Preventing Chronic Diseases: Eliminating Obstacles to Healthy Living

The National Center for Health in Public Housing

National Center for Health in Public Housing (NCHPH)

- The National Center for Health in Public Housing (NCHPH) is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U30CS09734, a National Training and Technical Assistance Partner (NTTAP) for $2,006,400 and is 100% financed by this grant. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.
- The mission of the National Center for Health in Public Housing (NCHPH) is to strengthen the capacity of federally funded Public Housing Primary Care (PHPC) health centers and other health center grantees by providing training and a range of technical assistance.

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Today's Speakers

Kevin Lombardi MD, MPH
Manager of Policy, Research, and Health Promotion

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Manager of Training & Technical Assistance

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