment, in preparation of the OSV in July. She also mentioned there would be 9l audit points and the audit is virtual.
- Dona mentioned that John and Deanna would present Strategic Planning Training to the Board, as the current one is out of date. She also mentioned that w work plan was submitted to Dr. Matyas, that will tie in with the Strategic Plan.
- Dona notified the Board that the Community Needs Assessment would be on the February agenda, for Board approval.

c) ~~b)~~ Staffing Update – Toya Adams

i) Toya announced several recent new hires as follows; Dr. Reza Rajabian, Dentist Manager, Dr. Bobbi Underhill, a Pediatrics Physician, with Locum Tenens, Jackson + Coker, and three (3) Medical Assistants and one of them would be a half-time support for QA/QI.

ii) Toya stated there were several candidates in background and Credentialing, as noted: two (2) Medical Assistants, Clinic Registered Nurse and an Office Assistant.

iii) Toya mentioned they continue to recruit aggressively to fill vacant positions.

6) Operations Committee Reports – It was voted and approved by the Board to move Agenda Item 6d to 5a.

a) Hiring Credentialing Update – Desiree Bodiford

i) Desiree introduced herself as the new Administrative Services Manager, and moving forward she would present the Hiring Credentialing Updates and Elise and Cherry would be available to fill in when necessary.

ii) Desiree stated there were 131 employees sanctioned. There was a total of 121 County employees and 10 Touro staff and there were no exclusions. Good news!

iii) Desiree mentioned they in December, they credentialed eleven (11) employees as noted: four (4) Touro Providers, two (2) Locum Tenens Providers and 5 County employees.

b) HRSA and Grants Update – Noelle Soto

- Noelle reviewed a HRSA post-award Health Center Program application opportunity for the clinics, for the purpose of providing COVID-19 vaccinations and she reviewed the

submission, which would cover the period of December 1, 2022 through May 31, 2023. Submission is up for Board approval.

- Please reference the handout titled, "*2023 Expanding COVID-19 Vaccination (ECV) Grant Number H8GCS47592 December 1, 2022 to May 31, 2023*".

i) ACTION ITEM: The Board will review and consider approval of the FY 2023 Expanding COVID-19 Vaccination (ECV) Post Award – Application Submission

Motion: To approve the FY 2023 Expanding COVID-19 Vaccination (ECV) Post Award – Application Submission.

Motion by: Robert Wieda and seconded by Deborah Hillman

Discussion: None

Ayes: Mike Brown, Ruth Forney, Gerald Hase, Deborah Hillman, Don O'Conner, Sandra Whaley, Robert Wieda, and Brandon Wirth

Nays: None

Abstain: None

Motion Carried.

c) Quarterly Financial Report – Nina Delmendo

Nina introduced Valerie Flores, a new hire, in the position that Jeannett Alberg held. Nina mentioned that she is working on the mid-year budget to be presented to the Board of Supervisors (BOS), in March. She reviewed the highlights of the FHS Quarterly Financial Report. Please reference handout, titled, "*Quarterly FHS Financial Report, December 31, 2022*".

~~d)~~ This agenda item 6a was approved by the Board to be moved to 5a. Please reference 5a.

7) Unfinished Business

a) Community Healthcare Board Self-Assessment Form – It was decided by the Board at the April 20, 2022, meeting to be revised by the Board Members. This item is pending an action plan.

8) Discussion

a) Board Member requirement to sign Annual Bylaws, Appendix A, Conflict of Interest Form

i) Chair Brandon Wirth explained to the Board that this form is completed annually in January. He asked the Board Members to remember to complete the form and submit them to the Board Clerk, Patricia Zuñiga, before leaving the meeting.

b) Finance – Future Agenda Format

i) Chair Brandon Wirth, proposed discussion about a change in format or process when Nina presented the Quarterly Financial Report..

ii) He encouraged the Board Members to attend the Financial Committee Meetings and stay informed about the Quarterly Financial Report presented at the Board Meetings. All Board

Members receive the Finance Committee documents and the Quarterly Financial Report is included. He asked for Board Member feedback.

iii) Dona presented feedback that there was an opportunity for all Board Members to review the Quarterly Financial Report on their own time or attend the Financial Committee Meetings, so that at the Board Meeting when Nina presents the Quarterly Financial Report, the Board Members already have reviewed the repot and could ask questions to Nina at the Board Meeting, instead of having her go through each line items and be more efficient of Nina's time during the meeting.

Iv) Board Member Ruth Forney though it was a good idea, and the Board Members could either attend the Financial Committee Meetings and ask questions at that time or review the report in advance and ask questions to Nina at the Board Meeting.

v) Chair Brandon Wirth asked about Nina's thoughts about having the Board Members prepared to ask questions about the financial report, rather than Nina going through each of the line items. Nina responded that it would be up to the Board, and she didn't mind going through the line items for the Board Members. She stated is was up to the Board Members, if they wanted to change the format of the Financial Report out.

vi) Chair Brandon Wirth and Nina Delmendo reminded the Board Members that regular Finance Committee meetings were held on the fourth (4th) Wednesday in the months of March, July, September and December, from 1:30 p.m. to 2:30 p.m.

vii) This was only a discussion item and County Counsel, Julie Barga guided the Board that if this topic needed to be approved by the Board Members, it would need to be added as an agenda and action item on a future board meeting agenda.

9) Board Member Comments

i) Board Member Ruth Forney mentioned that it was better now that the meetings are in person, so they can meet everyone. Other Board Members agreed.

10) Parking Lot (These items are postponed, until further notice.)

a) Compliance Training and Robert's Rules Review
b) Health Center Marketing Campaign & Website Design

11) Next Community Healthcare Board Meeting (in person)

DATE: February 15, 2023 (In person)
TIME: 12:00 p.m. – 2:00
Location: Multi-Purpose Room
2101 Courage Drive
Fairfield, CA 94533

12) Closed Session

a) Process of Project Officer/CEO Evaluation Review, by Board Members

i) Chair Brandon Wirth excused all guests and asked them to leave the room for Closed Session. He reminded Board Members that all that was discussed in closed session was to remain private among Board Members only.

13) Adjourn

Meeting was adjourned at 2:35 p.m.

Handouts:

- HRSA Health Center Program Fiscal Year 2023 Expanding COVID-19 Vaccination (ECV)
- 2023 Expanding COVID-19 Vaccination (ECV) Grant Number H8GCS47592 December 1, 2022 to May 31, 2023
- Quarterly FHS Financial Report, December 31, 2022
- Primary Care Provider – Quality Improvement Program 2022 Quality Measure Highlight, Unit of Service – Health Equity Grant, Measure Description
- Solano County Family Health Services 2022 Quality Measure Highlight, Unit of Service – Health Equity Grant Submission Proposal
- FHS Community Healthcare Board Bylaws, Article VII: Conflict of Interest and Appendix "A" Conflict of Interest form
- Approved Family Health Services Community Healthcare Board 2023 Annual Calendar

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MEMORANDUM

To: Community Healthcare Board

From: Janine Harris, Revenue Cycle Manager/Policy & Financial Analyst

Date: February 15, 2023

Subject: Analysis of Sliding Fee Discount Program (SFDP)

Per HRSA's Health Center Program Compliance Manual and Family Health Services (FHS) Sliding Fee Discount Program (SFDP) Policy, FHS must do the following:

(1) Evaluate, at least once every three years, its sliding fee scale discount program. At a minimum, the health center:

- Collects utilization data that allows it to assess the rate at which patients within each of its discount pay classes, as well as those at or below 100 percent of the FPG, are accessing health center services;
- Utilizes this and, if applicable, other data to evaluate the effectiveness of its sliding fee discount program in reducing financial barriers to care; and
- Identifies and implements changes as needed.

(Health Center Program Compliance Manual, page 41)

An analysis of patients eligible for SFDP from January–December 2022 shows the following:

Nominal Charge:
Solano County FHS provides a full 100 percent discount and does not use a nominal charge for patients at or below 100% FPG.

Utilization:

- Patients on the SFDP accessed medical services at an average rate of 2.10 visits per patient. This utilization rate is lower than the overall utilization of the health center of 2.24 medical visits per patient. The difference in utilization is minimal. This suggests that being on the SFDP is not a barrier to accessing care at FHS.
- Patients on the SFDP accessed dental services at an average rate of 3.17 visits per patient. This utilization rate is higher than the overall utilization of the health center of 3.06 dental visits per patient. This suggests that being on the SFDP is not a barrier to accessing care at FHS.
- Patients on the SFDP accessed mental health services at an average rate of 2.24 visits per patient. This utilization rate is lower than the overall utilization of the health center of 3.23 mental health visits per patient. We will continue to monitor Mental Health visits to ensure being on the SFDP is not a barrier to accessing care at FHS.

RECOMMENDATION:

Utilization data suggests that being on the SFDP is not a barrier to accessing care at FHS for medical and dental services. FHS will continue to monitor Mental Health visits to ensure being on the SFDP is not a barrier to accessing care. Due to overall underutilization of Mental Health services, FHS will continue to monitor and recommend improvements on how to increase utilization across the board.
In the 2019 patient satisfaction survey, 75% of patients who were assessed fees found that fees and explanation of fees were "good" or "very good". Fees and explanation of fees will continue to be part of future patient satisfaction surveys and any significant findings will be presented to the board.

TABLE 1: JANUARY - DECEMBER 2022: SFDP PROGRAM ANALYSIS MEDICAL SERVICES						
SFDS Class	Discount Percentage	Total Encounters	Total Patients	Average Visits Per Patient	Average Payment	% Patients Paying 100% Fee
A	100%	965	445	2.17	$0.00	N/A
B	80%	289	148	1.95	$75.53	71%
C	60%	134	74	1.81	$109.85	57%
D	50%	115	67	1.72	$99.57	49%
E	FULL FEE	14	10	1.40	$133.29	43%

TABLE 1: JANUARY - DECEMBER 2022: SFDP PROGRAM ANALYSIS DENTAL SERVICES						
SFDS Class	Discount Percentage	Total Encounters	Total Patients	Average Visits Per Patient	Average Payment	% Patients Paying 100% Fee
A	100%	438	147	2.98	$0.00	N/A
B	80%	243	73	3.33	$174.06	81%
C	60%	104	36	2.89	$205.97	74%
D	50%	90	28	3.21	$325.65	71%
E	FULL FEE	3	2	1.50	$74.50	33%

TABLE 1: JANUARY - DECEMBER 2022: SFDP PROGRAM ANALYSIS MENTAL HEALTH SERVICES						
SFDS Class	Discount Percentage	Total Encounters	Total Patients	Average Visits Per Patient	Average Payment	% Patients Paying 100% Fee
A	100%	31	12	2.58	$0.00	N/A
B	80%	3	2	1.50	$43.56	67%
C	60%	1	1	1.00	$0.00	0%
D	50%	3	2	1.50	$0.00	0%
E	FULL FEE	0	0	0.00	$0.00	N/A

Sliding Fee Scale Discount Program

Policy Number: 100.03

Effective Date	March 1, 2023
Frequency of Review	Annual
Last Reviewed	February 7, 2023
Last Updated	February 7, 2023
Author	Janine Harris
Responsible Department	Revenue Cycle Management

PURPOSE:
The purpose of this policy is to reduce and/or eliminate financial barriers to patients who qualify for the program to ensure access to services regardless of the patient's ability to pay. At no time will a patient be denied services because of an inability to pay.

BACKGROUND
It is the policy of Solano County Health and Social Services to uphold compliance with government regulations. Family Health Services (FHS) is a Federally Qualified Health Center (FQHC) and receives federal funding under the Health Center Program authorized by section 330 of the Public Health Services (PHS) Act (42 U.S.C. 254b) ("section 330"), as amended (including sections 330(e) and (h)). The program is administered by the federal Health Resources and Services Administration (HRSA).

POLICY:
Family Health Services shall provide medical, dental and mental health services regardless of a patient's ability to pay. The Sliding Fee Scale Discount Program (SFSDP) is available for all patients to apply for. FHS will base program eligibility only on income and family size. A full discount is provided for individuals and families with annual incomes at or below 100% of the current Federal Poverty Guidelines (FPG); partial discounts are provided for individuals and families with incomes above 100% of the current FPG and at or below 200% of the current FPG; no discounts are provided to individuals and families with annual incomes above 200% of the current FPG. Sliding Fee Scale Discount levels are described in Attachment 1.

Exception: All Ryan White patients may be eligible for sliding fee discounts as described in the Ryan White Part C / North Bay AIDS Center Sliding Fee Scale and Billing Caps Policy.

DEFINITIONS:
Income – Earnings, unemployment compensation, workers' compensation, Social Security, Supplemental Security Income, public assistance, veterans' payments, survivor benefits, pension or retirement income, alimony, child support, or any other sources that typically become available. Noncash benefits, such as food stamps and housing subsidies, do not count.

Family – A group of two or more people who share a common residence, are related by blood, marriage, adoption or otherwise present themselves as related, and share the costs and responsibilities of the support and livelihood of the group.

Proof of Income – Any of the following documentation of gross income shall be accepted as proof of income. Two current pay stubs, most recent federal tax return, award or benefit letter from affiliated agency, income verification documentation from affiliated agency, letter from employer on letterhead, another generally accepted proof of income, or the approved self-declaration form. The self-declaration form may only be used in special circumstances for patients who are otherwise unable to provide proof of income. Use of the self-declaration form must be approved by the front office accounting clerk, a supervisor or a manager. Self-declared patients will be responsible for 100% of their charges until the self-declaration form is approved.

PROCEDURE:

1. Notification of SFSDP
    a. FHS will notify patients of the SFSDP by:
        i. Posting notification in the health center waiting area.
        ii. Verbal notification upon registration
2. Assessing Income and Family Size
    a. All patients will self-report income and family size on the Health Center Patient Welcome Packet form.
    b. Patients applying for the SFSDP will also self-report income and family size on the SFSDP Application.
    c. All patients are re-assessed if income or family size changes, as self-reported by the patient, or when the SFSDP eligibility period expires and a new application is received.
3. Completion of Application for the SFSDP
    a. The patient or responsible party must complete the Sliding Fee Scale Discount Program application and provide proof of income.
    b. Incomplete applications will not be processed, and discounts will not be applied until the application is complete.
    c. FHS front office accounting clerks or a supervisor or manager will review applications for completeness and accuracy.
    d. Information from the application is input into the practice management system, NextGen. The application and proof of income is scanned into NextGen.
    e. In instances where the patient is applying for retro eligibility for the program, front office accounting clerks may approve up to 90 days of retro eligibility. Retro eligibility beyond the 90 days may be reviewed and approved by the Revenue Cycle Manager.
4. Eligibility for the SFSDP
    a. Eligibility is based on income and family size only.
    b. All patients are eligible to apply for the program.
    c. Eligibility will be honored for 12 months.
        i. Upon registration for each subsequent encounter, the patient will be asked if family size or income has changed. If family size or income has changed, the patient will be reassessed for program eligibility by completing a new application and providing updated proof of income.
5. Applicability to Patients with Third Party Coverage

a. Patients who are covered by a Qualifying Health Plan with which FHS is contracted, but with "out of pocket" costs (i.e. co-insurance, co-pays, share of cost) may apply for the SFSDP, if it is not prohibited by the Qualifying Health Plan.
b. Staff will screen patient for eligibility for the SFSDP by asking the patient to complete the SFSDP Application and provide proof of income.
c. Once sliding fee level for the patient is assessed, the patient may pay the lesser of the charge discounted to the patient's sliding fee level OR the patient's out of pocket costs.

6. Services, supplies, and equipment
   a. The SFSDP shall apply to all services listed in the Form 5A: Services Provided (Required Services) on the Health Resources and Services Administration (HRSA) Service Area Compete (SAC) Application.
   b. The same methodology will apply to supplies or equipment that are related to, but not included in, the service itself as part of prevailing standards of care (for example, dentures).
7. Collections
   a. FHS front office staff will review the patient's account upon check-in. If the patient has a balance due, front office staff will request applicable payments from the patient, according to the FHS Insurance Eligibility policy, #100.01.
   b. Payment plans are available upon request, according to the FHS Cash Handling policy, #100.02 and Fee Waiver & Payment Plans, #100.08. The Payment Plan Agreement form is completed by the patient and approved by the front office accounting clerk or office supervisor or manager. The agreement is scanned into NextGen.
8. Refusal to Pay
   a. Refusal to pay is defined as a patient who has the ability to pay but is unwilling to pay the amount owed, as expressed verbally by the patient or if the patient does not make an effort to pay upon receipt of monthly statements from FHS. All patients qualify to apply for the SFSDP, payment plans, and fee waivers.
   b. Patients who refuse to pay will still be eligible for services. Patients will not be turned away because of a refusal to pay.
   c. If a patient refuses to pay the amount owed, FHS abides by the Health and Social Services collection policy and Bad Debt Write Off policy, #100.14, which places the patient's account as delinquent without payment made within the last 120 days and may refer the patient to a collections agency.
9. Request for Waiver of Fees
   a. Patients may request a fee waiver, or a fee waiver may be requested on their behalf as described in the Fee Waiver & Payment Plans policy #100.08.
10. Record Keeping
    a. All documentation received from the patient related to the SFSDP application and payment plan agreements are scanned and filed electronically in NextGen.
11. When a patient needs referred care services not provided by FHS, the patient will be referred to a facility which has an agreement for services with FHS. The referred facility must have a sliding fee scale discount program if they charge patients for services rendered under the agreement. Fees for these services must be discounted such that:

a. Individuals and families with incomes above 100% of the current FPG and at or below 200% of the FPG receive an equal or greater discount for these services than if FHS SFSDP were applied to the referral provider's fee schedule; and
b. Individuals and families at or below 100% of the FPG receive a full discount or a nominal charge for these services.

12. FHS will annually assess SFSDP activity and present findings to the Community Healthcare Board that ensure the SFSDP does not create a barrier for patients access to care. At a minimum, FHS will:
    a. Collect utilization data that allows it to assess the rate at which patients within each of its discount pay classes, as well as those at or below 100% of the FPG, are accessing health center services;
    b. Utilize this and, if applicable, other data (for example, results of patient satisfaction surveys or focus groups, surveys of patients at various income levels) to evaluate the effectiveness of its sliding fee scale discount program in reducing financial barriers to care; and
    c. Identify and implement changes as needed.

Knowledge of a violation or potential violation of this policy must be reported directly to the FHS Revenue Cycle Manager and the FHS Clinic Operations Officer, or to the employee compliance hotline.

Sliding Fee Scale Discount Program

Policy Number: 100.03

Attachment 1: Sliding Fee Scale Discount Program Guidelines

Annual Gross Income

SOLANO COUNTY HEALTH AND SOCIAL SERVICES DEPARTMENT
FAMILY HEALTH SERVICES

SLIDING FEE DISCOUNT PROGRAM SUMMARY - Effective Starting Date of Service 3/1/2023

Patients must complete a sliding fee discount application and submit supporting documents to determine eligibility for participation in the program. Eligibility is re-certified every year. Participating members receive discounts on services, as summarized below.
https://aspe.hhs.gov/prior-hhs-poverty-guidelines-and-federal-register-references

Each applicant household is assigned a category based on annual income and number of people.

Category	A		B		C		D		E		F	
% Federal Poverty Guidelines (FPG)	100% and under		101-138%		139-170%		171-200%		201-250%		251-300%	
	Income Range for Each Category by Family Size											
Family Size	From	To	From	To	From	To	From	To	From	To	From	To
1	$0	$14,580	$14,581	$20,120	$20,121	$24,786	$24,787	$29,160	$29,161	$36,450	$36,451	$43,740
2	$0	$19,720	$19,721	$27,214	$27,215	$33,524	$33,525	$39,440	$39,441	$49,300	$49,301	$59,160
3	$0	$24,860	$24,861	$34,307	$34,308	$42,262	$42,263	$49,720	$49,721	$62,150	$62,151	$74,580
4	$0	$30,000	$30,001	$41,400	$41,401	$51,000	$51,001	$60,000	$60,001	$75,000	$75,001	$90,000
5	$0	$35,140	$35,141	$48,493	$48,494	$59,738	$59,739	$70,280	$70,281	$87,850	$87,851	$105,420
6	$0	$40,280	$40,281	$55,586	$55,587	$68,476	$68,477	$80,560	$80,561	$100,700	$100,701	$120,840
7	$0	$45,420	$45,421	$62,680	$62,681	$77,214	$77,215	$90,840	$90,841	$113,550	$113,551	$136,260
8	$0	$50,560	$50,561	$69,773	$69,774	$85,952	$85,953	$101,120	$101,121	$126,400	$126,401	$151,680
For each additional person:		*Add*		*Add*		*Add*		*Add*		*Add*		*Add*
		$5,140		*$7,093*		*$8,738*		*$10,280*		*$12,850*		*$15,420*

Patient Discount Percentages

Category	A	B	C	D	E	F
Medical/Dental/Mental Health	100%	80%	60%	50%	Full Fee Based on Schedule of Charges	

Exceptions: *Ryan White services may be provided at no charge for patients at 300% or below FPG. See Ryan White Program Policies.

Monthly Gross Income

SOLANO COUNTY HEALTH AND SOCIAL SERVICES DEPARTMENT
FAMILY HEALTH SERVICES

SLIDING FEE DISCOUNT PROGRAM SUMMARY - Effective Starting Date of Service 3/1/2023

Patients must complete a sliding fee discount application and submit supporting documents to determine eligibility for participation in the program. Eligibility is re-certified every year. Participating members receive discounts on services, as summarized below.
https://aspe.hhs.gov/prior-hhs-poverty-guidelines-and-federal-register-references

BASED ON MONTHLY INCOME

Each applicant household is assigned a category based on annual income and number of people.

Category	A		B		C		D		E		F	
% Federal Poverty Guidelines (FPG)	100% and under		101-138%		139-170%		171-200%		201-250%		251-300%	
	Income Range for Each Category by Family Size											
Family Size	From	To	From	To	From	To	From	To	From	To	From	To
1	$0	$1,215	$1,216	$1,677	$1,678	$2,066	$2,067	$2,430	$2,431	$3,038	$3,039	$3,645
2	$0	$1,643	$1,644	$2,268	$2,269	$2,794	$2,795	$3,287	$3,288	$4,108	$4,109	$4,930
3	$0	$2,072	$2,073	$2,859	$2,860	$3,522	$3,523	$4,143	$4,144	$5,179	$5,180	$6,215
4	$0	$2,500	$2,501	$3,450	$3,451	$4,250	$4,251	$5,000	$5,001	$6,250	$6,251	$7,500
5	$0	$2,928	$2,929	$4,041	$4,042	$4,978	$4,979	$5,857	$5,858	$7,321	$7,322	$8,785
6	$0	$3,357	$3,358	$4,632	$4,633	$5,706	$5,707	$6,713	$6,714	$8,392	$8,393	$10,070
7	$0	$3,785	$3,786	$5,223	$5,224	$6,435	$6,436	$7,570	$7,571	$9,463	$9,464	$11,355
8	$0	$4,213	$4,214	$5,814	$5,815	$7,163	$7,164	$8,427	$8,428	$10,533	$10,534	$12,640
For each additional person:		*Add*		*Add*		*Add*		*Add*		*Add*		*Add*
		$428		*$591*		*$728*		*$857*		*$1,071*		*$1,285*

Patient Discount Percentages

Category	A	B	C	D	E	F
Medical/Dental/Mental Health	100%	80%	60%	50%	Full Fee Based on Schedule of Charges	

Exceptions: *Ryan White services may be provided at no charge for patients at 300% or below FPG. See Ryan White Program Policies.

REFERENCED POLICIES	• Ryan White Part C / North Bay AIDS Center Sliding Fee Scale and Billing Caps • Policy #100.01: Insurance Eligibility • Policy #100.02: Cash Handling • Policy #100.08: Fee Waiver & Payment Plan • Policy #100.14: Bad Debt Write Off • Health & Social Services Collection Policy: Board of Supervisor Agenda Item #20, Board Meeting Dated January 11, 1994, Subject: Report on Primary Care Clinic Addressing Fiscal Issues, Controls, Adding Staff and New Operating Policies
REFERENCED FORMS	• Self-Declaration Form (English) • Self-Declaration Form (Spanish) • Sliding Fee Scale Discount Program Application (English) • Sliding Fee Scale Discount Program Application (Spanish) • Payment Plan Agreement (English) • Payment Plan Agreement (Spanish) • Fee Waiver Form (English) • Fee Waiver Form (Spanish) • Health Center Patient Welcome Packet
REFERENCES	

Chair - Community Healthcare Board **Date**

Vice-Chair - Community Healthcare Board **Date**

Solano County Family Health Services

Self-Declaration Form

Patient Information	
Patient's Name:	Patient's D.O.B:
Address:	Phone Number:

Declaration of Employment:

I _____ declare that my current status of employment is: [ ] I am working. [ ] I am not working.

Declaration of Income and Family size:

I declare that my combined household income is $_____ weekly, bi-weekly, monthly or annually (circle one). I also certify that a total number of _____ people--including spouse, children, parents, grandparents, etc.--are currently residing in my household.

I certify that the information that I provided is correct and I authorize the health center to use it. I understand that this information will be used to determine my eligibility for a Sliding Scale Discount, and if eligible, I will receive discounted health services for one year. If my family size or income changes at any time, I will notify the health center to be reassessed for program eligibility.

Applicant's Signature: _____ **Date:** _____

Approved by: _____ **Date:** _____
Health Center Representative - Name / Signature Title

Revised: 02/07/23

Solano County Family Health Services

Declaración Personal

Información del Paciente	
Nombre del Paciente:	Fecha de Nacimiento:
Dirección	Número de Teléfono

Declaración de Empleo:

Yo _____ declaro que en el presente mi estado de empleo es : [ ] Yo estoy trabajando. [ ] Yo no estoy trabajando.

Declaración de Ingresos y cuantos en la Familia:

Yo declaro que el total de ingresos combinado de la familia es $_____ semanal, cada dos semanas, mensual o anual (seleccione una). Yo también certifico que el total de personas—incluyendo esposa, hijos, padres, abuelos, etc. son _____ que están viviendo en mi hogar.

Yo declaro que la información que estoy dando es correcta y autorizo al centro de salud de usarla. Yo entiendo que esta información será usada para determinar mi elegibilidad para la tarifa escalada de descuentos, y si califico, yo recibiré descuentos en los servicios de salud por un año. Si mi familia o los ingresos cambian en algún momento, yo notificaré al centro de salud para ser reevaluado para el programa.

Firma del Aplicante: _____ **Fecha:** _____

Aprobado por: _____ **Fecha:** _____
Representante del Centro de Salud - Nombre / Firma Title

Solano County Family Health Services

Sliding Fee Scale Application

I. Patient Name: _____ DOB: _____

II. Any health insurance: ____ No ____ Yes

III. If yes, name of health insurance plan: _____

IV. Household Size Information (Household is considered a group of two or more people who share a common residence, are related by blood, marriage, adoption or otherwise present themselves as related, and share the costs and responsibilities of the support and livelihood of the group).

Please list below **all** members of your household, including yourself.

	Name	Relationship	Date of Birth		Name	Relationship	Date of Birth
1.				5.			
2.				6.			
3.				7.			
4.				8.			

V. Household Income Information

Please list below all sources of income for all adult members of your household, including yourself (Income includes but is not limited to, earnings, unemployment compensation, SSI, SSDI, public assistance, veteran's pay, survivor benefits, pension or retirement income, alimony, and child support). Proof of income includes (1) Your last two current paystubs, (2) most recent federal tax return, (3) income documentation from affiliated agency, (4) letter from employer on letterhead, (5) Self-Declaration (special circumstances, see Accounting Clerk for criteria to use this form). Adults are considered those persons 18 years of age and older.

This application must be returned with proof of income to be considered for our Sliding Fee Scale Discount program.

Name	Relationship	Source of Income	Amount/Frequency	Annualized

For Office Use Only		
Qualified	*Sliding Fee Scale:*	*% FPG*
☐	*A – 100% Discount*	*< 100%*
☐	*B – 80% Discount*	*101-138%*
☐	*C – 60% Discount*	*139-170%*
☐	*D – 50% Discount*	*171-200%*
Does not qualify		
☐	*E – 0%Discount*	*201-250%*
☐	*F – 0% Discount*	*251-300%*
☐	*0% Discount*	*> 300%*

Date Print Name Signature Relationship (if not applicant)

Accepted By: _____ Title: _____ Date: _____

Print Name Signature

**Retro eligibility may be available upon approval*

Solano County Family Health Services

Sliding Fee Scale Application

Appeal Process: We understand that you might not agree with the decision made regarding your eligibility for the Sliding Fee Scale Discount Program. If you wish to appeal the determination of eligibility for the Sliding Fee Scale Discount Program, please submit a new application to Family Health Services. You may walk into one of the clinics listed below and ask to speak to an accounting clerk, or you may call 707-784-2010 and ask to speak to an accounting clerk.

If you do not qualify for a discount due to your income and family size, you may still qualify for a payment plan agreement or, in certain circumstances, a fee waiver. Please call 707-784-2010 and ask to speak to an accounting clerk regarding your account. **At no time will a patient be denied services because of an inability to pay.**

Fairfield Adult Primary Care Clinic – 2201 Courage Drive, Fairfield, CA 94533

Fairfield Pediatric and Dental Clinic – 2101 Courage Drive, Fairfield, CA 94533

Vacaville Adult, Pediatric and Dental Clinic – 1119 East Monte Vista Avenue, Vacaville, CA 95688

Vallejo Adult, Pediatric and Dental Clinic – 365 Tuolumne Street, Vallejo, CA 94590

Solano County Family Health Services

Solicitud Para Tarifa Escalada

I. Nombre del Paciente: _____ Fecha de Nacimiento: _____

II. Tiene algún seguro médico: ____ No ____ Si

III. Nombre del plan de seguro médico, si lo tiene: _____

IV. Información de cuantos viven en el hogar (Hogar es considerado un grupo de dos o más personas quienes comparten una residencia común, son relacionados por sangre, matrimonio, adopción o se presentan como familiares y comparten costos y responsabilidades de soporte y sustento del grupo).

Por favor escriba todos los miembros del hogar, incluyendo a usted mismo.

	Nombre	Relación	Fecha de Nacimiento		Nombre	Relación	Fecha de Nacimiento
1.				5.			
2.				6.			
3.				7.			
4.				8.			

V. Información de Ingresos del Hogar

Por favor indique abajo todas las formas de ingreso de todos los adultos en el hogar, incluyéndose usted mismo (Ingresos incluye, salarios, beneficios de desempleo, SSI, SSDI, asistencia pública, pagos de veterano, beneficios de sobreviviente, pensiones y retiro, pensión alimenticia, y manutención). Prueba de ingresos incluye (1) Los últimos dos talones de pago, (2) la última declaración de impuestos, (3) prueba de ingresos de agencias afiliadas, (4) carta del empleador con el membrete, (5) Declaración personal (Circunstancias especiales, ver al contador para razones como usar esta forma). Adultos son las personas de 18 años de edad o más.

Esta aplicación debe ser devuelta con pruebas de ingreso para ser considerada para nuestro programa de descuento.

Nombre	Relación	Fuente de Ingreso	Cantidad/ Frecuencia	Total al Año

Sólo para uso oficial		
Qualified	*Sliding Fee Scale*	*% FPG*
☐	*A – 100% Discount*	*< 100%*
☐	*B – 80% Discount*	*101-138%*
☐	*C – 60% Discount*	*139-170%*
☐	*D – 50% Discount*	*171-200%*
Not Qualified		
☐	*E – 0%Discount*	*201-250%*
☐	*F – 0% Discount*	*251-300%*
☐	*0% Discount*	*> 300%*

Fecha Nombre Firma Relación (si no es el aplicante)

Aceptado Por: _____ Título: _____ Fecha: _____

Nombre Firma

**Elegibilidad retroactiva puede ser dada bajo aprobación*

Solano County Family Health Services

Solicitud Para Tarifa Escalada

Proceso de apelación: Entendemos que es posible que no esté de acuerdo con la decisión tomada con respecto a su elegibilidad para el Programa de descuento de escala móvil de tarifas. Si desea apelar la determinación de elegibilidad para el Programa de Descuento de Tarifa Escalada, envíe una nueva solicitud a Servicios de Salud Familiar. Puede ingresar a una de las clínicas que se enumeran a continuación y pedir hablar con un empleado de contabilidad, o puede llamar al 707-784-2010 y pedir hablar con un empleado de contabilidad.

Si no califica para un descuento debido a sus ingresos y tamaño familiar, aún puede calificar para un acuerdo de plan de pago o, en ciertas circunstancias, una exención de tarifas. Llame al 707-784-2010 y pida hablar con un empleado de contabilidad con respecto a su cuenta. **En ningún momento se le negarán servicios a un paciente debido a la incapacidad de pagar.**

Fairfield Adult Primary Care Clinic – 2201 Courage Drive, Fairfield, CA 94533

Fairfield Pediatric and Dental Clinic – 2101 Courage Drive, Fairfield, CA 94533

Vacaville Adult, Pediatric and Dental Clinic – 1119 East Monte Vista Avenue, Vacaville, CA 95688

Vallejo Adult, Pediatric and Dental Clinic – 365 Tuolumne Street, Vallejo, CA 94590

Solano County Family Health Services

PAYMENT PLAN AGREEMENT

FAIRFIELD	**FAIRFIELD**	**VACAVILLE**	**VALLEJO**
2201 Courage Dr.	2101 Courage Dr.	1119 E. Monte Vista	365 Tuolumne St.
707-784-2010	707-784-2010	707-784-2010	707-784-2010

PATIENT'S NAME: _____ PATIENT'S DOB: _____

DATE: _____ CURRENT BALANCE ON ACCOUNT: _____

I understand that I am responsible for the outstanding balance and agree to the following:

☐ I agree to notify this health center if any changes occur in family size, income, medical insurance status or address.

☐ I agree to pay $_____ each month until paid in full.

☐ I agree to pay $_____ every two (2) weeks until paid in full.

NOTES: _____

_____

I certify that the information given by me on this form is true in all respects. My signature below certifies that I have read and understand to the best of my knowledge the information on this form and have been given an opportunity to ask questions regarding any issues that I might have regarding the sliding fee-scale.

PLEASE NOTE: **If payment is not made as agreed upon above, your account may be transferred to the Collection Agency.**

You may call us at the above number if you have any questions regarding your statement.

_____

Date Print Name Signature Relationship (if not self)

Approved by: _____ **Date:** _____

Health Center Representative - Name / Signature Title

Solano County Family Health Services

Acuerdo de Plan de Pagos

FAIRFIELD	**Fairfield**	**VACAVILLE**	**VALLEJO**
2201 Courage Dr.	2101 Courage Dr.	1119 E. Monte Vista	365 Tuolumne St.
707-784-2010	707-784-2010	707-784-2010	707-784-2010

Nombre del Paciente: _____ Fecha de Nacimiento: _____

Fecha: _____ BALANCE ACTUAL EN LA CUENTA: _____

Yo entiendo que yo soy responsable por cualquier balance debido y acuerdo a lo siguiente:

☐ Yo acuerdo en notificar a este centro de salud de cualquier cambio en miembros de la familia, ingresos y estado de cualquier seguro médico o dirección.

☐ Yo acuerdo en pagar $_____ cada mes hasta cubrir el total.

☐ Yo acuerdo en pagar $_____ cada dos (2) semanas hasta cubrir el total.

Notas: _____

_____

Yo certifico que la información dada por mí en esta forma es verdadera en todos los aspectos. Mi firma abajo certifica que yo he leído y entendido según mi conocimiento la información en esta forma y que he tenido la oportunidad de hacer preguntas relacionado con la tarifa escalada de descuentos.

POR FAVOR ENTIENDA: **Si los pagos no son hechos como acordó arriba, su cuenta puede ser reportada a una agencia de cobros.**

Usted puede llamar a los números de arriba si tiene alguna pregunta sobre su factura.

_____

Fecha Nombre Firma Relación (Si no es el paciente)

Aprobado por: _____ **Fecha:** _____

Representante del Centro de Salud – Nombre / Firma Titulo

Solano County Family Health Services

FEE WAIVER REQUEST

FAIRFIELD	**FAIRFIELD**	**VACAVILLE**	**VALLEJO**
2201 Courage Dr.	2101 Courage Dr.	1119 E. Monte Vista	365 Tuolumne St.

PATIENT'S NAME: _____ PATIENT'S DOB: _____

DATE: _____ ENCOUNTER#_____

If you are currently experiencing a financial hardship and would like Family Health Services to consider you for a one-time fee waiver for the requested encounter, please provide the reason for your request below:

_____

_____

_____

_____

_____

_____

_____

_____

By signing below, I certify that the information given by me on this form is true in all respects. My signature below certifies that I have read and understand to the best of my knowledge the information on this form and have been given an opportunity to ask questions regarding the fee waiver request. I acknowledge that my fee waiver request must be approved and signed by either the Practice Manager or Revenue Cycle Manager before it can be assigned to me and my signature below is not a guarantee of approval.

_____

Patient's Signature Date

Processed by:_____ **Date:**_____

Health Center Representative – Name/ Signature Title

Approved by: _____ **Date:** _____

Health Center Manager – Name / Signature Title

Solano County Family Health Services

Solicitud de Exención de Pago

FAIRFIELD	**FAIRFIELD**	**VACAVILLE**	**VALLEJO**
2201 Courage Dr.	2101 Courage Dr.	1119 E. Monte Vista	365 Tuolumne St.

Nombre del Paciente: _____ Fecha de Nacimiento: _____

Fecha: _____ Visita#_____

Si usted en este momento está teniendo dificultad financiera y quisiera que el Centro de Salud lo considere para una exención de la visita requerida, por favor dé una explicación abajo:

_____

_____

_____

_____

_____

_____

_____

_____

Por mi firma abajo, Yo certifico que la información que estoy dando en esta forma es verdadera en todo sentido. Mi firma abajo certifica que yo he leído y entendido en mi conocimiento la información en esta forma y que se me ha dado la oportunidad de hacer preguntas acerca de la solicitud de exención de pago. Yo reconozco que mi solicitud de exención debe ser aprobada y firmada por el gerente del Centro de Salud o el Administrador de Finanzas antes de que esta exención se me otorgue y mi firma no es una garantía de aprobación.

_____

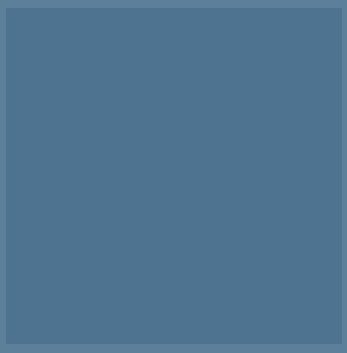
Firma del Paciente Fecha

Procesado por:_____ **Fecha:**_____

Representante del Centro de Salud - Nombre / Firma Titulo

Aprobado por: _____ **Fecha:** _____

Gerente del Centro de Salud - Nombre / Firma Titulo









COMMUNITY NEEDS ASSESSMENT

JANUARY 2023 | PREPARED FOR

Solano County Family Health Services

Facktor

TABLE OF CONTENTS

I.

ORGANIZATIONAL PROFILE

Background

Solano County Family Health Services (SCFHS) was originally founded in October 1918, when the Solano County Board of Supervisors opened the Solano County Public Hospital on West Texas Street in Fairfield. The facility began as a fifty-bed hospital that offered surgical, emergency, laboratory, radiology, long-term care, and outpatient primary care services. Staffing included 12 to 15 full-time medical doctors and 30 to 40 nursing and ancillary staff. Over the years, the facility cared for Solano County's indigent community, Medi-Cal recipients, and prisoners from the county jail. The County Hospital closed in June 1973. Although the hospital closed, the outpatient primary care clinics continued to operate and see patients five days a week, with some weekend and evening hours offered. In 2004, SCFHS became a Section 330-funded Federally Qualified Health Center (FQHC). The new Fairfield Adult Medical Clinic opened its doors in 2010, as did the Vallejo Medical Clinic. The Vacaville Medical and Dental Clinics opened in 2012. The mission of SCFHS is "to provide high quality, comprehensive, accessible medical and dental care to support Solano County's diverse community to live, learn and work with thriving health."

Sites and Services

SCFHS serves Solano County at the following locations:

- Family Health Services - Vallejo Integrated Care Clinic: 355 Tuolumne St., Vallejo, CA 94590
- Family Health Services - Vallejo: 365 Tuolumne St., Vallejo, CA 94590
- Family Health Services - Fairfield: 2201 Courage Dr., Fairfield, CA 94533
- Family Health Services - Fairfield Pediatric Clinic: 2101 Courage Dr., Fairfield, CA 94533
- Family Health Services - Fairfield Dental: 2101 Courage Dr., Fairfield, CA 94533
- Family Health Services - Vacaville: 1119 E Monte Vista Ave., Vacaville, CA 95688
- FHS Mobile Medical and Dental Clinic: 3255 N Texas St., Fairfield, CA 94533
- Global Center for Success: 1055 Azuar Dr., Vallejo, CA 94592

SCFHS provides a wide range of services to address the needs of its community across the lifespan either directly or through referral agreements. These services include:

- General Primary Medical Care
- Diagnostic Laboratory Services
- Diagnostic Radiology
- Screenings
- Emergency Care During and After Hours
- Voluntary Family Planning
- Immunizations
- Well Child Services
- Gynecologic and Obstetrical Care
- Pharmaceutical Services
- Case Management
- Eligibility Assistance
- Health Education
- Outreach
- Transportation

- Translation
- Dental Services
- Mental Health
- Substance Use Disorder Services
- Nutrition
- Complementary and Alternative Medicine
- Psychiatry

SCFHS also offers a first-of-its-kind Mobile Food Pharmacy that employs a truck that delivers fresh fruits and vegetables to the clinics throughout Solano County on a weekly schedule. It is innovative in that it eliminates barriers - such as lack of transportation and time - that patients face by bringing the healthy food to them right after their appointments. FHS patients are also provided with free cookbooks and recipe cards.

Overall, SCFHS seeks to serve the safety-net population in its Solano County service area and focuses on offering culturally appropriate medical care to each of its patients. SCFHS is committed to delivering excellent health services in a caring, nurturing, and respectful atmosphere and improving the quality of life for every individual and family in our community. SCFHS's services are available to everyone, without regard to financial position, ethnicity, language, culture, sexual orientation, documentation or immigration status.

Governance

SCFHS's governing Board of Directors (Board) consists of local leaders, advocates and patients who live and work in the community. These dedicated individuals approve all major organizational decisions and have fiduciary, quality assurance, and policy-making responsibilities. The Board maintains a clear line of authority to SCFHS's Executive Director and the management team. Current Board members are:

- Brandon Wirth, President
- Michael Brown, Vice Chair
- Ruth Forney
- Gerald Hase
- Deborah Hillman
- Anthony Lofton, Member at Large
- Don O'Conner
- Tracee Stacy
- Sandra Whaley
- Robert Wieda

II.

PURPOSE & DESIGN

SCFHS commissioned this needs assessment to discern the barriers in the community, the areas and potential service lines where provider capacity is lacking, and the specific healthcare needs of its target population. This needs assessment will be shared with Board members, SCFHS staff, and funders for the purposes of program planning and fund development.

For this needs assessment, secondary data were collected and analyzed from a variety of sources. This quantitative analysis is helpful in highlighting health outcomes that significantly impact the community and to help SCFHS better understand which types of services will most positively improve outcomes for their patients. Additionally, to provide a comprehensive overview, data were identified at the zip code, city, state, and national levels, where appropriate and available.

The following data sources were used:

1. Demographic data from U.S. Census Bureau 2000, 2010 and *American Community Survey* (ACS) 2020;
2. Birth and mortality data from the *Birth and Death Profiles* published by the California Department of Public Health (CDPH);
3. UCLA's California Health Interview Survey (www.chis.ucla.edu);
4. Federal Uniform Data System (UDS) data and UDS Mapper (www.udsdata.org);
5. SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018; and,
6. Other sources and reports as appropriate and cited.

III.

DEMOGRAPHICS

Service Area

SCFHS's service area is located within Solano County, the northeastern county in the nine-county San Francisco Bay Area. A portion of the County extends into the Sacramento Valley and is abutted by Napa County, Yolo County, Sacramento County, San Joaquin County and Contra Costa County. The County has seven cities and a total area of 906 square miles.[1]

SCFHS conducted its patient origin study by reviewing its UDS data for the period July 1, 2021 through June 30, 2022 on where their patient populations reside as documented by the zip codes in the health center's electronic health record system. Figure 1 shows SCFHS's patient origin map from that study. Figure 2 shows SCHFS's service area, which includes the 15 zip codes listed in Table 1 that identify the clinic's defined services area where 97.56 percent of health center patients reside.* The service area is discussed in greater detail in the Access to Providers section.

TABLE 1: SCFHS SERVICE AREA ZIP CODES

ZIP CODE	COMMUNITY/CITY	ZIP CODE	COMMUNITY/CITY
94503	American Canyon	94590	Vallejo
94510	Benicia	94591	Vallejo
94533	Fairfield	94592	Vallejo
94534	Fairfield	95694	Winters
94535	Travis AFB	95620	Dixon
94571	Rio Vista	95687	Vacaville
94585	Suisun City	95688	Vacaville
94589	Vallejo		

*SCFHS's service area meets the Health Resources and Services Administration's requirement that an FQHC's service area represent where at least 75 percent of patients reside.

FIGURE 1: SCFHS PATIENT ORIGIN MAP

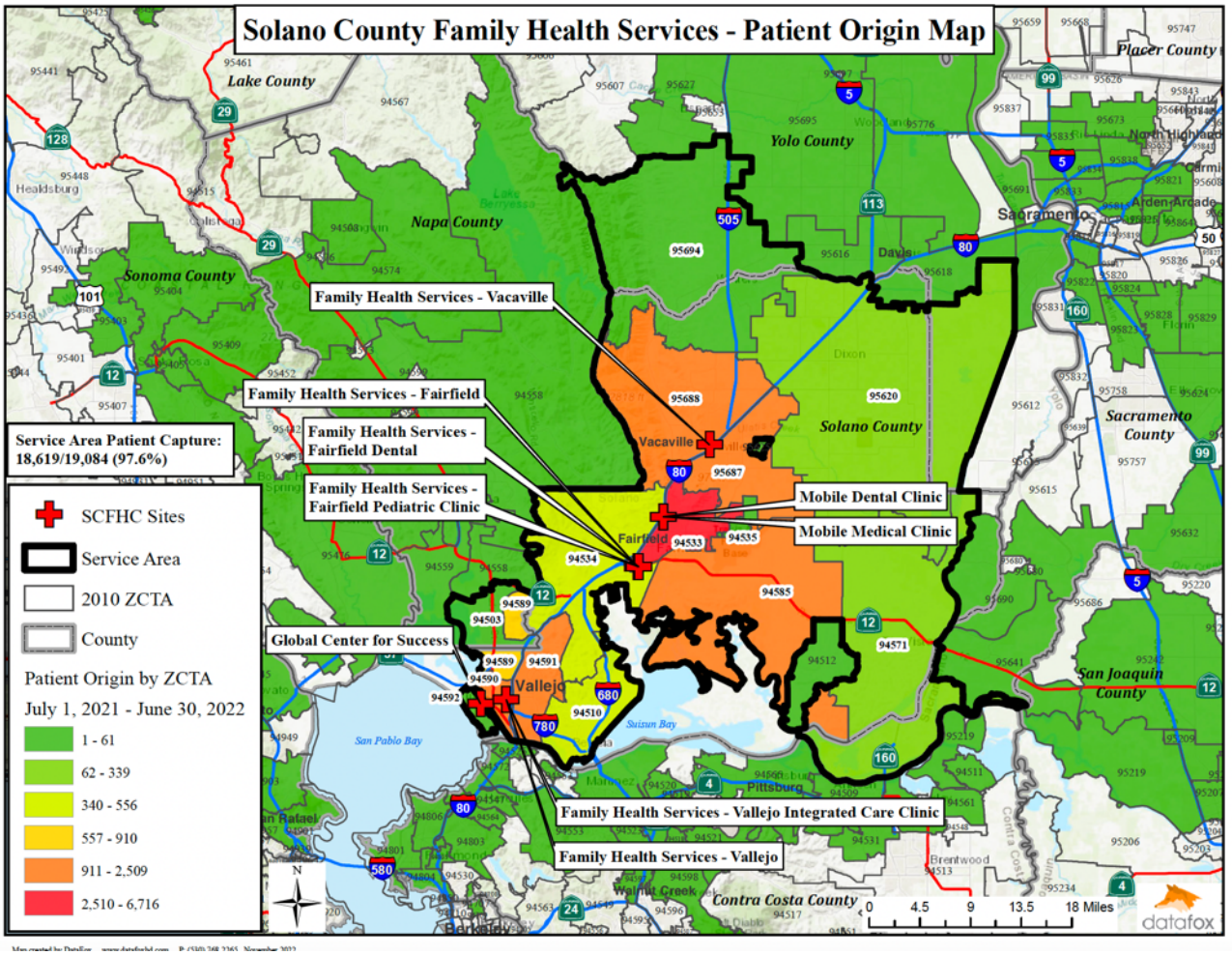
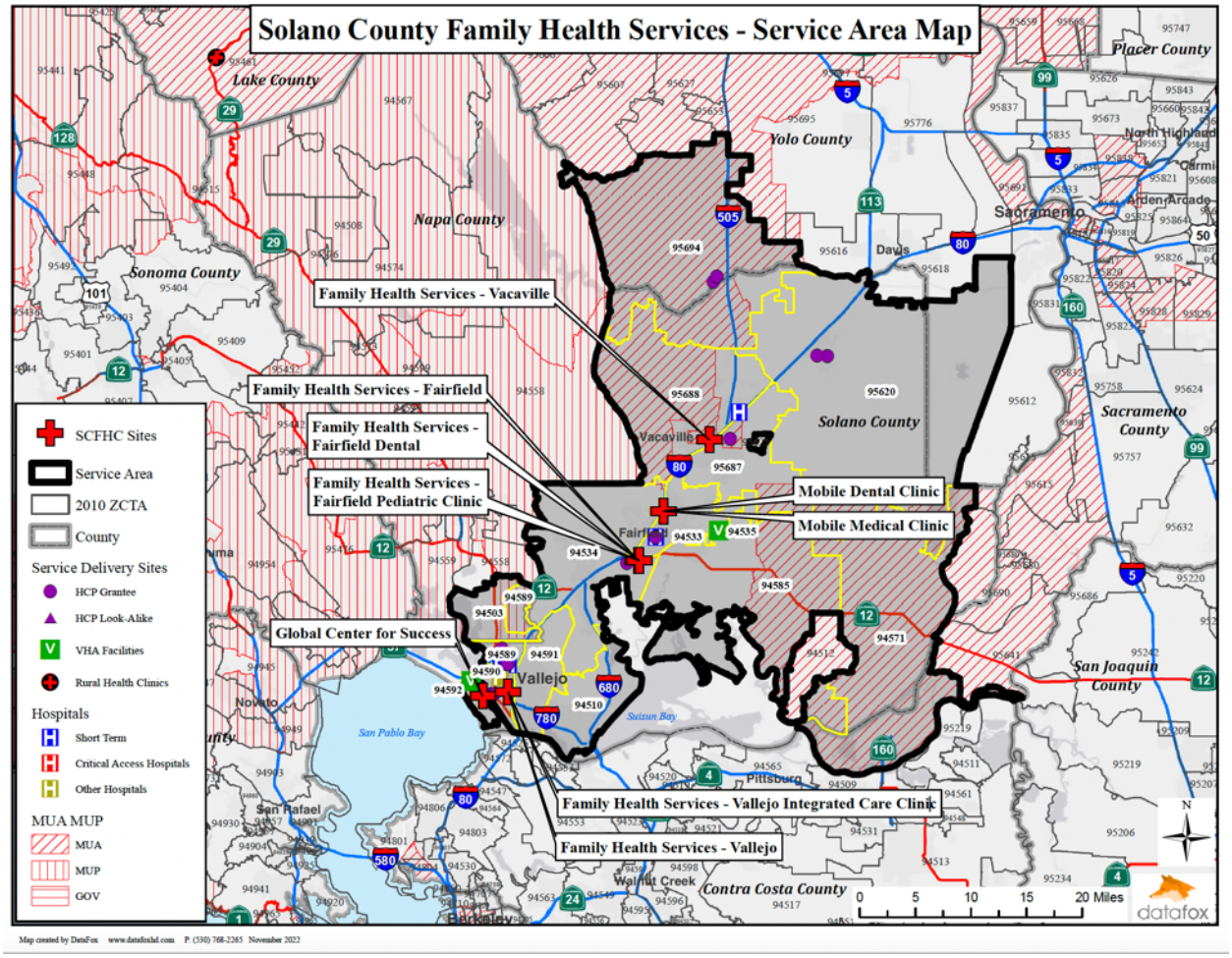


FIGURE 2: SCHFS SERVICE AREA MAP



Population Count

As shown in Table 2, SCFHS's service area population consists of 473,849 individuals. Of the 15 zip codes that comprise SCFHS's service area, 94533 (Fairfield), has the most residents with 16.60 percent of the service area population. The zip code contributing the least number of individuals is 94592 (Vallejo) with 0.21 percent of the service area population. Across the service area, 101,014 individuals (or 21.32 percent of the total population) are low-income (below 200 percent of the Federal Poverty Level [FPL]).

TABLE 2: TOTAL & LOW-INCOME POPULATIONS BY ZIP CODE FOR SCFHS SERVICE AREA

ZIP CODE	POST OFFICE NAME	TOTAL POPULATION	LOW-INCOME (BELOW 200% FPL) POPULATION
94503	American Canyon	20,295	3,617
94510	Benicia	28,297	4,098
94533	Fairfield	78,695	22,557
94534	Fairfield	38,471	3,369
94535	Travis AFB	3,407	788
94571	Rio Vista	10,330	2,305
94585	Suisun City	29,351	6,460
94589	Vallejo	30,206	9,784
94590	Vallejo	37,378	13,185
94591	Vallejo	56,333	11,096
94592	Vallejo	1,038	303
95694	Winters	10,549	1,881
95620	Dixon	22,312	5,017
95687	Vacaville	69,073	10,466
95688	Vacaville	38,114	6,088
Total		473,849	101,014

Source: UDS Mapper

Gender and Age Distribution

As shown in Table 3, within SCFHS's service area, there are slightly more females than males, accounting for 50.2 percent and 49.8 percent of the population, respectively. Related to age, 31.2 percent of SCFHS's service area is under the age of 24; 53.4 percent is between 25 and 64; and 15.5 percent is over the age of 65. SCFHS's service area population experienced an increase of 7.5 percent between 2010 and 2020, which was on par with Solano County (also a net increase of 7.5 percent), but lower than California (a net increase of 5.6 percent) over those years.

SCFHS's service area saw an overall decrease in its younger residents (between the age of 0 and 24). However, there was a marked increase in residents over the age of 65 since 2010. Solano County and California also reflect the trend of a 'graying' of the population with similarly robust increases in their older adult populations. This trend is expected to continue, with a doubling of the number of Californians aged 65 and older expected between 2010 and 2050.[2]

TABLE 3: SCFHS SERVICE AREA POPULATION BY AGE AND GENDER

	SCFHS SERVICE AREA	PERCENT OF TOTAL			PERCENT CHANGE SINCE 2010		
		SERVICE AREA	SOLANO COUNTY	CA	SERVICE AREA	SOLANO COUNTY	CA
Male Ages 0-4	14,626	3.1 %	3.1 %	3.1 %	-1.0 %	-0.3 %	-4.7 %
Male Ages 5-17	39,342	8.3 %	8.3 %	8.5 %	-4.3 %	-3.8 %	-3.4 %
Male Ages 18-24	22,159	4.7 %	4.6 %	4.9 %	-2.3 %	-3.2 %	-6.1 %
Male Ages 25-44	66,236	14.0 %	14.1 %	14.6 %	12.1 %	12.4 %	8.0 %
Male Ages 45-64	60,658	12.8 %	12.7 %	12.2 %	0.4 %	-0.5 %	5.7 %
Male Ages 65-84	29,797	6.3 %	6.4 %	5.7 %	53.6 %	54.4 %	36.2 %
Male Ages 85+	2,862	0.6 %	0.6 %	0.7 %	29.2 %	29.6 %	34.4 %
Female Ages 0-4	13,753	2.9 %	2.9 %	3.0 %	-1.3 %	-0.4 %	-5.0 %
Female Ages 5-17	38,256	8.1 %	7.9 %	8.1 %	-2.7 %	-3.7 %	-3.0 %
Female Ages 18-24	19,353	4.1 %	4.0 %	4.6 %	-5.0 %	-6.1 %	-3.9 %
Female Ages 25-44	62,737	13.2 %	13.3 %	14.0 %	9.3 %	10.1 %	6.1 %
Female Ages 45-64	63,348	13.4 %	13.3 %	12.6 %	2.0 %	1.3 %	4.9 %
Female Ages 65-84	34,844	7.4 %	7.5 %	6.7 %	46.4 %	47.8 %	32.0 %
Female Ages 85+	5,878	1.2 %	1.3 %	1.2 %	43.9 %	45.2 %	23.4 %
Total	473,849	100.0 %	100.0 %	100.0 %	7.5 %	7.5 %	5.6 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates; 2010 Census, Summary File 1

Race and Ethnicity

Solano County is a racially diverse region and has become more so in recent years. The SCFHS service area has a population that is 36.7 percent White alone, 27.3 percent Hispanic or Latino, 15.7 percent Asian, 12.8 percent Black/African American, 6.3 percent Other, 0.9 percent Native Hawaiian & Pacific Islander, and 0.4 percent American Indian and Alaska Native. (See Table 4.) Since 2000, demographic shifts are evident in SCFHS's service area with: increases in Other/ Non-Hispanic, Hispanic, Native Hawaiian & Pacific Islander, Asian, and Black/ African American; and decreases American Indian and Alaska Native and White. While the magnitudes vary, these percentages are relatively consistent with the proportions in Solano County.

TABLE 4: SCFHS POPULATION BY RACE AND ETHNICITY

	SCFHS SERVICE AREA	PERCENT OF TOTAL			PERCENT CHANGE SINCE 2010		
		SERVICE AREA	SOLANO COUNTY	CA	SERVICE AREA	SOLANO COUNTY	CA
White Alone, Non-Hispanic	173,695	36.7 %	37.2 %	36.5 %	-2.2 %	-2.0 %	-4.0 %
Hispanic or Latino	129,458	27.3 %	26.8 %	39.1 %	19.5 %	20.1 %	9.8 %
Asian, Non-Hispanic	74,225	15.7 %	15.1 %	14.6 %	13.5 %	13.7 %	20.3 %
Black or African American, Non-Hispanic	60,793	12.8 %	13.3 %	5.4 %	0.8 %	0.9 %	-1.0 %
Other, Non-Hispanic	29,969	6.3 %	6.3 %	3.7 %	27.0 %	25.3 %	37.2 %
Native Hawaiian & Pacific Islander, Non-Hispanic	4,042	0.9 %	0.9 %	0.3 %	18.7 %	19.8 %	5.4 %
American Indian and Alaska Native, Non-Hispanic	1,667	0.4 %	0.3 %	0.3 %	-15.5 %	-19.7 %	-18.8 %
Racial or Ethnic Minority	300,154	63.3 %	62.8 %	63.5 %	59.7 %	59.2 %	59.9 %
Total	473,849	100.0 %	100.0 %	100.0 %	7.5 %	7.5 %	5.6 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimate; U.S. Census Bureau, 2010 Census, Summary File 1

IV.

SOCIAL DETERMINANTS OF HEALTH

Social determinants of health represent political and economic structures, physical and social environments, and access to health services that affect quality-of-life outcomes and health disparities.[3] The patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include economic stability, employment, safe and affordable housing, access to education, public safety, availability of healthy foods, access to transportation, local emergency/health services, and environments free of life-threatening toxins.[4] Differences in health are striking in communities with poor SDOH such as unstable housing, low income, unsafe neighborhoods, or substandard education. Social determinants of health also contribute to wide health disparities and inequities. For example, people who don't have access to grocery stores with healthy foods are less likely to have good nutrition which raises their risk of health conditions like heart disease, diabetes, and obesity — and even lowers life expectancy relative to people who do have access to healthy foods. Poverty is the single largest determinant of health, and ill health is an obstacle to social and economic development. Poorer people live shorter lives and have poorer health than affluent people. This disparity has drawn attention to the remarkable sensitivity of health to the social environment.

A person's zip code can be more of a health predictor than genetic code. In order to improve population health in and around SCFHS's service area, the public health system must expand to include non-traditional partners such as transportation, workforce development, and housing. Several indicators related to SDOH, such as economic stability, health insurance, education, health literacy, environment, food insecurity and social and community context, are presented below.

Race and Ethnicity

As previously noted, SCFHS's service area has a population that is 36.7 percent White alone, 27.3 percent Hispanic or Latino, 15.7 percent Asian, 12.8 percent Black/African American, 6.3 percent Other, 0.9 percent Native Hawaiian & Pacific Islander, and 0.4 percent American Indian and Alaska Native. Despite policies such as *Healthy People,*[5] which was implemented to identify, reduce, and ultimately, eliminate inequities in care, a divide in health care continues to persist. While there have been significant medical advances, a study consisting of forty-five studies demonstrated how people from ethnic minority backgrounds had higher rates of adverse drug and dosing errors and higher rates of hospital acquired infections.[6] The data show that racial and ethnic minority groups, throughout the United States, experience higher rates of illness and death across a wide range of health conditions, including diabetes, hypertension, obesity, asthma, infant mortality and heart disease, when compared to their White counterparts. Additionally, the life expectancy of non-Hispanic/Black Americans is four years lower than that of White Americans. The COVID-19

pandemic, and its disproportionate impact among racial and ethnic minority populations is another stark example of these enduring health disparities.[7]

There is much more genetic variation within races than between races and, therefore, race is more of a social construct than a biological construct. There are no objective criteria for choosing one adaptive trait over another to define race.[8] It can be argued then that racism, rather than race, is the underlying structural determinant that sets the stage for all other social determinants of health and is the fundamental driver of health inequities. It drives the inequities in housing, income, and education, especially among communities of color.

Per Table 5, an average of 21.3 percent of the total residents of SCFHS's service area lives under 200 percent FPL. The distribution of percentages by race and ethnicity is also shown in Table 5, with 19.8 percent of those below 200 percent FPL being a racial minority.

TABLE 5: SCFHS SERVICE AREA POPULATION BY RACE AND ETHNICITY (HISPANIC INTEGRATED)

	SCFHS SERVICE AREA		TARGET POPULATION*		PERCENT OF RACE
	NUMBER	PERCENT	NUMBER	PERCENT	UNDER 200 % FPL
White	239,198	50.5 %	54,627	54.1 %	22.8 %
Asian	76,367	16.1 %	14,910	14.8 %	19.5 %
Black/African American	62,566	13.2 %	12,902	12.8 %	20.6 %
More than one Race	44,505	9.4 %	8,605	8.5 %	19.3 %
Unreported/Declined to Report	44,108	9.3 %	8,648	8.6 %	19.6 %
Other Pacific Islander	3,414	0.7 %	636	0.6 %	18.6 %
American Indian/Alaskan Native	2,735	0.6 %	507	0.5 %	18.5 %
Native Hawaiian	2,663	0.1 %	962	0.1 %	36.1 %
Racial Minority	234,651	49.5 %	46,387	45.9 %	19.8 %
Total	473,849	100.0 %	101,014	100.0 %	21.3 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates
**Target Population = Residents living below 200 percent FPL*

As shown in Table 6, 21.6 percent of the service area Hispanic or Latino population is living below 200 percent FPL as compared to 21.2 percent of the non-Hispanic/non-Latino population.

TABLE 6: SCFHS SERVICE AREA POPULATION BY HISPANIC/LATINO AND NON-HISPANIC/NON-LATINO

	SCFHS SERVICE AREA		TARGET POPULATION*		PERCENT OF RACE UNDER 200 % FPL
	NUMBER	PERCENT	NUMBER	PERCENT	
Hispanic or Latino	129,458	27.3 %	28,017	27.7 %	21.6 %
Non-Hispanic or Latino	344,391	72.7 %	72,997	72.3 %	21.2 %
Total	473,849	100.0 %	101,014	100.0 %	21.3 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates
**Target Population = Residents living below 200 percent FPL*

Poverty

Rising socio-economic status tends to improve health outcomes, while falling socio-economic status tends to decrease levels of health and wellness. Differences in social status, income and wealth, and opportunities for a quality education are often associated with health impacts that disproportionately affect certain populations, such as the poor, young children, and the elderly. Income is one of the strongest predictors of health outcomes worldwide. People with greater wealth tend to live longer and experience lower rates of chronic disease.[9] Lower incomes are associated with higher rates of mortality, premature births, and other health issues. Households with higher incomes are likely to have more educated residents, lower unemployment rates, and better access to healthcare. These factors contribute to better health outcomes related to mortality, chronic diseases, and other health indicators.[10,11]

When households earn incomes much lower than the average cost of living, they tend to make sacrifices in important areas. Those lifestyle compromises can include eating less food and/or unhealthier food, living in substandard housing, and/or delaying medical care. Additionally, the lack of resources to meet basic needs causes long-term stress, which has been shown to be correlated with health-related quality of life (HRQOL). These effects have manifested in the forms of experienced pain/discomfort, chronic disease, and anxiety/depression.[12]

While impoverished households can be found in virtually every tract throughout Solano County, it is unmistakable that most of these households are in specific geographic areas. Nearly one-quarter (21.8 percent) of people in SCFHS's service area is considered "low income," living below 200 percent of the FPL, just lower than Solano County (22.1 percent) but significantly lower than California (29.4 percent) populations who meet this criterion. (See Table 7.) In 2022, 200 percent FPL corresponded to $55,500 for a family of four.[13] Within SCFHS's service area, 101,014 individuals live below 200 percent FPL. These residents make up SCFHS's target population, a group that most often lacks insurance and access to services.

Within SCFHS's service area, 9.0 percent live below 100 percent FPL, while 12.8 percent live between 100 and 199 percent FPL.

TABLE 7: BREAKDOWN OF POPULATION BY POVERTY LEVEL

	SCFHS SERVICE AREA	PERCENT OF TOTAL			PERCENT CHANGE SINCE 2011		
		SERVICE AREA	SOLANO COUNTY	CA	SERVICE AREA	SOLANO COUNTY	CA
Below Poverty	41,859	9.0 %	9.1 %	12.6 %	-6.6 %	-7.4 %	-6.9 %
100% to 199% Poverty	59,155	12.8 %	13.0 %	16.8 %	2.2 %	4.8 %	-8.1 %
200% Poverty and Above	361,832	78.2 %	77.9 %	70.6 %	14.3 %	13.9 %	13.8 %
Under 200% of FPL	101,014	21.8 %	22.1 %	29.4 %	-1.7 %	-0.6 %	-7.6 %
Total Civilian Non-Institutionalized Population	462,846	100.0 %	100.0 %	100.0 %	10.4 %	10.4 %	6.6 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates; Source: U.S. Census Bureau, 2011 ACS 5-Year Estimates

In regard to healthcare, various studies have found that those living in poverty face barriers impacting access to care, including: the inability to afford healthcare co-payments, mistrust of providers, inadequate transportation, limited awareness of health resources, long waits, cultural isolation, and fears regarding immigration status. For school-aged children, additional gaps and health disparities exacerbate these barriers.

Residents who live in a poverty-stricken community are often subjected to additional costs and limitations. Research has shown the wide-ranging social and economic effects that result when the poor are concentrated in economically segregated and disadvantaged communities such as those in SCFHS's service area. Concentrated poverty can limit educational opportunities, lead to increased crime rates and poorer health outcomes.[14] Specifically, violent crime rates tend to be higher in economically distressed neighborhoods.[15] For health outcomes, residents living in low-income neighborhoods tend to have worse physical and mental health issues, such as physical limitation, heart disease, diabetes, stroke, and other chronic conditions.[16] Individuals living in poverty are also at higher risk for behaviors that lead to preventable chronic diseases such as higher levels of stress, limited physical activity, poor dietary habits, and cigarette smoking.[17]

Utilization data also show that residents under 100 percent FPL are disproportionately accessing primary care clinics by a wide margin (see Table 8). Although 8.8 percent of the population is below 100 percent FPL, this group utilizes 53.1 percent of the total primary care community clinic resources in the service area. These data underscore the importance of community-based primary care clinics to this population as their only source of health care.

TABLE 8: UTILIZATION OF PRIMARY CARE CLINICS BY POVERTY LEVEL

	SERVICE AREA UTILIZATION	PERCENT OF UTILIZATION	SERVICE AREA POPULATION	PERCENT OF POPULATION
Under 100 % FPL	23,613	53.1 %	41,859	8.8 %
100 - 138 % FPL	5,189	11.7 %	21,239	4.5 %
139 - 199 % FPL	3,374	7.6 %	37,916	8.0 %
200 - 399 % FPL	1,848	4.2 %	139,424	29.4 %
400 % FPL and Above	520	1.2 %	222,408	46.9 %
Unknown	9,928	22.3 %	11,003	2.3 %
Total	44,472	100.0 %	473,849	100.0 %

Source: 2020 California Office of Statewide Healthcare Planning and Development, 2020 ACS 5-Year Estimates

Economic Stability

Economic stability represents an individual's ability to access much needed resources, such as food, adequate housing, and necessary healthcare. Employment is directly correlated with a person's health; when the rate of unemployment increases, unemployed adults are more likely to delay or not receive needed medical care and prescriptions compared with employed adults. Illness and premature death increase as well.[18]

The largest industries in Solano County are healthcare and social assistance, retail trade and manufacturing. Many of SCFHS's residents commute to the Bay Area and Sacramento for occupations ranging from construction, manufacturing, health care and government. Solano County is still recovering from a recession and the pandemic and faces additional pressures from the statewide drought and global inflation. Solano County's agriculture industry, which represented a $357.12 million gross value in 2020, is slumping due in large part to the drought, but also access to global markets due to COVID-19.[19] For many Solano residents who had been commuting to other counties for higher-paying jobs, the additional cost of gas may make it more financially viable for them to find local jobs – even lower-paying jobs – than to continue their commutes.[20]

Workers living in the service area earn less for some jobs than in the County, the state, or the nation, even for similar occupational categories as shown in Table 9. The amount *each parent* in a four-person family would have to earn to remain above 200 percent FPL in 2022 is $27,750 per year. Those earning below 200 percent FPL are among SCFHS's target population because they do not earn sufficient income to afford health care without significant subsidy and assistance.

TABLE 9: MEDIAN WAGE FOR GENERAL CATEGORY OCCUPATIONS (2020 INFLATION ADJUSTED DOLLARS), CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER

OCCUPATION	SCFHS SERVICE AREA	SOLANO COUNTY	CA	U.S.
Healthcare practitioners and technical occupations	$ 79,226	$ 76,984	$ 75,342	$ 60,151
Management, business, and financial occupations	$ 78,634	$ 71,843	$ 78,758	$ 70,073
Computer, engineering, and science occupations	$ 72,575	$ 80,320	$ 96,638	$ 79,791
Protective service	$ 61,066	$ 70,847	$ 54,375	$ 46,782
Natural resources, construction, and maintenance	$ 46,284	$ 51,168	$ 37,433	$ 40,496
Education, legal, community service, arts, and media	$ 44,222	$ 47,673	$ 50,732	$ 44,854
Sales and office occupations	$ 35,788	$ 37,251	$ 34,631	$ 32,496
Production, transportation, and material moving	$ 35,056	$ 39,091	$ 31,161	$ 32,236
Building and grounds cleaning and maintenance	$ 30,269	$ 33,060	$ 23,975	$ 21,992
Healthcare support	$ 25,789	$ 27,042	$ 24,111	$ 23,794
Personal care and service	$ 18,470	$ 17,353	$ 19,186	$ 18,096
Food preparation and serving related occupations	$ 14,917	$ 19,169	$ 19,560	$ 15,922

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates.

Table 10 shows that the overall median household income in the SCFHS service area ($87,317) is higher than that of the County ($84,638) and the per capita income is higher for SCFHS's service area ($37,719) as compared to Solano County ($36,685).

TABLE 10: PER CAPITA INCOME BY RACE/ETHICITY (2020 AGE INFLATED DOLLARS)

	PER CAPITA INCOME			
	SCFHS SERVICE AREA	SOLANO COUNTY	CA	U.S.
White, Non-Hispanic	$ 47,799	$ 47,631	$ 55,603	$ 41,758
Asian	$ 37,867	$ 37,658	$ 45,111	$ 42,331
Black or African American	$ 33,566	$ 33,318	$ 31,057	$ 24,454
American Indian	$ 30,349	$ 27,165	$ 26,164	$ 21,673
Black or African American	$ 33,566	$ 33,318	$ 31,057	$ 24,454
Per Capita Income, All Persons	$ 36,719	$ 36,685	$ 38,576	$ 35,384
Median Household Income (2020 Inflation-Adjusted Dollars)	$ 87,317	$ 84,638	$ 78,672	$ 64,994

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates

As shown in Table 11, 13.2 percent of residents in SCFHS's service area are employed in occupations that earn less than 200 percent of the FPL annually: food preparation and serving related occupations, healthcare support, and personal care and service. These residents represent the working poor.

TABLE 11: EMPLOYMENT BY GENERAL CATEGORY OCCUPATION, CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER

	SCFHS SERVICE AREA		SOLANO COUNTY	CA	U.S.
OCCUPATION	NUMBER	PERCENT	PERCENT	PERCENT	PERCENT
Sales and office occupations	49,264	21.9 %	22.0 %	20.9 %	21.3 %
Management, business, and financial occupations	31,246	13.9 %	13.9 %	16.4 %	16.0 %
Production, transportation, and material moving	29,535	13.1 %	13.1 %	11.9 %	13.1 %
Natural resources, construction, and maintenance	24,847	11.1 %	11.1 %	8.8 %	8.7 %
Education, legal, community service, arts, and media	19,205	8.5 %	8.7 %	11.4 %	11.1 %
Healthcare practitioners and technical occupations	14,555	6.5 %	6.3 %	5.2 %	6.1 %
Food preparation and serving related occupations	13,107	5.8 %	5.8 %	5.6 %	5.6 %
Computer, engineering, and science occupations	10,771	4.8 %	4.9 %	7.4 %	6.2 %
Healthcare support	10,331	4.6 %	4.6 %	3.6 %	3.3 %
Building and grounds cleaning and maintenance	8,100	3.6 %	3.6 %	3.9 %	3.7 %
Protective service	7,502	3.3 %	3.4 %	2.1 %	2.1 %
Personal care and service	6,308	2.8 %	2.8 %	2.9 %	2.7 %
Employed Population	224,771	100.0 %	100.0 %	100.0 %	100.0 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates

The unemployed population experiences worse health and higher mortality rates than the employed population.[21] Unemployment has been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality, especially suicide. [22]

Based on the U.S. Census Bureau American Community Survey (ACS) 5-year estimate from 2020, SCFHS's service area had an unemployment rate of 5.7 percent, while Solano County and California had unemployment rates of 5.9 percent and 6.2 percent, respectively. (See Table 12.) The labor force increased by 10.5 percent in SCFHS's service area between 2011 and 2020, while the unemployment rate decreased by 36.5 percent.

TABLE 12: UNEMPLOYMENT RATE (2020 DATA)

		PERCENT OF TOTAL			PERCENT CHANGE SINCE 2011		
	SCFHS SERVICE AREA	SERVICE AREA	SOLANO COUNTY	CA	SERVICE AREA	SOLANO COUNTY	CA
Employed	224,771	94.3 %	94.1 %	93.8 %	15.7 %	15.2 %	12.3 %
Unemployed	13,672	5.7 %	5.9 %	6.2 %	-36.5 %	-35.2 %	-34.2 %
Labor Force	238,443	100.0 %	100.0 %	100.0 %	10.5 %	10.2 %	7.6 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimate; Source: *U.S. Census Bureau, 2010 ACS 5-Year Estimates Ages 16 and over*

Children living in poverty are more likely to have health and developmental problems — and to take part in behaviors that can harm their health. Children who have at least one parent with steady work are less likely to live in poverty. High-quality child-care programs and strategies to increase job opportunities can help more parents get year-round, full-time work.[23]

As shown in Table 13, the percentage of unemployment of families with children under 18 (with neither parent in the labor force for two parent families, and no parent in the labor force for single parent families) is 6.4 percent for the service area, which is somewhat lower than the rates for Solano County (6.6 percent) and significantly lower than California (7.9 percent), and the nation (7.3 percent).

TABLE 13: UNEMPLOYMENT OF FAMILIES WITH CHILDREN

	SCFHS SERVICE AREA		SOLANO COUNTY	CA	U.S.
	NUMBER	PERCENT	PERCENT	PERCENT	PERCENT
Unemployment of Families w/Children	6,375	6.4 %	6.6 %	7.9 %	7.3%

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates

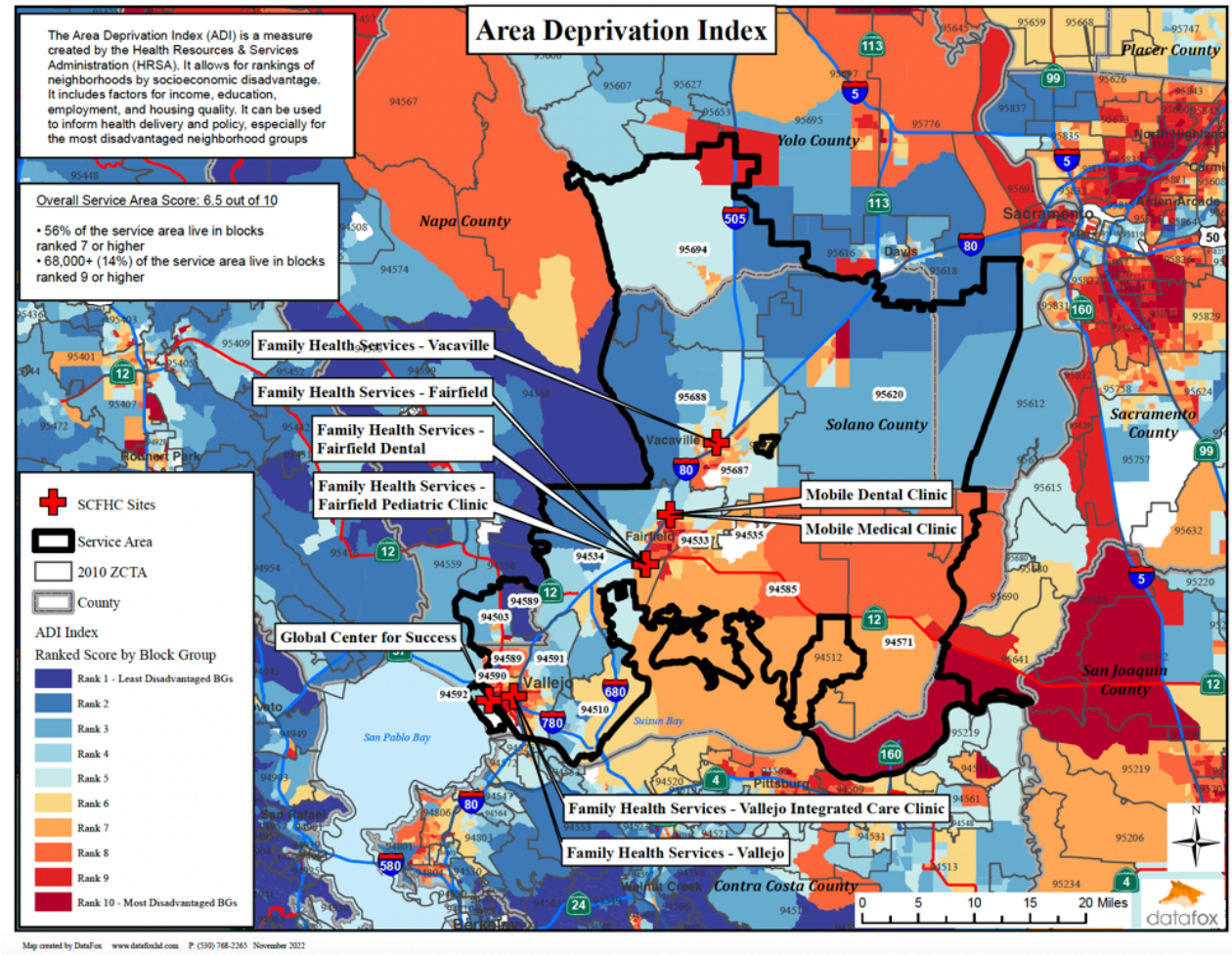
Area Deprivation Index

Living in a disadvantaged neighborhood has been linked to a number of healthcare outcomes, including higher rates of diabetes and cardiovascular disease, increased utilization of health services, and earlier death.[24,25] Health interventions and policies that don't account for neighborhood disadvantage may be ineffective. As the health care system shifts toward value-based planning and purchasing, new tools are needed to integrate social determinants of health into clinical and preventive care to improve population health and reduce health care disparities.[26]

The Area Deprivation Index (ADI) is based on a measure created by the Health Resources & Services Administration (HRSA) and it allows for rankings of neighborhoods by socioeconomic disadvantage. It includes factors for the theoretical domains of income, education, employment, and housing quality and can be used to inform health delivery and policy, especially for the most disadvantaged neighborhood groups.[27]

As shown in Figure 3, there are pockets of high ADI scores within SCFHS's service area. (Note: A Census Block Group is the geographic unit of construction and is considered the closest approximation to a "neighborhood". As such, there is no precise overlap with 5-digit zip codes or ZCTA).

FIGURE 3: AREA DEPRIVATION INDEX



Health Insurance

While health insurance is only one of many determinants of health, access to health insurance is associated with better health monitoring and access to health services.[28] Coverage has been shown to reduce psychological distress, to increase access to healthcare facilities, to establish usual sources of care, and to improve continuity of care – all of which are arguably and positively associated with long-term individual health.[29] In contrast, without a regular source of healthcare, the uninsured are less likely to receive important preventive services or treatments for chronic conditions such as asthma, diabetes, or hypertension, making them more likely to develop severe yet preventable health conditions and to be diagnosed at more advanced disease stages. People with Medi-Cal or who are uninsured are significantly more likely to report having difficulty finding a provider or delaying care and once they receive care, they typically also have worse average health outcomes after treatment, even after adjusting for demographic characteristics and prior health status, such as the number and type of co-morbidities.[30,31] Additionally, after diagnosis, the uninsured often receive less or inadequate medical care and are more likely to experience premature death than those who are insured.[32,33]

According to the 2020 American Community Survey, 27.9 percent of SCFHS's service area residents received public insurance benefits (Medicaid, Medicare, or other public insurance), as shown in Table 14. This percentage is lower than rates for Solano County (28.3 percent) and California (33.3 percent). Furthermore, 5.1 percent of the service area residents is uninsured. Concurrently, SCFHS's service area private insurance rate of 67.0 percent is higher than percentages for Solano County (66.8 percent) and California (59.5 percent).

TABLE 14: HEALTH INSURANCE

	SCFHS SERVICE AREA		SOLANO COUNTY		CA	
CATEGORY	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Medicaid	71,889	15.2 %	65,929	15.3 %	7,724,092	19.9 %
Medicare	57,496	12.1 %	52,945	12.3 %	4,978,453	12.8 %
Other Public Insurance	3,035	0.6 %	2,848	0.7 %	215,081	0.6 %
Private Insurance, Including Capitation	317,447	67.0 %	288,438	66.8 %	23,114,927	59.5 %
None/Uninsured	23,982	5.1 %	21,737	5.0 %	2,806,173	7.2 %
Total	473,849	100.0 %	431,897	100.0 %	38,838,726	100.0 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates

Passage of the Affordable Care Act (ACA) has had significant positive impact on un- and underinsured populations in California, increasing coverage in both private and public plans. However, this still leaves a significant number of individuals without insurance in SCFHS's service area. The "residually uninsured" typically are people who are: 1) eligible for Medi-Cal but not enrolled, or 2) eligible for Covered California (the state's health insurance exchange

established as a result of the ACA), with or without subsidy, but not enrolled. Although subsidies are available to people between 138 percent and 400 percent of the FPL, insurance remains expensive. In addition, enrollment in Covered California has a limited open enrollment period each year.

The uninsured and those enrolled in Medi-Cal still often struggle to get the services they need. Low Medi-Cal reimbursement rates for providers, as well as geographic, lingual, cultural, and other barriers limit access to care. The quality of health services provided to low-income Medi-Cal beneficiaries sometimes suffers due to the fragmented nature of care and access issues, particularly access to specialty care.

Educational Attainment

Educational attainment is considered a key driver of health status since low levels of education are often linked to poverty and poor health. Lack of education is a major impediment to wage growth among service area workers as well. Early childhood development is influenced by characteristics of the child, the family, and the broader social environment. Physical health, cognition, language, and social and emotional development underpin school readiness. Publicly funded, center-based, comprehensive early childhood development programs are a community resource that promotes the well-being of young children. Programs such as Head Start are designed to close the gap in readiness to learn between poor children and their more economically advantaged peers. Systematic reviews of the scientific literature demonstrate effectiveness of these programs in preventing developmental delay, as assessed by reductions in retention in grade and placement in special education.[34]

Educational attainment is considered a key driver of health status since low levels of education are often linked to poverty and poor health. Lack of education is a major impediment to wage growth among service area workers as well. As shown in Table 15, there are differences in educational attainment between the SCFHS service area population, Solano County, and the state as a whole. Of the SCFHS service area residents, 11.5 percent are without a high school diploma, while 11.2 percent of County and 15.4 percent of California residents did not receive a diploma. Similarly, among SCFHS service area zip codes, only 34.9 percent of adults have some form of college degree, whereas 34.8 percent of County residents and 39.5 percent of Californians have a college degree.

TABLE 15: EDUCATIONAL ATTAINMENT FOR POPULATION 18 YEARS AND OVER

	SCFHS SERVICE AREA	PERCENT OF TOTAL			PERCENT CHANGE SINCE 2011		
		SERVICE AREA	SOLANO COUNTY	CA	SERVICE AREA	SOLANO COUNTY	CA
Less Than 9th Grade	19,612	5.3 %	5.0 %	8.0 %	1.7 %	-1.2 %	-6.5 %
9th-12th Grade, No Diploma	22,666	6.2 %	6.2 %	7.4 %	-18.1 %	-16.9 %	-15.0 %
High School Graduate/GED	91,031	24.7 %	25.0 %	21.7 %	10.0 %	10.6 %	7.1 %
Some College, No Degree	106,058	28.8 %	29.0 %	23.4 %	11.3 %	10.5 %	5.5 %
Associate degree	36,712	10.0 %	10.0 %	7.6 %	16.2 %	15.6 %	15.3 %
Bachelor's Degree	63,436	17.2 %	17.1 %	20.3 %	25.0 %	24.2 %	26.3 %
Graduate Degree	28,357	7.7 %	7.7 %	11.6 %	35.7 %	36.3 %	33.8 %
Without a College Degree*	239,367	65.1 %	65.2 %	60.5 %	6.4 %	6.3 %	1.3 %
Total	367,872	100.0 %	100.0 %	100.0 %	12.1 %	11.8 %	9.8 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates; Source: U.S. Census Bureau, 2010 ACS 5-Year Estimates

**AS Degree or Higher*

However, over the past ten years, SCFHS's service area has made real strides in education. High school dropouts (those with 9th to 12th grade education but no diploma) decreased by 18.1 percent, while those with a high school diploma/GED increased by 10.0 percent; those with some college but no degree increased by 11.3 percent; those with an associate degree increased by 12.7 percent; those with a bachelor's degree increased by 37.1 percent; and those with a graduate degree increased by 44.3 percent. The improvement in obtained education for residents in the service area is a key predictor in decreasing poverty levels and poor health of residents. Residents without a high school diploma make up over one-tenth of the SCFHS service area population (11.5 percent), and they are more likely to be low-income, unemployed and/or uninsured. Indeed, all of the communities with the highest poverty rates, as discussed previously, also have the lowest rates of educational achievement. As education and poverty impacts health literacy, it, in turn, affects health access. (See the section on Health Literacy.)

■ Language and Immigration

The make-up of the American population is quickly changing as a result of immigration patterns and significant increases among racially, ethnically, culturally, and linguistically diverse populations already residing in the United States. Solano County, adjacent to one of the largest urban areas in the U.S., clearly reflects this shifting landscape within its own residents.

TABLE 16: MAJOR LANGUAGES SPOKEN AT HOME (5+YEARS)

CATEGORY	SCFHS SERVICE AREA		SOLANO COUNTY		CA	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
English Only	311,502	69.9 %	296,007	70.9 %	20,725,855	56.1 %
Spanish	76,233	17.1 %	68,707	16.4 %	10,462,968	28.3 %
Tagalog (including Filipino)	29,796	6.7 %	27,002	6.5 %	786,864	2.1 %
Other Asian and Pacific Island Languages	7,231	1.6 %	6,775	1.6 %	710,439	1.9 %
Other Indo-European Languages	6,898	1.5 %	6,175	1.5 %	1,173,804	3.2 %
Chinese (including Mandarin, Cantonese)	4,999	1.1 %	4,755	1.1 %	1,254,601	3.4 %
Vietnamese	2,337	0.5 %	2,113	0.5 %	564,809	1.5 %
French, Haitian, or Cajun	1,367	0.3 %	1,320	0.3 %	137,704	0.4 %
Korean	1,214	0.3 %	1,156	0.3 %	360,451	1.0 %
German or Other West Germanic Languages	1,044	0.2 %	964	0.2 %	121,066	0.3 %
Russian, Polish or Other Slavic Languages	1,007	0.2 %	994	0.2 %	246,691	0.7 %
Arabic	1,006	0.2 %	980	0.2 %	190,446	0.5 %
Other Languages	836	0.2 %	826	0.2 %	201,243	0.5 %
Total Civilian Population 5+ Years	445,470	100.0 %	417,774	100.0 %	36,936,941	100.0 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates

As seen in Table 16, SCFHS's service area within Solano County reflects this shifting ethnic and cultural landscape. According to the latest Census Bureau numbers, 30.1 percent of SCFHS's service area households speaks a language other than English at home, compared with 29.1 percent in Solano County and 43.9 percent in California as a whole. The majority of these residents are foreign-born and speak Spanish, with Mexico representing the highest percentages of foreign born at 6.6 percent of the service area, followed by the Philippines at 6.5 percent.[35] Of those who speak a language other than English at home, 38.0 percent report speaking English "less than very well." These linguistic barriers can have a harmful effect on health outcomes by creating obstacles to healthcare access and utilization. Difficulties with English can hamper a person's ability to seek medical services or understand the healthcare they are given. Persons with Limited English Proficiency (LEP) are also less likely to have a regular source of medical care or follow a provider's instructions.[36]

However, even beyond addressing language barriers, the delivery of high-quality primary health care requires health care practitioners to have a deeper understanding of the socio-cultural background of patients, their families, and the environments in which they live. According to the National Center for Cultural Competence,[37] nowhere are the divisions of

race, ethnicity and culture more sharply drawn than in the health of those residing in the United States. There are continuing disparities in the incidence of illness and death among African Americans, Latino/Hispanic Americans, Native Americans, Asian Americans, Alaskan Natives and Pacific Islanders as compared with the U.S. population as a whole.

An Institute of Medicine (IOM) report documented racial/ethnic disparities in the diagnosis and treatment of several conditions, even when analyses were controlled for socioeconomic status, insurance status, co-morbidity, and age, among other potential confounders.[38] These disparities are due, in part, to variations in patients' health beliefs, values, preferences, and behaviors. These include variations in patient recognition of symptoms; thresholds for seeking care; the ability to communicate symptoms or concerns or beliefs about certain kinds of care (i.e., concerns of a provider who understands their meaning; the ability to understand the prescribed management strategy; expectations of care; and adherence to preventive measures and medications). These factors influence patient and physician decision-making and the interactions between patients and the healthcare delivery system, thus contributing to health disparities. Additional health studies have also shown that these disparities are frequently evident in chronic health outcomes for ethnic minorities and English language learners. Within California, the Black population has the highest reported death rates from breast, cervical, prostate, lunch, and colorectal cancer among all ethnic and racial groups.[39]

Therefore, the focus of community health centers is to give to culturally competent primary health services that help clinical encounters facilitate more favorable outcomes, enhance the potential for a more rewarding interpersonal experience and increase the satisfaction the patient receiving health care services. Culturally competent health care should include provider's understanding of the:

- Language, beliefs, values, traditions and practices of a culture;
- Culturally defined, health-related needs of individuals, families and communities;
- Culturally based belief systems of the etiology of illness and disease and those related to health and healing; and
- Attitudes toward seeking help from health care providers.

Health Literacy

As defined by *Healthy People*, health literacy is "the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions."[40] Health literacy is considered a more significant predictor of health status than income level, ethnicity, age, education, or employment.[41] Nationally, in 2015, the approximated cost of low health literacy was approximately $612 billion dollars.[42,43] Low health literacy are felt by: a) individuals, families, and communities struggling to access quality care or maintain healthy behaviors, b) health care delivery

systems unable to provide safe and effective services and c) governments, employers, insurers, and patients facing higher costs.[44]

The importance of health literacy for a wide range of health-related outcomes – including the use of preventive medical services, control of chronic conditions, and, ultimately, mortality, is well established. The U.S. Department of Health and Human Services (HHS) defines health literacy as "the degree to which individuals have the capacity to obtain, process, and understand basic health information needed to make appropriate health decisions."[45] Adequate health literacy may include being able to read and comprehend essential health-related materials (e.g., prescription bottles, appointment slips, etc.). Adequate health literacy may increase a person's capacity to take responsibility for their health and their family's health. Low or limited health literacy skills are more prevalent among certain population groups and may be linked to many poor health outcomes. The impact of health literacy on skills needed to make health-related decisions may affect a patient's adherence to a treatment regimen.

A few factors may influence an individual's health literacy, including living in poverty, education, race/ethnicity, age, and disability. Not surprisingly, low-income, minority, and immigrant groups have the poorest health literacy. Adults living below the poverty level have lower health literacy than adults living above the poverty level. Some of the greatest disparities in health literacy occur among racial and ethnic minority groups from different cultural backgrounds and those who do not speak English as a first language. People with low health literacy and limited English proficiency are twice as likely as individuals without these barriers to report poor health status.[46]

As shown in Table 17, the percentage of the population age 15+ lacking basic prose literacy is 18.4 percent for the SCFHS service area, 14.0 percent for Solano County, 23.1 percent for the state, and 21.0 percent for the nation. While the service area rate is higher than the County, it's lower than the state and national rates.

TABLE 17: HEALTH LITERACY - PERCENT OF POPULATION (AGE 15+) LACKING BASIC PROSE LITERACY

	SCFHS SERVICE AREA		SOLANO COUNTY	CA	U.S.
CATEGORY	NUMBER	PERCENT	PERCENT	PERCENT	PERCENT
Health Literacy - Percent of Population Lacking Basic Prose Literacy	87,180	18.4 %	14.0 %	23.1 %	21.0 %

Source: National Center for Education Statistics, National Assessment of Adult Literacy; Service Area/State/Nation – 2020; County – 2003

Environmental Health

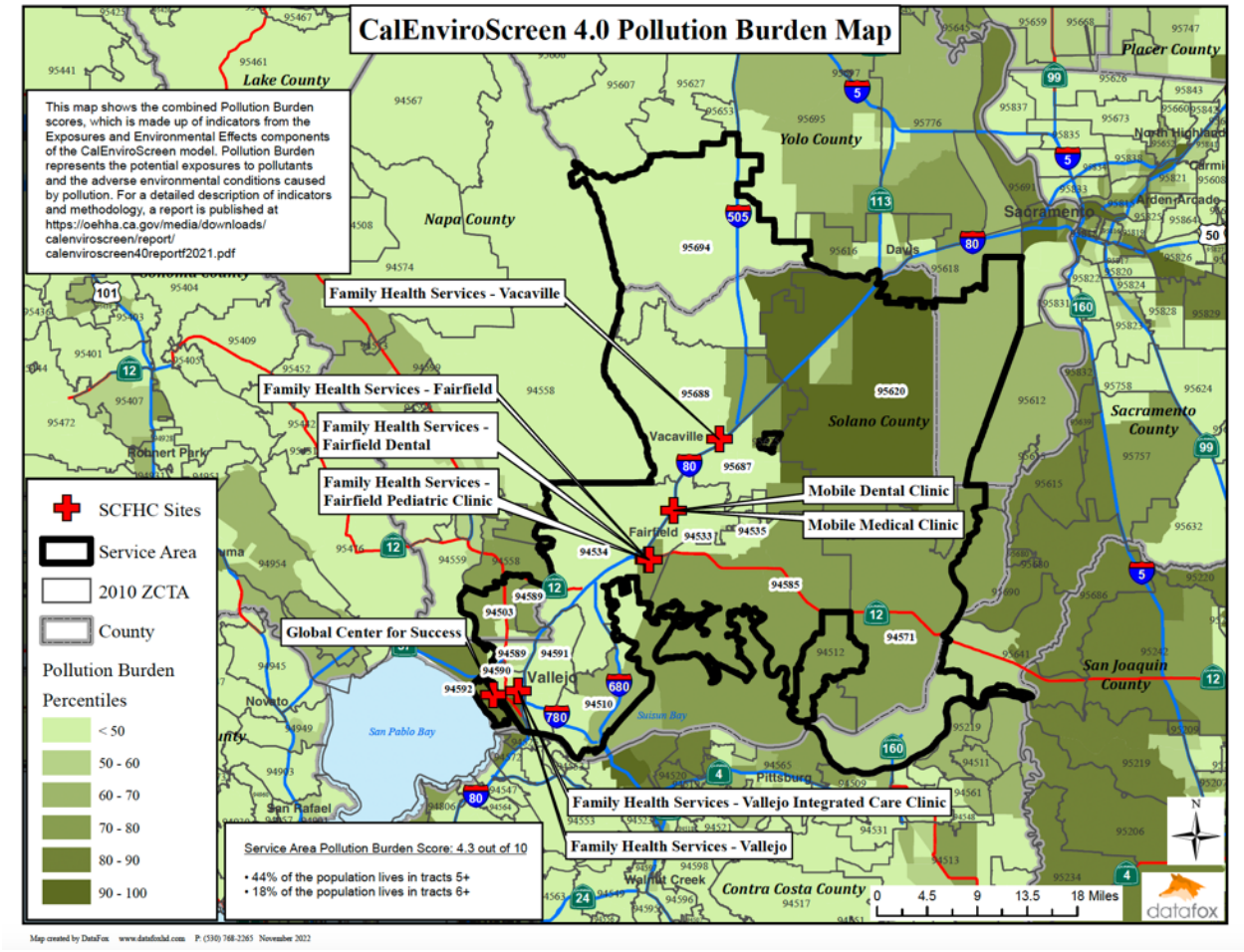
Environmental factors - such as outdoor air pollution, household air pollution, drinking water contamination and occupational exposure to hazardous materials, pesticides, lead exposure and chemicals – influence the risk and experience of chronic disease. The conditions in which people live and work can vary according to factors such as income, occupation, education and ethnicity and lead to inequalities in exposure to environmental risks and related diseases. For example, exposure to air pollution can have devastating effects such as increased risks of heart attacks, aggravation of asthma, difficulty breathing, coughing, chronic bronchitis, and more. In California, the levels of air pollution have decreased over the last three decades. However, recent catastrophic wildfires in the state have contributed to hazardous air quality conditions in the Solano County area for several months of the year.

Air pollution is the largest single environmental health risk, estimated to kill 1 in 8 people globally, due to heart disease, stroke, respiratory disease and cancer. Chronic exposure to outdoor air pollutants, such as ozone and fine particulate matter, are particularly damaging to pregnant women, infants, and young children as well as the elderly and those with existing lung and cardiovascular disease.

An American Lung Association report card from 2018 reported unacceptable levels of both ozone and particulate matter in Solano County.[47] Warmer temperatures linked to climate change increase the frequency and severity of ozone days. Climate change is also linked to extreme weather patterns, drought and wildfires, which contribute to increased particle pollution.[48] In summer, most of Solano County is exposed to prevailing westerly winds through the Carquinez Strait, which mixes and reduces ozone levels by drawing cooler, marine air from the Pacific Ocean and San Pablo Bay eastward. However, when the marine flow is weak or nonexistent, ozone levels may exceed health standards on a few days each year, mainly east of Suisun City. In Solano County, PM2.5 concentrations (fine particulate matter is defined as particles that are 2.5 microns or less in diameter) can become elevated enough to exceed health standards during the winter when air pollution is transported from the Central Valley due to prevailing easterly winds. Local residential wood burning can also cause elevated particulate levels on cold, calm evenings during winter.[49]

The pollution burden map for the SCFHS service area as shown in Figure 4 represents the potential exposures to pollutants and adverse environmental conditions caused by pollution. Indicators include: ozone, diesel fumes, drinking water contaminants, lead exposure risk, pesticide use, toxic facilities, traffic and more.[50] The pollution burden score for the service area is a 4.3 out of 10 with 44 percent of the population living in tracts with scores of 5 or higher and 18 percent (85,292 residents) of the population living in tracts with scores of 6 or higher.

Figure 4: POLLUTION BURDEN MAP



Asthma is a serious health condition influenced by environmental exposure. Poverty can play a major role in developing asthma and the ability to manage it. This can be because of poor rental housing, location near highways, not being able to pay for treatment and more. Asthma is one of the most common chronic conditions in children and is most often caused by exposure to cigarette smoke (smokers or second-hand smoke), air pollution, allergens, or occupational exposure. Asthma is one of the most common chronic illnesses in the United States, and racial/ethnic disparities in asthma prevalence are substantial.[51,52] Comprehensive community-based approaches are highly effective in reducing environmental allergens, missed school days, and emergency department (ED) visits, as well as increasing symptom-free days.[53]

Within the SCFHS service area, 13.8 percent of children (ages 17 and younger) have ever been diagnosed with asthma compared with 14.5 percent for the state, while 20.7 percent of service area adults (ages 18 +) have ever been diagnosed with asthma as compared to 15.9 percent of California adults. (See Table 18.)

Table 18: Age-Adjusted Hospital and Emergency Room Admissions -Asthma (Average Annual Rate Per 10,000 Population)

	2018		2014		Percentage Change	
	SCFHS SERVICE AREA	CA	SCFHS SERVICE AREA	CA	SCFHS SERVICE AREA	CA
Ever diagnosed with asthma (1-17)	13.8 %	14.5 %	18.6 %	14.6 %	-4.8 %	-0.1 %
Ever diagnosed with asthma (18+)	20.7 %	15.9 %	19.3 %	13.9 %	1.4 %	2.0 %

Source: UCLA Center for Health Policy Research, California Health Interview Survey: Neighborhood Edition (CHIS NE), 2021. Zip Code Level Data.

Food Insecurity

Food insecurity is a condition in which households lack access to adequate and nutritious food because of limited money or other resources. The risk for food insecurity increases when money to buy food is limited or not available.[54,55,56] In 2016, Black non-Hispanic households were nearly two times more likely to be food insecure than the national average (22.5 percent versus 12.3 percent, respectively). Among Latino/Hispanic households, the prevalence of food insecurity was 18.5 percent compared to the national average (12.3 percent).[57] Populations who are food insecure may be at an increased risk for a variety of negative health outcomes and health disparities including obesity and chronic disease. Children and teenagers who are food insecure are more than two times as likely to repeat a grade and miss more school days. Neighborhood conditions may affect physical access to food.[58] For example, people living in some urban areas, rural areas, and low-income neighborhoods may have limited access to full-service supermarkets or grocery stores.[59] Predominantly Black and Hispanic neighborhoods have fewer full-service supermarkets than predominantly white and non-Hispanic neighborhoods.[60] Access to healthy foods is also affected by lack of transportation and long distances between residences and supermarkets or grocery stores.

CalFresh (food-stamps) and WIC (Women, Infants and Children) give low-income individuals and families a way to buy more food, improve nutrition and stretch the grocery budget, but federal food programs are failing to serve eligible, hungry families. Bureaucratic hassles and the stigma of receiving assistance prevent people from getting the help they need. Federal food programs—if fully utilized—are essential for fighting hunger in Solano County. [61]

Solano County is home to a large population of food insecure people. Before the pandemic, many County residents lived with food insecurity, but after the COVID-19 outbreak, the number of people needing food assistance increased markedly. Furthermore, almost half of all residents live in areas with limited access to grocery stores or other sources of fresh and health food.[62] Many Solano County residents live in areas identified as "food deserts"; defined as living more than one-half mile away from a grocery store in an urban area, or ten miles for a rural area.[63] The spread of grocery stores tends to follow the spread of higher income and lower unemployment rates. This leaves the more impoverished neighborhoods with less access to healthy and affordable food.

As shown in Table 19, 8.5 percent of the residents in Solano County lack adequate access to food as compared to 10.2 percent of state residents and 10.9 percent of U.S residents.

TABLE 19: FOOD INSECURITY

	SOLANO COUNTY	CA	U.S.
Percentage of population who lack adequate access to food	8.5 %	10.2 %	10.9 %

Source: Map the Meal Gap, 2017

Transportation

Transportation is an important social determinant of health as it affects many aspects of an individual's health and well-being – from accessing healthcare services and healthy food options to maintaining social connections.[64] Lack of transportation is the leading cause of patient no-shows for medical appointments, and missed appointments are associated with increased medical care costs for the patient, disruption of patient care and provider-patient relationships, delayed care and increased emergency room visits Patients with transportation barriers carry a greater burden of disease which may, in part, reflect the relationship between poverty and transportation availability.[65] As a result, understanding the relationship between transportation barriers and health may be important to addressing health in the most vulnerable who live in poverty.

Reliable and affordable transportation is essential, particularly for low-income individuals and those facing other barriers to health and social services. As shown in Table 20, the rates for vehicle availability for the service area are equal to, or nearly equal to, those of Solano County, but worse than the state and nation. In the service area, 4.7 percent of residents do not have any vehicles available, and 8.2 percent of households have a vehicle shortage.

TABLE 20: TRANSPORTATION BARRIERS

	SCFHS SERVICE AREA		SOLANO COUNTY	CA	U.S.
	NUMBER	PERCENT	PERCENT	PERCENT	PERCENT
No Vehicles Available	7,423	4.7 %	4.7 %	7.0 %	8.5 %
2 Workers, 1 Vehicle Available	3,277	2.1 %	2.1 %	3.5 %	3.2 %
3 or more Workers, 1 Vehicle Available	532	0.3 %	0.3 %	0.5 %	0.4 %
3 or more Workers, 2 Vehicle Available	1,870	1.2 %	1.1 %	1.6 %	1.2 %
Total Households w/ Vehicle Shortage	13,102	8.2 %	8.3 %	12.7 %	13.3 %
Total Households	159,231	100.0 %	100.0 %	100.0 %	100.0 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates.

Social and Community Conditions

Social and community conditions impact health profoundly. Civic participation, including voting, volunteering, participating in group activities, and community gardening are individual activities that benefit society (e.g., voting) or group activities that benefit either the group members (e.g., recreational soccer teams) or society (e.g., volunteer organizations).[66] In addition to the direct benefit that civic participation provides to the community, it also produces secondary health benefits for participants.[67,68] Participating in the electoral process by voting or registering others to vote is an example of civic participation that impacts health. A study of 44 countries found that voter participation was associated with better self-reported health, even after controlling for individual and country characteristics.[69] In another study, individuals who did not vote reported poorer health in subsequent years.[70]

Simply belonging to groups can improve health as well. Membership in formal groups (e.g., Girl Scouts, Kiwanis, Rotary, Parent Teacher Association) or informal groups (e.g., book clubs, bird watching clubs) has been shown to increase social capital and decrease social isolation among members.[71] Group identification is predictive of higher levels of satisfaction with life even after controlling for factors such as gender, age, nationality, etc.[72] As a result, these groups may indirectly improve the physical and mental health of their members.

As shown in Table 21, the rate of Civic Participation (the percentage of the voting population that voted in the 2018 General Election) was 48.7 percent for the service area, compared to 50.5 percent in Solano County, 51.9 percent for the state, and 53.4 percent for the nation. The rate of Social Cohesion (membership associations per 10,000 people) in the service area (6.2) is greater than the County (5.4) and the state (5.9), but lower than the nation (10.6).

TABLE 21: CIVIC PARTICIPATION (VOTING) AND SOCIAL COHESION (MEMBERSHIP ASSOCIATIONS PER 10,000)

	SCFHS SERVICE AREA	SOLANO COUNTY	CA	U.S.
Civic Participation - Voting Percent*	48.7 %	50.5 %	51.9 %	53.4 %
Social Cohesion# (Membership Association rate per 10,000 Population)	6.2	5.4	5.9	10.6

*Sources: *U.S. Census Bureau; # County Business Patterns*

Another important determinant of health within the social and community context is crime and violence experienced by individuals living in a community. People who survive violent crime endure physical pain and suffering may also experience mental distress and reduced quality of life. Repeated exposure to crime and violence may be linked to an increase in negative health outcomes. For example, people who fear crime in their communities may engage in less physical activity. As a result, they may report poorer self-rated physical and mental health. One study found that people who perceive their environment to be less safe from crime may also have higher body mass index scores and higher levels of obesity due to reduced physical activity. Low-income neighborhoods are more likely to be affected by crime and property crime than high-income neighborhoods. Children and adolescents exposed to violence are at risk for poor long-term behavioral and mental health outcomes. There are serious short- and long-term health effects from exposure to crime and violence in one's community. Addressing exposure to crime and violence as a public health issue may help prevent and reduce the harms to individual and community health and well-being.[73]

The Total Crime Index is the total number of arrests in a year divided by the population indexed to the national rate. Total crimes include property crime, assault, murder, motor vehicle theft, rape, personal crime, robbery, larceny, and burglary. The national average is indexed to 100 with geographical measures referenced from the national rate. For example, if the crime rate was 130 for the service area, crime in the service area is 30 percent greater than the national average. If the crime rate was 80 in the service area, then crime in the service area is 20 percent less than the national.

As seen in Table 22, the Total Crime Index, with 100 being the national average, shows the service area at 72 and Solano County at 75, which are lower than California at 80.

TABLE 22: CRIME AND VIOLENCE

	SERVICE AREA	SOLANO COUNTY	CA	U.S.
Total Crime Index (100 = National Average)	72	75	80	100

Source: U.S Department of Justice, FBI, Criminal Justice Information Services Division, 2019

Broadband Access

Most adults in the United States use the internet, but many of them don't have broadband service at home. There are disparities in home broadband service by race/ethnicity, age, geographic location, education, and income. More hospitals and health systems are using internet-based communication and health care tools, so strategies to increase broadband internet access are important for improving health.

About 21.3 million Americans, or 6.5 percent of the population live in "digital deserts" and lack access to broadband internet service, according to the Federal Communications Commission.[74] While the COVID-19 pandemic has helped expand care to patients through telehealth, it has also revealed a digital divide among patient populations who cannot afford or access broadband. Public health experts have called the impact of broadband internet access on the country's health a "super-determinant of health" because without it, people are unable to find resources and support for healthy behaviors and lifestyle changes.[75]

TABLE 23: BROADBAND INTERNET ACCESS

	SCFHS SERVICE AREA		SOLANO COUNTY	CA	U.S.
	NUMBER	PERCENT	PERCENT	PERCENT	PERCENT
Broadband subscription (e.g., cable, fiber optic, or DSL)	123,848	77.8 %	78.1 %	75.2 %	70.3 %
Dial-up Alone, No Other Type of Internet Subscription	229	0.1 %	0.1 %	0.2 %	0.3 %
Cellular Data Plan Alone, No Other Type of Internet Subscription	16,825	10.6 %	10.3 %	10.1 %	11.1 %
Satellite Internet Service Alone, No Other Type of Internet Subscription	549	0.3 %	0.3 %	0.6 %	0.6 %
Some combination of dial-up, cellular, and satellite	5,039	3.2 %	3.2 %	3.0 %	3.1 %
Other Service or Access without Subscription	2,751	1.7 %	1.7 %	2.2 %	2.7 %
No Internet Access	9,990	6.3 %	6.3 %	8.7 %	11.8 %
Total Households	159,231	100.0 %	100.0 %	100.0 %	100.0 %
Access Likely Insufficient for Reliable Internet Video	25,393	15.9 %	15.6 %	16.1 %	17.8 %

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

While no statistics are available for the percentage of service area residents who received care from a health provider through video/telephone conversation in the past year, 6.3 percent of the service area has no internet access, equal to the County rate of 6.3 percent,

but lower than the state rate of 8.7 percent, or the national rate of 11.8 percent. (See Table 23, above.) Of service area residents, 15.9 percent reported access to internet/broadband that is likely insufficient for reliable video.

Housing Security and Homeless

In today's economy, high housing costs, along with gentrification and displacement of communities, are forcing many families into difficult living situations. Living doubled- or tripled-up with another family due to financial constraints can place stress on personal relationships, housing stock, public services, and infrastructure. When shared housing is not an option – or if other factors arise such as job loss, foreclosure, or domestic violence – the result can be homelessness. Housing insecurity among young children is associated with food insecurity and a greater likelihood of poor health.

In Solano County, lower-income renters are more likely than higher income renters to spend more than half of their income on housing.[76] According to the U.S. Census Bureau, of the renter-occupied housing units, 51.3 percent of service area residents reported their housing costs to be greater than 30 percent of their income. (See Table 24.)

TABLE 24: HOUSING AFFORDABILITY – HOUSING COSTS GREATER THAN 30 PERCENT OF INCOME

	SCFHS SERVICE AREA	SOLANO COUNTY	CA	U.S.
Owner-Occupied Housing Units w/ Mortgage	33.0 %	33.1 %	38.4 %	27.7 %
Owner-Occupied Housing Units w/o Mortgage	13.1 %	13.1 %	16.4 %	14.4 %
Renter-Occupied Housing Units	51.3 %	51.6 %	53.3 %	47.7 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates

TABLE 25: OVERCROWDING – MORE THAN ONE PERSON PER ROOM

	SCFHS SERVICE AREA	SOLANO COUNTY	CA	U.S.
All Occupied Housing Units	5.7 %	5.6 %	8.2 %	3.3 %
Owner-Occupied Housing Units	2.7 %	2.5 %	4.2 %	1.8 %
Renter-Occupied Housing Units	10.7 %	10.5 %	13.2 %	6.2 %

Source: U.S. Census Bureau, 2020 ACS 5-Year Estimates

Additionally, "overcrowding" – defined as more than one person per room – is more prevalent in the service area than in the County, state, and nation for all housing types. (See Table 25.) Additionally, 10.7 percent of renter-occupied housing units in the service are overcrowded, as compared to 10.5 percent in the County, 13.2 percent in California, and 6.2 percent in the United States.

Living in an unstable housing environment can have a devastating impact on health. Life expectancy decreases significantly for people who live in an unstable housing situation or who experience homelessness. Children with a history of homelessness are more likely to have developmental delays and find themselves hospitalized. And once someone is evicted, it increases their risk of facing additional homelessness.

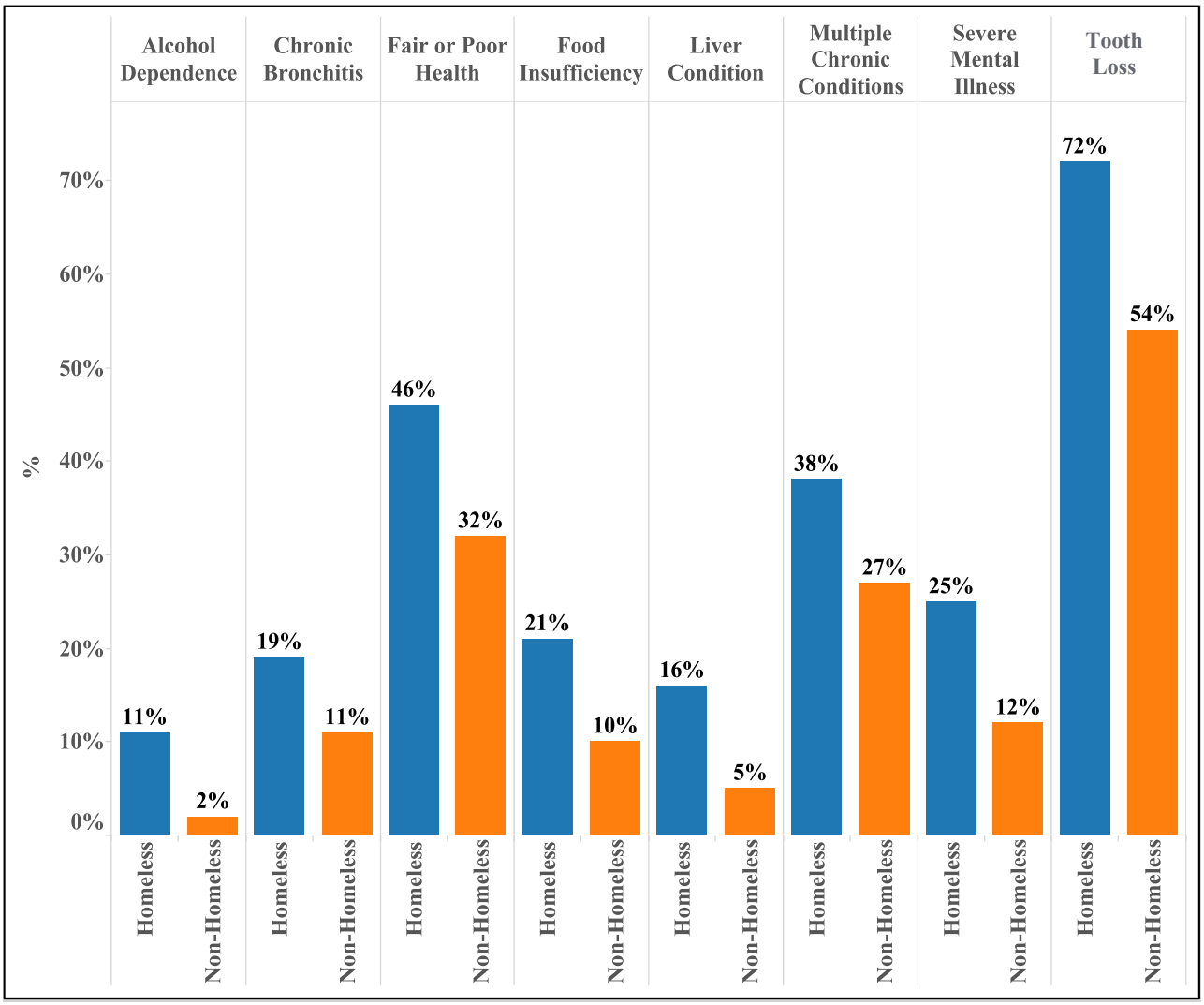
Unstable housing and homelessness are significant social determinants of health. Homeless patients may be predisposed to worse health outcomes due to poor living conditions and food insecurity. Additionally, these patients also tend to have limited resources for self-care. For example, a homeless patient with diabetes may have difficulty managing this condition without an appropriate place to store insulin and access to nutritious food. Homeless patients may also reside in hard-to-reach places (e.g., heavily wooded areas) or be very transient and have little or no transportation. These access issues create challenges for health care providers in reaching homeless patients and establishing the patient-provider relationships necessary for effective treatment.[77]

People experiencing homelessness have several unique health care needs related to the homeless experience. According to reports by the Substance Abuse and Mental Health Services Administration, about 35 percent of people experiencing homelessness have chronic substance abuse issues, more than 80 percent have had lifelong alcohol and/or drug abuse problems, nearly 30 percent have mental health conditions, and about 50 percent have co-occurring substance abuse and mental health issues.[78] In addition, homeless populations in the service area will likely have higher rates of tuberculosis, HIV/AIDS, diabetes, hypertension, frostbite, respiratory infections, and skin ulcers. They are at higher risk of trauma due to physical violence. Providers also typically encounter high rates of poor nutrition, poor dental care, and poor personal hygiene among those experiencing homelessness, further compounding the unique and complex health care needs of this population. Being uninsured, which is more common for those who are experiencing homelessness, is a consistent predictor of the inability to access healthcare, which contributes to and exacerbates the unique health care needs of this special population.[79]

As a requirement for receiving homeless assistance funding from the U.S. Department of Housing and Urban Development (HUD), the Point-in-Time homeless count is usually conducted biennially in Solano County. However, because of the COVID-19 pandemic, the previous PIT Count was done in 2019, and the 2021 count was moved to 2022. From 2019 to 2022, the overall unsheltered population experienced a 28-person increase, going from 1,151 to 1,179. This represents a 53-person decrease from the 1,232 reported in 2017.[80]

According to the findings, the number of chronically homeless decreased from 19 percent to 16.5 percent from 2019-2022.[81] Chronically homeless is defined as "an individual with one or more disabling conditions or a head of household with a disabling condition who has been continuously homeless for one year or more and/or has experienced four or more episodes of homelessness in the past three years."

FIGURE 5: HEALTH STATUS OF HEALTH CENTER USERS (HOMELESS VS. NON-HOMELESS)[95]



An analysis of HRSA's 2009 (most recent available) Health Center Patient Survey showed that, even among a largely low-income population, there are significant disparities when comparing homeless and non-homeless individuals.[82] As shown in Figure 5, a significantly higher percentage of the homeless population suffers from chronic conditions compared to the non-homeless population. Multiple chronic conditions include 2 or more of hypertension, diabetes, asthma, emphysema, heart problems, stroke, cancer, and HIV/AIDS.

Considering the difficult nature of treating homeless persons and the increase in health risks, the cost of providing services for this subpopulation is significant. However, a study shows that placing homeless people in supportive housing would reduce the cost of homelessness on taxpayers by around 49.5 percent.[83]

Studies that focus on the homeless estimate that tuberculosis (TB) rates among individuals experiencing homelessness are likely to be 10 times those in the general population- measuring around 44 cases per 100,000 in the homeless population, and 5 cases per 100,000 in the general population.[84] Homeless individuals diagnosed with TB are more likely to be male than those diagnosed with TB in the general population (84 percent to 61 percent, respectively).[85] TB and HIV co-infection is more prevalent among individuals experiencing homelessness than non-homeless. Although homeless individuals are more likely to have latent tuberculosis infection, the compounding factors of substance abuse or HIV infection can result in progression to active TB status. Homeless individuals are less likely to complete treatment than their housed counterparts (77 percent and 84 percent, respectively).[86]

Familial and intimate partner violence (IPV) is a significant contributing factor to family homelessness.[87] Homelessness in families with young children is especially prevalent when an abused woman does not have access to adequate resources to support herself and her children. Lack of affordable housing and long waiting lists for assisted housing mean that many women are forced to choose between abuse and the streets. Between 20 and 50 percent of all homeless women and children become homeless as a direct result of fleeing domestic violence.[88]

Homeless individuals disproportionately experience substance abuse more than housed individuals. Alcohol abuse among individuals experiencing homelessness is reported to range between 58 and 84 percent; and drug abuse among homeless individuals is reported to range from 27 to 57 percent.[89] Compared to low-income housed women, mothers who are homeless have twice the rate of drug and alcohol dependence (41 percent).[90] For many homeless people, substance abuse co-occurs with mental illness, and puts these individuals at increased risk for violence and victimization and frequent cycling between the streets, jails and emergency rooms.[91] Chronic substance abuse disorders (drugs and alcohol) put individuals who are homeless at "higher risk for other health problems and impact their access to care." [92]

Public housing residents face significant social, economic, and physical barriers to the practice of health behaviors for prevention of chronic disease. Research shows that public housing residents are more likely to report higher rates of obesity, current smoking, disability, and insufficient physical activity compared to individuals not living in public housing.[93]

V.

LOCAL PROVIDER CAPACITY

Community Need Index

The Community Need Index (CNI), developed by Catholic Healthcare West in joint partnership with Solucient, LLC, is the first scoring that includes underlying economic and structural barriers that impact access to healthcare.[94] The CNI aggregates socioeconomic indicators known to contribute to health disparity and applies that data to hospital admissions. The CNI score goes from 1.0 to 5.0 based on barriers related to income, culture/language, education, insurance, and housing in order to quantify healthcare access in communities across the nation. Dignity Health's research has shown that residents of communities with the highest CNI scores (4.2 to 5) are twice as likely as communities with the lowest CNI scores to be hospitalized for manageable conditions such as pneumonia or congestive heart failure.

FIGURE 6: COMMUNITY NEEDS INDEX FOR SCFHS'S SERVICE AREA ZIP CODES

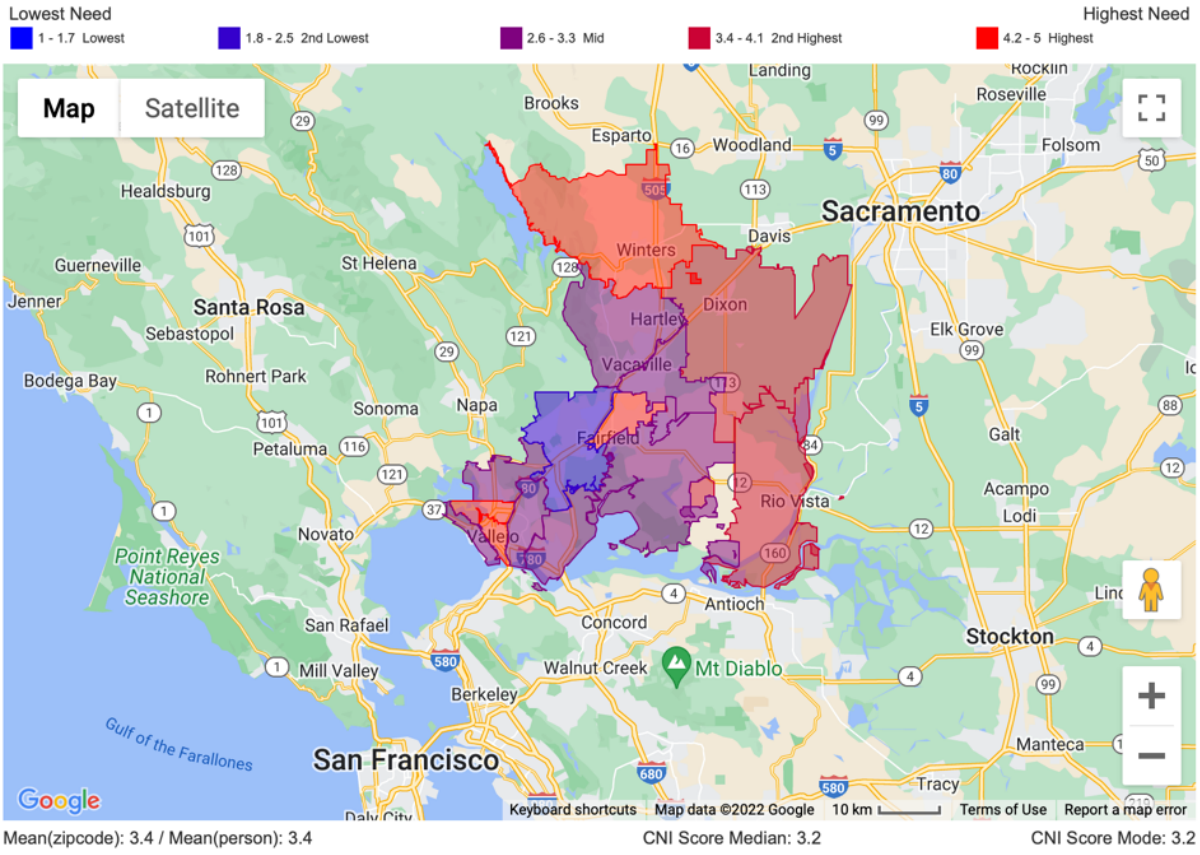


Figure 6 shows that the overall mean CNI score for the service area is 3.4 out of a possible 5.0, which falls within the second highest need range (3.4 – 4.1). According to the CNI, three of the zip codes are designated as highest need areas. (See Table 26.) Per the CDC Health Disparities and Inequalities Report 2013, people who live and work in low socioeconomic

circumstances are at increased risk for mortality, morbidity, unhealthy behaviors, reduced access to healthcare, and inadequate quality of care.[95] A study by the Johns Hopkins Center for Health Disparities Solutions found that the estimated cost of racial and ethnic disparities in U.S. healthcare from years 2006-2009 was $456.8 billion.[96]

TABLE 26: SCFHS'S SERVICE AREA ZIP CODES WITH COMMUNITY NEED INDEX SCORE (NOTE: HIGHEST NEED AREAS HIGHLIGHTED IN ORANGE)

ZIP CODE	CITY/COMMUNITY	NEED SCORE	ZIP CODE	CITY/COMMUNITY	NEED SCORE
94503	American Canyon	3.2	94590	Vallejo	4.4
94510	Benicia	2.6	94591	Vallejo	3.2
94533	Fairfield	4.2	94592	Vallejo	2.6
94534	Fairfield	2.2	95694	Winters	4.6
94535	Travis AFB	3.2	95620	Dixon	3.6
94571	Rio Vista	3.4	95687	Vacaville	3.2
94585	Suisun City	3.2	95688	Vacaville	3.2
94589	Vallejo				

Access to Providers

A central factor regarding access to care is the availability of health care providers to the communities. Insurance coverage is hollow if there are no providers in the area from whom the residents can receive services. Table 27 shows the ratio of the population to various providers. Solano County lags the state in ratios of population to primary care providers and population to mental health providers. According to the 2022 County Health Rankings and Roadmap, a program of the Robert Wood Johnson Foundation, Solano County ranks 22nd out of 58 California counties for "Clinical Care," which factors in provider ratios.[97]

TABLE 27: RATIOS OF POPULATION TO PROVIDERS

	SOLANO COUNTY	CA
Ratio of population to primary care physicians*	1,185	1,254
Ratio of population to dentists*	1,073	1,149
Ratio of population to mental health providers#	259	268

*Sources: *Area Health Resource File/American Medical Association, 2018; #CMS National Provider Identification File, 2020*

There are many other health center centers in the service area providing primary health care in addition to SCFHS's service delivery sites. However, the volume of residents in need for

health services among eligible patients exceeds current providers' capacity to provide such services. As shown in Table 28, in total there were 58,145 service area residents seen by FQHCs and Look-Alikes in 2020, including 44,083 patients with Medicaid, and 8,707 patients who were without medical insurance. Despite the large number of health centers and service delivery sites, just over one half (57.0 percent) of low-income residents were served by existing FQHCs and Look-Alikes. Additional low penetration rates were seen for Medicaid enrollees (50.1 percent) and for the medically uninsured (37.3 percent). Overall, there were 43,472 persons at or below 200 percent FPL, 43,983 Medicaid enrollees and 14,633 medically uninsured who were left unserved. These statistics confirm that although a large volume of patients is served by FQHCs and Look-Alikes within the service area, there remains a significant unmet need among SCFHS's service area target population.

TABLE 28: UNSERVED LOW-INCOME RESIDENTS

	SCFHS SERVICE AREA	
	NUMBER	PERCENT
Total HCP Patients	58,145	57.6 %
Unserved Low-Income Population	43,472	43.0 %
Total Low-Income Population	101,014	100.0 %
HCP Medicaid Enrolled Patients	44,083	50.1 %
Unserved Medicaid Enrollees	43,983	49.9 %
Total Medicaid Enrollees	88,066	100.0 %
HCP Uninsured Patients	8,707	37.3 %
Unserved Uninsured Population	14,633	62.7 %
Total Uninsured Population	23,340	100.0 %

Source: HRSA Data Warehouse, UDS Mapper Data - 2021 UDS

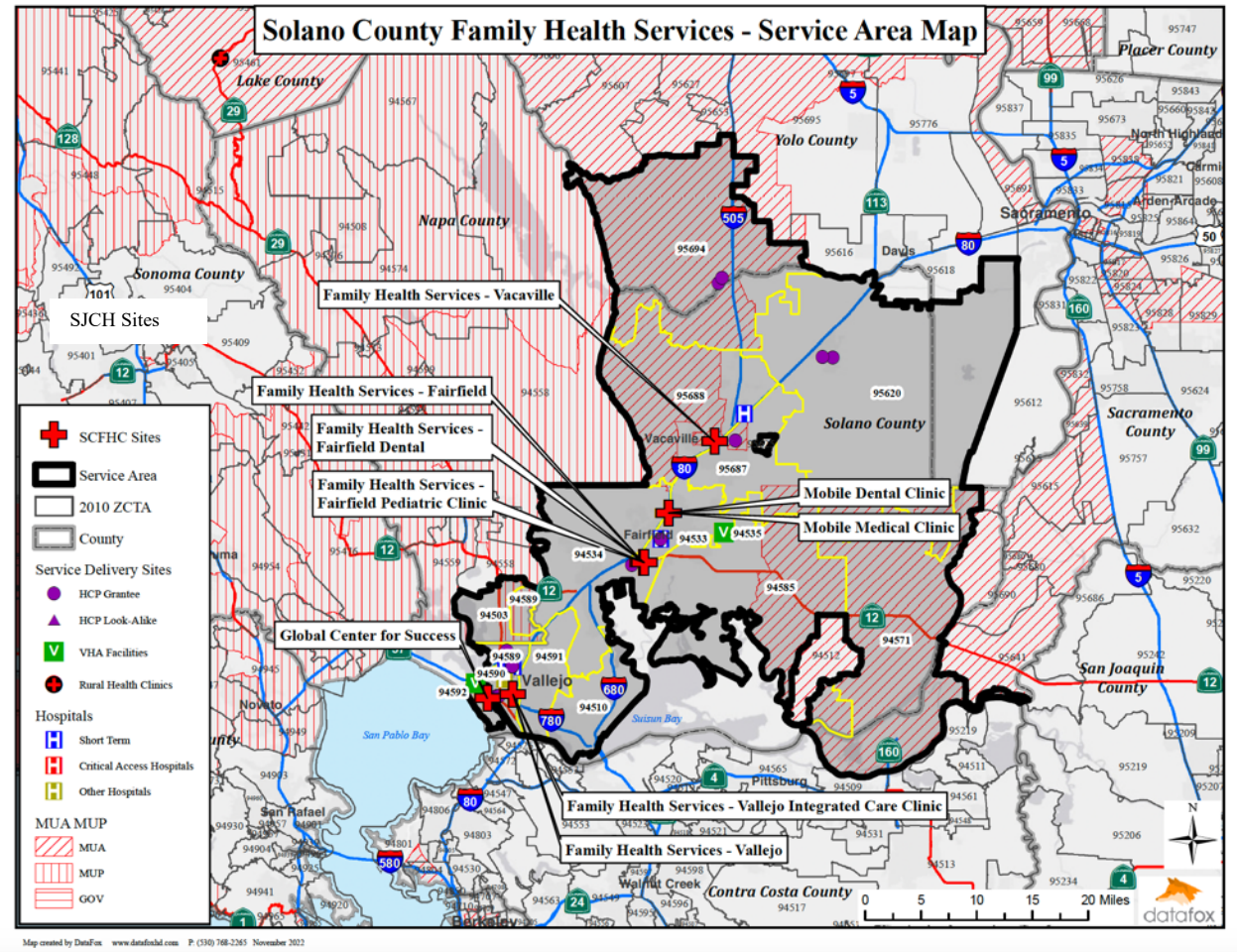
According to UDS Mapper, 44.9 percent of SCFHS's service area (a total of 971 square miles) is designated as a Medically Underserved Area (MUA) or a Medically Underserved Population (MUP). There are five MUAs and one MUP as shown in Table 29.

TABLE 29: MUA AND MUP DESIGNATIONS IN SERVICE AREA

MUA/MUP	ID	TYPE
MSSA 137/Walnut Grove	1064107865	MUA
MSSA 203.2/Rio Vista	1062505166	MUA
Yolo Service Area	00385	MUA
Solano Service Area	00365	MUA
Solano Service Area	00356	MUA
Low Inc - Napa Service Area	00249	MUP

Figure 7 shows the locations of the Health Center Program grantees, Look-Alike health centers, hospitals, and Veterans Health Administration (VHA) facilities and hospitals in SCFHS's service area. These facilities are listed after the map.

FIGURE 7: SCFHS'S SERVICE AREA



SAFETY-NET SERVICE PROVIDER DELIVERY SITES IN THE SCFHS SERVICE AREA

FQHCs and Look-Alikes

ZCTA 94533

- OLE Health - East Fairfield

ZCTA 94534

- OLE Health - Fairfield

ZCTA 94589

- La Clínica Dental at Elsa Widenmann Health Center
- La Clínica Great Beginnings
- La Clínica North Vallejo
- La Clínica North Vallejo Administrative & Support Services
- La Clínica Vallejo Great Beginnings Administrative & Support Services
- La Clínica Vallejo Great Beginnings/North Vallejo Support Services

ZCTA 94590

- La Clínica Vallejo
- Temporary Site - Vallejo Community Testing & Vaccination Center

ZCTA 95620

- Community Medical Centers, Dixon
- Sutter West Medical Group - Dixon

ZCTA 95687
- Community Medical Centers, Vacaville

ZCTA 95694
- Sutter West Medical Group - Winters
- Winters Healthcare 172 E. Grant Avenue

Hospitals

ZCTA 94533
- Northbay Medical Center

ZCTA 94589
- Kaiser Foundation Hospital and Rehabilitation Center
- Sutter Solano Medical Center

ZCTA 94590
- Adventist Health Vallejo

ZCTA 95688
- Kaiser Foundation Hospital – Vacaville

VHA Facilities

ZCTA 94535
- Fairfield VA Clinic

ZCTA 94592
- Mare Island VA Clinic

Rural Health Centers

None.

While there are private providers located within the service area, these providers are typically unable to see the patients within SCFHS's target population who do not have private insurance due to low Medi-Cal reimbursement rates and/or policies that limit charity work. In most cases, the private providers in the service area lack the resources needed to serve more than a small fraction of low-income patients not covered by private insurance.

Low-income service area residents are challenged with accessing medical care. For example, they are less likely to get a medical appointment within two days and more likely to have difficulty finding both primary care and specialty care than the general population. Consequently, low-income residents are more likely to visit an emergency department than the general population.

Penetration Rates for Low-income Population

According to UDS Mapper, 21.32 percent of residents of the service area are low income (living below 200 percent FPL). Table 30 shows the penetration rates among that population for each of the zip codes in SCFHS's service area, with an overall penetration rate of 57.56 percent across current FQHCs and FQHC Look-Alikes. With 101,014 low-income residents in the service area, that translates to 58,144 residents receiving services, leaving 42,870 low-income residents without a medical home. With an average patient utilization rate of 3.7 medical visits per year (based on California UDS data), that calculates to a deficit of 158,619 medical visits annually for SCFHS's service area.

TABLE 30: PENETRATION OF LOW-INCOME POPULATION IN SERVICE AREA

ZIP CODE	POST OFFICE NAME	LOW-INCOME (BELOW 200% FPL) POPULATION	PENETRATION OF LOW-INCOME POPULATION
94503	American Canyon	3,617	79.04 %
94510	Benicia	4,098	28.87 %
94533	Fairfield	22,557	51.97 %
94534	Fairfield	3,369	59.75 %
94535	Travis AFB	788	2.41 %
94571	Rio Vista	2,305	27.94 %
94585	Suisun City	6,460	47.69 %
94589	Vallejo	9,784	59.88 %
94590	Vallejo	13,185	70.13 %
94591	Vallejo	11,096	55.84 %
94592	Vallejo	303	31.35 %
95694	Winters	1,881	132.06 %
95620	Dixon	5,017	76.30 %
95687	Vacaville	10,466	50.23 %
95688	Vacaville	6,088	60.10 %
Total		101,014	57.56 %

Source: 2022- UDS Mapper

V.

HEALTH DISPARITIES

Leading Causes of Death

The leading causes of death in SCFHS's service area are (from highest to lowest): cancer, heart disease, stroke, Alzheimer's disease, diabetes, unintentional injuries, chronic lower respiratory disease, diabetes, pneumonia and influenza, hypertension, chronic liver disease and cirrhosis, and intentional self-harm. As seen in Table 31, SCFHS's service area has higher overall five-year crude death rates compared to the state for cancer, stroke, Alzheimer's Disease, unintentional injuries, chronic lower respiratory disease, diabetes, pneumonia and influenza, hypertension, chronic liver disease and cirrhosis, and suicide.

TABLE 31: LEADING CAUSES OF DEATH, 5-YEAR CRUDE DEATH RATES (RATE PER 100,000 PERSONS), 2016-2020

CATEGORY	SCFHS SERVICE AREA		SOLANO COUNTY		CA	
	Number	Rate	Number	Rate	Number	Rate
Malignant Neoplasms (Cancers)	4,420	186.6	4,201	192.0	297,886	150.5
Diseases of the Heart	3,179	134.2	2,993	136.8	315,439	159.3
Cerebrovascular Disease (Stroke)	1,213	51.2	1,172	53.6	83,090	42.0
Alzheimer's Disease	1,095	46.2	1,057	48.3	83,986	42.4
Unintentional Injuries	926	39.1	887	40.5	74,385	37.6
Chronic Lower Respiratory Disease (CLRD)	901	38.0	861	39.3	67,138	33.9
Diabetes Mellitus	843	35.6	817	37.3	49,676	25.1
Pneumonia and Influenza	447	18.9	434	19.8	30,925	15.6
Hypertension	427	18.0	409	18.7	27,848	14.1
Chronic Liver Disease and Cirrhosis	344	14.5	323	14.8	27,701	14.0
Intentional Self Harm (Suicide)	298	12.6	281	12.8	21,642	10.9
All Other Causes	528	22.3	4,011	183.3	305,689	154.4
Total Deaths	14,621	617.1	17,446	797.3	1,385,405	699.9

Source: California Department of Public Health, Cal-ViDa Query Tool, 2016-2020

Obesity and Diabetes

Obesity is a major risk factor for Type 2 diabetes, as well as cardiovascular disease, stroke, and certain types of cancers. It is approaching tobacco use as the leading preventable cause of death in the United States and is a major contributor of the escalating costs of healthcare. Obesity and obesity-related chronic disease are extremely costly; it is estimated that 28.2 percent of all healthcare dollars nationwide are spent treating obesity.[98] One of the reasons that might account for the high risk in SCFHS's service area with regards to heart disease, cancers, stroke, and diabetes, as noted by the leading causes of death rates, is the prevalence of obesity in the community. As shown in Table 32, 27.6 percent of service area adults (18 years of age and older) are obese as compared to 29.2 percent for Solano County, 25.8 percent for California, and 30.9 percent of U.S. residents.[99]

TABLE 32: OBESITY

	Obese (BMI ≥ 30) Adult Respondents Ages 18 and Over Civilian Non-Institutionalized		
	Number Obese	Population	Percent Obese
SCFHS Service Area	101,448	367,872	27.6 %
Solano County	101,007	345,913	29.2 %
California	7,840,461	30,389,382	25.8 %
United States	78,272,776	253,272,570	30.9 %

Sources: 1) Service Area - UDS Mapper, 2017; County - CDC Diabetes Interactive Atlas, 2015; State – State of Childhood Obesity, 2018; National - State of Childhood Obesity, 2018

There are several possible explanations for the prevalence of obesity. First, racial/ethnic populations differ in behaviors that contribute to weight gain. Minority race/ethnicity and low-income were associated with lower physical activity in most groups.[100] Differences exist in attitudes and cultural norms regarding body weight. Also, certain populations have less access to affordable, healthy foods and safe locations for physical activity. Evidence suggests that neighborhoods with large minority populations – such as those in SCFHS's service area – have fewer chain supermarkets and produce stores. Evidence also suggests that healthy foods are relatively more expensive than energy-dense foods, especially in minority and low-income communities. These populations also have less access to physical activity facilities and resources.

With respect to diabetes, it is estimated that 12.0 percent of adults 18 years of age and older in SCFHS's service area have ever been diagnosed with diabetes, compared with 10.6 percent for California. There was a 0.4 percent increase for cases of diabetes in the service area from 2014 to 2018.[101] (See Table 33.)

TABLE 33: DIABETES FOR ADULTS 18 YEARS OF AGE AND ABOVE

	2018		2014		PERCENTAGE CHANGE	
	SCFHS SERVICE AREA	CA	SCFHS SERVICE AREA	CA	SCFHS SERVICE AREA	CA
Ever diagnosed with diabetes (18+)	12.0 %	10.6 %	11.6 %	8.8 %	0.4 %	1.8 %

Source: UCLA Center for Health Policy Research, California Health Interview Survey: Neighborhood Edition (CHIS NE), 2021. Zip Code Level Data.

Women's Health Disparities

Women often make the healthcare decisions for the family and are the primary caregivers; therefore, the health of women affects not only the individual but her family and the community. Women, who are key in maintaining healthy families, access the health system more than men, both for themselves and on behalf of their children. Many become pregnant and give birth, a significant health event, then typically become their child's primary caregiver, a role that greatly influences household health overall. Women experience unique health care challenges and are more likely to be diagnosed with certain diseases than men. For example, cancer kills more than 285,000 women in the United States annually and access to early testing and preventive services could help more women detect malignancies earlier, such as breast and reproductive cancers. In addition, raising awareness about symptoms and risk factors for STDs and HIV is an important component of prevention and early diagnosis and treatment.[102]

Per the CDC, 82.9 percent of women (ages 21 to 65 years) in the SCFHS service area reported having a cervical cancer screening, which is lower than the rates for Solano County (83.4 percent), California (83.3 percent) and the nation (85.5 percent). (See Table 34.) Mammography use for women 50 to 70 years of age is better for the SCFHS service area (79.2 percent) than the County (76.5 percent), the state (72.7 percent) and the nation (77.8 percent). Additionally, only 31.3 percent of women aged 65 and older are up to date on core clinical preventive services, although this rate is higher than that of the County (25.3 percent), the state (24.1 percent) and the nation (28.1 percent).

TABLE 34: WOMEN'S HEALTH SCREENINGS

	SCFHS SERVICE AREA		SOLANO COUNTY	CA	U.S.
	Number	Percent	Percent	Percent	Percent
Cervical Cancer Screening (21-65 years)	114,487	82.9 %	83.4 %	83.3 %	85.5 %
Mammography Use (50-74 years)	57,523	79.2 %	76.5 %	72.7 %	77.8 %
Older Women Up-to-date on Core Clinical Preventive Services* (65+)	12,766	31.3 %	25.3 %	24.1 %	28.1 %

*Flu shot in past year, PPV shot ever, colorectal cancer screening, and mammogram in past 2 years.

Source: Centers for Disease Control and Prevention (CDC), Population Level Analysis and Community Estimates (PLACES) Project. 2020 data release. https://www.cdc.gov/places

Improving the well-being of women is an important public health goal for the U.S. As stated by *Healthy People*, their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. Pregnancy can also provide an opportunity to identify existing health risks in women and to prevent future health problems for women and their children. These health risks may include hypertension and heart disease, diabetes, depression, genetic conditions, sexually transmitted diseases (STDs), tobacco use and alcohol abuse, inadequate nutrition, or unhealthy weight.

According to the Centers for Disease Control, the risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care.[103] Early prenatal care provides an effective and cost-efficient way to prevent, detect and treat maternal and fetal medical problems. It provides an excellent opportunity for health care providers to offer counseling on healthy living habits that lead to optimal birth outcomes. Late or no prenatal care substantially increases the likelihood that an infant will require admission to a neonatal intensive care unit or require a longer stay in the hospital at substantial cost to the family and the health care system.

Violence against women – particularly intimate partner violence and sexual violence – is a major public health problem and a violation of women's human rights. Estimates published by WHO indicate that globally about 1 in 3 (30 percent) of women worldwide have been subjected to either physical and/or sexual intimate partner violence or non-partner sexual violence in their lifetime. Most of this violence is intimate partner violence. Worldwide, almost one third (27 percent) of women aged 15-49 years who have been in a relationship report that they have been subjected to some form of physical and/or sexual violence by their intimate partner.[104]

Violence can negatively affect women's physical, mental, sexual, and reproductive health, and may increase the risk of acquiring HIV in some settings. The social and economic costs of intimate partner and sexual violence are enormous and have ripple effects throughout society. Women may suffer isolation, inability to work, loss of wages, lack of participation in regular activities and limited ability to care for themselves and their children. Children who grow up in families where there is violence may suffer a range of behavioral and emotional disturbances. These can also be associated with perpetrating or experiencing violence later in life.[105]

As shown in Table 35, the rate for intimate partner violence is slightly better for the SCFHS service area (4.7/1,000) than the rate for Solano County (4.7/1,000), but worse than the state rate (4.1/1,000).

TABLE 35: INTIMATE PARTNER VIOLENCE (RATE PER 1,000)

	SCFHS SERVICE AREA		SOLANO COUNTY	CA
	Number	Rate	Rate	Rate
Domestic Violence Related Calls for Assistance	2,214	4.7	5.0	4.1

Source: California Department of Justice, Criminal Justice Statistics Center, OpenJustice Data Portal, DVRCA, openjuctice.doj.ca.gov/data, 2020 calls.

Birth Health

Birth health statistics are a predictor of two factors: maternal exposure to health risks and an infant's current and future morbidity. While the rates of infant mortality are not available for the service area, the rate per 1,000 live births in the service area for low birth weight (75.5) was worse than the County rate (70.8) and the state rate (70.1). Births to teen mothers was lower in the service area (30.9/1,000 live births) than the County (31.2/1,000 live births) or the state (33.7/1,000 live births). (See Table 36.)

TABLE 36: BIRTH HEALTH COMPARISONS AND DISPARITIES
(RATE PER 1,000 LIVE BIRTHS, EXCEPT BIRTH RATE IS PER 1,000 POPULATION)

	SCFHS SERVICE AREA		SOLANO COUNTY		CALIFORNIA	
CATEGORY	Number	Rate	Number	Rate	Number	Rate
Low Birth Weight (Under 2,500 grams)	1,590	75.5	1,414	70.8	121,958	70.1
Infant Mortality	NOT AVAILABLE	NOT AVAILABLE	79	4.0	7,134	4.1

CATEGORY	SCFHS SERVICE AREA		SOLANO COUNTY		CALIFORNIA	
	Number	Rate	Number	Rate	Number	Rate
Births to Teen Mothers	651	30.9	624	31.2	58,615	33.7
Late Entry into Prenatal Care (After 1st Trimester)	3,705	175.9	3,561	178.2	252,026	144.9
Live Births/Birth rate	21,061	14.8	19,985	15.0	1,739,856	14.7

Source: California Department of Public Health 2018-2021

The health consequences of birth health statistics are numerous and are often stated as a predictor of a community's overall health. For example, births to teen mothers are a particular concern since the births can pose medical and social problems for the mother as well as her infant. Adolescent mothers are less likely to get or stay married, less likely to complete high school or college, and more likely to require public assistance and live in poverty than their peers who are not mothers. Teen moms are also more likely to smoke during pregnancy and to suffer from depression during and after pregnancy. Compared to children born to older mothers, children born to teens are more likely to have a higher rate of early mortality and hospitalization, drop out of high school, enter foster care, be on welfare, and have children as teens themselves.[106]

Oral Health

The 2000 U.S. Surgeon General's Report "Oral Health in America" conclusively linked chronic oral infections to other overall health problems, including diabetes, heart disease, and adverse pregnancy outcomes. Furthermore, oral health is related to quality of life and poor oral health can have significant consequences on a person's diet, nutrition, speech, social interaction, self-esteem, mental health, education, and career achievement.[107] Dental disease is an epidemic, and it is disproportionately affecting the poor, the uninsured, and especially children.

Indeed, a survey of over 21,000 California children found that, by the third grade, over 70 percent had a history of tooth decay. Neglecting the oral health of children creates a cascade of problems that ultimately cost the taxpayers more. These include pain, infection, nutrition problems, tooth loss, sleep deprivation, attention deficit, slower social development, and missed school days.[108] Alarmingly, children on Medi-Cal – particularly Latinos and African Americans – experience higher rates of tooth decay, yet they visit the dentist less often than privately insured children. Even Latino and Black children with private insurance are less likely than white children to visit dentists and have longer intervals between dental visits. These findings indicate racial and ethnic disparities in access to oral health services among minority children covered by Medi-Cal – a substantial portion of SCFHS's target population.[109]

Tooth decay is the most common preventable illness affecting U.S. children today. In California, tooth decay among young children has increased over the past two decades.[110] When left untreated, tooth decay can contribute to a wide range of problems, including poor nutrition, sub-normal growth, and unnecessary pain.[111] California students miss an estimated 874,000 days of school each year due to dental problems, costing schools over $29 million annually.[112] Children who reported having recent tooth pain were four times more likely to have a low grade-point average compared to children without oral pain.[113]

The American Academy of Pediatric Dentistry advises that children visit the dentist or have an oral health assessment from his/her primary care professional by six months of age and that a dental home should be established by their first birthday.[114] It is also recommended that they visit the dentist twice yearly thereafter.[115] Meanwhile, the American Dental Association advocates that adults see a dentist at least once a year, and potentially more frequently depending on the patient's individual needs. However, the reality for many is that dental care is out of reach.

The oral health payment system is usually related to primary care systems, e.g., those on Medi-Cal are also likely to be on its oral health partner, Denti-Cal, and those who are medically uninsured are almost assuredly uninsured for dental services. Therefore, high rates of Medi-Cal dependence and the presence of uninsured residents also translate to problems accessing and affording oral health care.

In many cases, oral health statistics for the service area's residents are poor. There is a lack of oral health maintenance among service area adults. As shown in Table 37, only 66.1 percent of SCFHS service area adults visited a dentist in the past year, which is comparable to the 66.0 percent of County adults and 66.2 percent of adults across the nation, though lower than the state rate of 63.2 percent. Additionally, 11.4 percent of service area residents aged 65 and over report having lost all their teeth, again comparable to the County rate of 11.5 percent, but lower than the state and national rates of 13 .0 percent and 13.9 percent, respectively.

TABLE 37: DENTAL HEALTH (ADULTS AND 65+)

	SCFHS SERVICE AREA		SOLANO COUNTY	CA	U.S
	Number	Percent	Percent	Percent	Percent
Dental Clinic/Dentist Visits (18+)	243,115	66.1 %	66.0 %	63.2 %	66.2 %
All Teeth Lost (65+)	8,374	11.4 %	11.5 %	13.0 %	13.9 %

Source: Centers for Disease Control and Prevention (CDC), Population Level Analysis and Community Estimates (PLACES) Project. 2021 data release. https://www.cdc.gov/places

One-quarter (24.8 percent) of service area adults reported their teeth being in fair or poor condition, which is on almost equal to the state rate (24.9 percent). (See Table 39.) And, 30.1 percent of service area adults reported not having dental insurance, although this is lower than the state rate of 34.5 percent.

TABLE 38: ORAL HEALTH STATUS (ADULTS 18+ YEARS OF AGE)

	SCFHS SERVICE AREA	CA
Teeth in Fair/Poor Condition	24.8 %	24.9 %
Uninsured - Dental Insurance	30.1 %	34.5 %

Source: UCLA Center for Health Policy Research, California Health Interview Survey: Neighborhood Edition (CHIS NE), 2021. Zip Code Level 2018 Data.

Service area data were unavailable related to the dental health of children, however Solano County and state data are available. Per 2021 UCLA CHIS data, 23.0 percent of Solano County children (ages 3-11 and <2 years with teeth) lacked dental insurance, compared to 7.4 percent for the same population across the state. As shown in Table 39, 46.4 percent of children (ages 3-11 and <3 years with teeth) have never having been to a dentist, which is significantly higher than the state rate of 17.1 percent.

TABLE 39: TIME SINCE LAST DENTAL VISIT – CHILDREN (3-11 YEARS OF AGE AND <3 YEARS OF AGE WHO HAVE TEETH)

	SOLANO COUNTY Percent	CA Percent
Never been to a dentist	46.4 %	17.1 %
6 months ago or less	45.2 %	65.2 %
More than 6 months up to 1 year	5.3 %	9.8 %
More than 1 year up to 2 years ago	-	6.7 %
More than 2 years up to 5 years ago	-	0.9 %
More than 5 years ago	-	0.3 %

Source: UCLA 2021 CHIS

■ Mental Health

Mental health disorders are a significant public health problem, both in their own right and because they are often associated with many other chronic diseases.[116] Mental health disorders can have a serious impact on physical health and are associated with the

prevalence, progression, and outcome of chronic diseases.[117] Mental illness exacerbates morbidity from the multiple chronic diseases with which it is associated, including heart disease, diabetes, obesity, asthma, epilepsy, and cancer.[118,119,120] This increased morbidity is often a result of lower use of medical care, lower treatment adherence for concurrent chronic diseases, and higher risk for adverse health outcomes.[121] Mental illness is also associated with increased use of tobacco products, at a rate of two to four times higher than in the general population.[122] Untreated disorders may leave individuals at risk for substance abuse, self-destructive behavior, and suicide. The effects of mental illness range from minor disruptions in daily functioning to incapacitating personal, social, and occupational impairments and early death. Rates for injuries, both intentional (e.g., homicide and suicide) and unintentional (e.g., motor vehicle), are 2-6 times higher among persons with a mental illness than in the overall population.[123,124]

Also, the economic repercussions of mental illness in the United States are substantial.[125,126,127] Approximately 1 in 5 adults in the U.S. – 52.9 million, or 21 percent – experience mental illness in a given year, of which only 46.2 percent received treatment. Mental illness also costs the United States approximately $193 billion in lost earnings each year.[128] $225 billion in healthcare expenditures.[129] Also, among all 44 million adults, or 17.3 percent of the population, a total expenditure of $106.5 billion is reported. The largest payers of the expenditure are 31.8 percent private insurance, 25.9 percent Medicaid, 19.1 percent Medicare, and 14.7 percent out of pocket.[130]

Depression is the most common type of mental illness affecting adults in the U.S. and is also the leading cause of disability worldwide.[131] In a report released by Mental Health America, it was found that as of 2022, approximately 19.9 percent of adults in America (almost 50 million) experience mental illness in a given year. In addition, of the 2.5 million youth who have severe depression, the highest rate (14.5 percent) was reported among youth who identify as more than one race.[132]

Mental health issues have increased during the COVID-19 pandemic. On average, more than one in three adults in the U.S. has reported symptoms of anxiety and/or depressive disorder since May 2020. In comparison, from January to June 2019, approximately one in ten adults reported symptoms of anxiety and/or depressive disorder.[133] The need for mental health and substance use care is expected to increase due to the COVID-19 pandemic, which may exacerbate mental health conditions and barriers to accessing care experienced by those already in need of these services and leave many people newly in need of mental health and substance abuse treatment.[134]

As for California, a fact sheet released by the National Alliance on Mental Illness in 2021, "Mental Health in California", reported that 1 in 5 Californian adults experience mental illness each year. Other key findings included:

- 1 in 20 adults experience serious mental illness;
- More than half of these adults did not receive; treatment, with 35.3 percent attributing the lack of care to cost;
- Over 9 million people in California live in communities lacking an appropriate number of mental health professionals; and,
- There are significant ethnic and racial disparities in the prevalence and treatment of mental illness: Hispanic, multiracial and African American populations experienced the highest rates of incidence, yet, along with the Asian populations, received the lowest treatment rates.[135]

In Solano County, many low-income individuals with mental health concerns do not have access to the treatment they need. Insufficient private insurance coverage for mental health services and inadequate availability of publicly funded treatment services are significant barriers for many. Limited integration of mental health services within the health care system also leads to missed opportunities for early problem identification and prevention. Per Table 40, the mental health indicators for Solano County adults are consistent with the rates for California and the U.S. Notably, 17.9 percent of adults (18 years of age and over) had mental illness in the previous year, with only 13.2 percent having received mental health services.

TABLE 40: MENTAL HEALTH CONDITIONS FOR ADULTS (18 YEARS OF AGE AND OVER)

	SOLANO COUNTY	CA	U.S.
Serious Mental Illness in the Past Year	3.8 %	4.0 %	4.4 %
Any Mental Illness in the Past Year	17.9 %	18.2 %	18.8 %
Received Mental Health Services in the Past Year	13.2 %	11.7 %	14.7 %
Had Serious Thoughts of Suicide in the Past Year	4.2 %	4.1 %	4.2 %
Major Depressive Episode in the Past Year	6.4 %	6.6 %	7.0 %

Substance Abuse

Drug overdose deaths continue to increase in the United States and according to the CDC, more than 700,000 people have died from a drug overdose since 1999, of whom, more than 68 percent of deaths involved an opioid, including prescription opioids, illegal opioids like heroin, and illicitly manufactured fentanyl. On average, just under 300 Americans die every day die from an opioid overdose.[136] Since 2013, there have been significant increases in overdose deaths involving synthetic opioids – particularly those involving illicitly-

manufactured fentanyl (IMF). The IMF market continues to change, and IMF can be found mixed with heroin, sold as heroin, or pressed into counterfeit prescription pills. [137,138]
The 2018 National Survey on Drug Use and Health estimated that approximately 22.9 million people aged 12 or older had a substance use disorder (SUD) related to their use of alcohol or illicit drugs in the past year, including 14.8 million people who had an alcohol use disorder and 8.1 million people who had an illicit drug use disorder.[139] California continues to face a serious drug crisis with substantial health and economic impacts. According to the California Opioid Overdose Surveillance Dashboard, in 2019, 6,219 Californians (15 per 100,000; age-adjusted) died from a drug-related overdose.[140] The National Drug Intelligence Center (NDIC) in 2011 (most recent available) estimated the public cost of treatments for illicit drug use at $3,368,564. These costs were divided into detoxification ($465,213), residential ($1,223,800), outpatient ($1,028,994), and outpatient methadone ($650,557) programs.[141]

Even as the coronavirus (COVID-19) infections and deaths dominate the spotlight, overdose deaths from use of illicit drugs show no sign of abating. Stresses related to the COVID-19 pandemic, such as economic strains, as well as COVID-19–related isolation and other factors hindering treatment and support for people with substance use issues, may contribute to the current rise in overdose deaths.[142] According to the US Centers for Disease Control and Prevention's National Center for Health Statistics, there were an estimated 75,500 overdose deaths that occurred in the 12-month period between March 2019 and March 2020, an increase of approximately 10 percent from the previous year.[143] Opioids —especially synthetic ones (other than methadone)—are currently the chief drivers of drug overdose fatalities.

Among the measures listed in Table 41, the Solano County data are either higher than or consistent with those of the state and the nation. For example, "Illicit drug use or than marijuana in the past month among individuals (12+)" is 4.0 percent for Solano County, compared to 3.8 percent for the state and 3.3 percent for the nation. For "Binge alcohol use in the past month among individuals (12+)", the County rate is 22.1 percent, while the state rate is 23.8 percent and the national rate is 24.4 percent.

TABLE 41: SUBSTANCE USE (AGE 12+ UNLESS OTHERWISE SPECIFIED)

	SOLANO COUNTY	CA	U.S.
Illicit Drug Use Other Than Marijuana in the Past Month among Individuals (12+)	4.0 %	3.8 %	3.3 %
Marijuana Use in the Past Year among Individuals (12+)	19.0 %	17.8 %	15.0 %
Marijuana Use in the Past Month among Individuals (12+)	12.2 %	11.6 %	9.5 %

	SOLANO COUNTY	CA	U.S.
Cocaine Use in the Past Year among Individuals (12+)	2.3 %	2.7 %	2.0 %
Heroin Use in the Past Year among Individuals (12+)	0.2 %	0.2 %	0.3 %
Methamphetamine Use in the Past Year among Individuals (12+)	0.8 %	0.9 %	0.6 %
Pain Reliever Use Disorder in the Past Year among Individuals (12+)	0.5 %	0.5 %	0.6 %
Binge Alcohol Use in the Past Month among Individuals (12+)	22.1 %	23.8 %	24.4 %
Alcohol Use in the Past Month among Individuals (Age 12-20)	17.4 %	17.9 %	19.3 %
Binge Alcohol Use in the Past Month among Individuals (Age 12-20)	10.2 %	10.8 %	11.8 %
Illicit Drug Use Disorder in the Past Year among Individuals (12+)	2.9 %	3.0 %	2.8 %

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018. Service Area estimates extrapolated from Los Angeles County SPA data based on spatial extrapolation of service area to SPA. Service Area estimates calculated by DataFox.

SCFHS will continue to target the mental health and substance abuse needs of its service area population. However, most research comparing mental health care across groups throughout the country finds evidence of common disparities in access and use that should be addressed by all mental health care providers. As documented in the U.S. Surgeon General's report on mental health and its supplement, racial and ethnic minorities typically have less access to mental health services than whites have, are less likely to receive needed care, and are more likely to receive poor-quality care when treated.[144,145] Also, minorities are more likely than whites to delay or fail to seek mental health treatment.[146,147,148] After entering care, minority patients are also less likely than whites to receive the best available treatments for depression and anxiety.[149,150]

An Institute of Medicine report studied health service disparities between population groups related to treatment or access not justified by the differences in the health status or preferences of the groups. The report found that overall spending for blacks and Latinos on outpatient mental health care is about 60 percent and 75 percent of spending rates for whites, respectively, after taking into account need for care.[151]

VI.

CONCLUSIONS

This needs assessment was compiled for SCFHS as an informational resource to guide strategic planning activities, fund development, and program development. The data collected identify common needs, issues, and priorities across various segments of the service area population.

Key socioeconomic and access to care findings include:

- Population SCFHS's service area population consists of 473,849 individuals.
- Gender. Within SCFHS's service area, there are slightly more females than males, accounting for 50.2 percent and 49.8 percent of the population, respectively. Related to age, 31.2 percent of SCFHS's service area is under the age of 24; 53.4 percent is between 25 and 64; and 15.5 percent is over the age of 65.
- Age. 31.2 percent of SCFHS's service area is under the age of 24; 53.4 percent is between 25 and 64; and 15.5 percent is over the age of 65.
- Race/Ethnicity. The SCFHS service area has a population that is 36.7 percent White alone, 27.3 percent Hispanic or Latino, 15.7 percent Asian, 12.8 percent Black/African American, 6.3 percent Other, 0.9 percent Native Hawaiian & Pacific Islander, and 0.4 percent American Indian and Alaska Native.
- Poverty. Nearly one-quarter (21.8 percent) people in SCFHS's service area is considered "low income," living below 200 percent of the FPL, just lower than Solano County (22.1 percent) but significantly lower than California (29.4 percent) populations who meet this criterion.
- Medical Care Utilization. Although 8.8 percent of the population is below 100 percent FPL, this group utilizes 53.1 percent of the total primary care community clinic resources in the service area.
- Occupation/Wages. 13.2 percent of residents in SCFHS's service area are employed in occupations that earn less than 200 percent of the FPL annually: food preparation and serving related occupations, healthcare support, and personal care and service.
- Unemployment. SCFHS's service area had an unemployment rate of 5.7 percent, while Solano County and California had unemployment rates of 5.9 percent and 6.2 percent, respectively.
- Area Deprivation Index. SCFHS has pockets of high ADI scores throughout the service area.
- Health Insurance. 27.9 percent of SCFHS's service area residents received public insurance benefits (Medicaid, Medicare, or other public insurance), while 5.1 percent of the service area residents is uninsured.
- Education. Of the SCFHS service area residents, 11.5 percent are without a high school diploma, while 11.2 percent of Solano County and 15.4 percent of California residents did not receive a diploma. Similarly, among SCFHS service area zip codes, only 34.9 percent of adults have some form of college degree, whereas 34.8 percent of County residents and 39.5 percent of Californians have a college degree.

- Language/Immigration 30.1 percent of SCFHS's service area households speaks a language other than English at home, compared with 29.1 percent in Solano County and 43.9 percent in California as a whole. The majority of these residents are foreign-born and speak Spanish, with Mexico representing the highest percentages of foreign born at 6.6 percent of the service area, followed by the Philippines at 6.5 percent.
- Health Literacy. The percentage of the population age 15+ lacking basic prose literacy is 18.4 percent for the SCFHS service area, 14.0 percent for Solano County, 23.1 percent for the state, and 21.0 percent for the nation. While the service area rate is higher than the County, it's lower than the state and national rates.
- Asthma. Within the SCFHS service area, 13.8 percent of children (ages 17 and younger) have ever been diagnosed with asthma compared with 14.5 percent for the state, while 20.7 percent of service area adults (ages 18 +) have ever been diagnosed with asthma as compared to 15.9 percent of California adults.
- Food Insecurity. 8.5 percent of the residents in Solano County lack adequate access to food as compared to 10.2 percent of state residents and 10.9 percent of U.S residents.
- Transportation. The rates for vehicle availability are for the service area are equal to, or nearly equal to, those of Solano County, but worse than the state, and nation. In the service area, 4.7 percent of residents do not have any vehicles available, and 8.2 percent of households have a vehicle shortage.
- Civic Participation and Social Memberships. The rate of Civic Participation (the percentage of the voting population that voted in the 2018 General Election) was 48.7 percent for the service area, compared to 50.5 percent in Solano County, 51.9 percent for the state, and 53.4 percent for the nation. The rate of Social Cohesion (membership associations per 10,000 people) in the service area (6.2) is greater than the County (5.4) and the state (5.9), but lower than the nation (10.6).
- Crime and Violence. The Total Crime Index, with 100 being the national average, shows the service area at 72 and Solano County at 75, which are lower than California at 80.
- Broadband Access. 6.3 percent of the service area has no internet access, equal to the County rate of 6.3 percent, but lower than the state rate of 8.7 percent, or the national rate of 11.8 percent. Of service area residents, 15.9 percent reported access to internet/broadband that is likely insufficient for reliable video.
- Housing Affordability. Of the renter-occupied housing units, 51.3 percent of service area residents reported their housing costs to be greater than 30 percent of their income. Additionally, overcrowding is more prevalent in the service area than in the County, state, and nation for all housing types. Notably, 10.7 percent of renter-occupied housing units in the service are overcrowded, as compared to 10.5 percent in the County, 13.2 percent in California, and 6.2 percent in the United States.
- Homelessness. From 2019 to 2022, the overall unsheltered population experienced a 28-person increase, going from 1,151 to 1,179. This represents a 53-person decrease from the 1,232 reported in 2017.

Local provider capacity constraints include:

- Community Need Index. The overall mean CNI score for the service area is 3.4 out of a possible 5.0, which falls within the second highest need range (3.4-4.1). According to the CNI, three of the 15 zip codes are designated as highest need areas.
- Access to Providers. Solano County ranks 22nd out of 58 California counties for "Clinical Care". 44.9 percent of SCFHS's service area (a total of 971 square miles) is designated as a Medically Underserved Area (MUA) or a Medically Underserved Population (MUP). There are five MUAs and one MUP. Despite the large number of health centers and service delivery sites, just over one half (57.0 percent) of low-income residents in the service area were served by FQHCs and Look-Alikes.
- Penetration Rates. The service area has an overall penetration rate of 57.56 percent across current FQHCs and FQHC Look-Alikes. With 101,014 low-income residents in the service area, that translates to 58,143 residents receiving services, leaving 42,871 low-income residents without a medical home. With an average patient utilization rate of 3.7 medical visits per year (based on California UDS data), that calculates to a deficit of 158,622 medical visits annually for SCFHS's service area.

- **Key health disparity findings include:**
- Leading Causes of Death. The leading causes of death in SCFHS's service area are (from highest to lowest): cancer, heart disease, stroke, Alzheimer's disease, diabetes, unintentional injuries, chronic lower respiratory disease, diabetes, pneumonia and influenza, hypertension, chronic liver disease and cirrhosis, and intentional self-harm.
- Obesity and Diabetes. 27.6 percent of service area adults (18 years of age and older) are obese as compared to 29.2 percent for Solano County, 25.8 percent for California, and 30.9 percent of U.S. residents. 12.0 percent of adults 18 years of age and older in SCFHS's service area have ever been diagnosed with diabetes, compared with 10.6 percent for California. There was a 0.4 percent increase for cases of diabetes in the service area from 2014 to 2018.
- Women's Health Disparities. Per the CDC, 82.9 percent of women (ages 21 to 65 years) in the SCFHS service area reported having a cervical cancer screening, which is lower than the rates for Solano County (83.4 percent), California (83.3 percent) and the nation (85.5 percent). Mammography use for women 50 to 70 years of age is better for the SCFHS service area (79.2 percent) than the County (76.5 percent), the state (72.7 percent), and the nation (77.8 percent). Additionally, only 31.3 percent of women aged 65 and older are up to date on core clinical preventive services, although this rate is higher than that of the County (25.3 percent), the state (24.1 percent) and the nation (28.1 percent).
- Birth Health While the rates of infant mortality are not available for the service area, the rate per 1,000 live births in the service area for low birth weight (75.5) was worse than the County rate (70.8) and the state rate (70.1). Births to teen mothers was lower in the

service area (30.9/1,000 live births) than the County (31.2/1,000 live births) or the state (33.7/1,000 live births).

- Oral Health. Only 66.1 percent of SCFHS service area adults visited a dentist in the past year, which is comparable to the 66.0 percent of County adults and 66.2 percent of adults across the nation, though lower than the state rate of 63.2 percent. One-quarter (24.8 percent) of service area adults reported their teeth being in fair or poor condition, which is on almost equal to the state rate (24.9 percent). And, 30.1 percent of service area adults reported not having dental insurance, although this is lower than the state rate of 34.5 percent. 23.0 percent of Solano County children (ages 3-11 and <2 years with teeth) lacked dental insurance, compared to 7.4 percent for the same population across the state. 46.4 percent of children (ages 3-11 and <3 years with teeth) have never having been to a dentist, which is significantly higher than the state rate of 17.1 percent.
- Mental Health. The mental health indicators for Solano County adults are consistent with the rates for California and the U.S. Notably, 17.9 percent of adults (18 years of age and over) had mental illness in the previous year, with only 13.2 percent having received mental health services.
- Substance Abuse. The Solano County data are either higher than or consistent with those of the state and the nation. For example, "Illicit drug use or than marijuana in the past month among individuals (12+)" is 4.0 percent for Solano County, compared to 3.8 percent for the state and 3.3 percent for the nation For "Binge alcohol use in the past month among individuals (12+)", the county rate is 22.1 percent, while the state rate is 23.8 percent and the national rate is 24.4 percent.

As previously noted, according to UDS Mapper, 21.32 percent of residents of the service area are low income (living below 200 percent FPL). There is an overall penetration rate in the service area of 57.56 percent across current FQHCs and FQHC Look-Alikes. With 101,014 low-income residents in the service area, that translates to 58,144 residents receiving services, leaving 42,870 low-income residents without a medical home. With an average patient utilization rate of 3.7 medical visits per year (based on California UDS data), that calculates to a deficit of 158,619 medical visits annually for SCFHS's service area.

SCFHS addresses a critical need for healthcare among the community it serves. The data presented here confirm a significant need for high-quality, culturally competent, coordinated, and comprehensive primary and specialty care in the service area. SCFHS will continue to be a key resource for individuals and families who are uninsured or underinsured as well as for other residents who find it difficult to access healthcare providers in Solano County With the support of its partners on the federal, state and community levels, SCFHS will continue to adjust and expand its service offerings to close the gap in health disparities in the service area. SCFHS is in a unique position to address these needs given its' success in serving the most vulnerable populations in their service area.

VIII.

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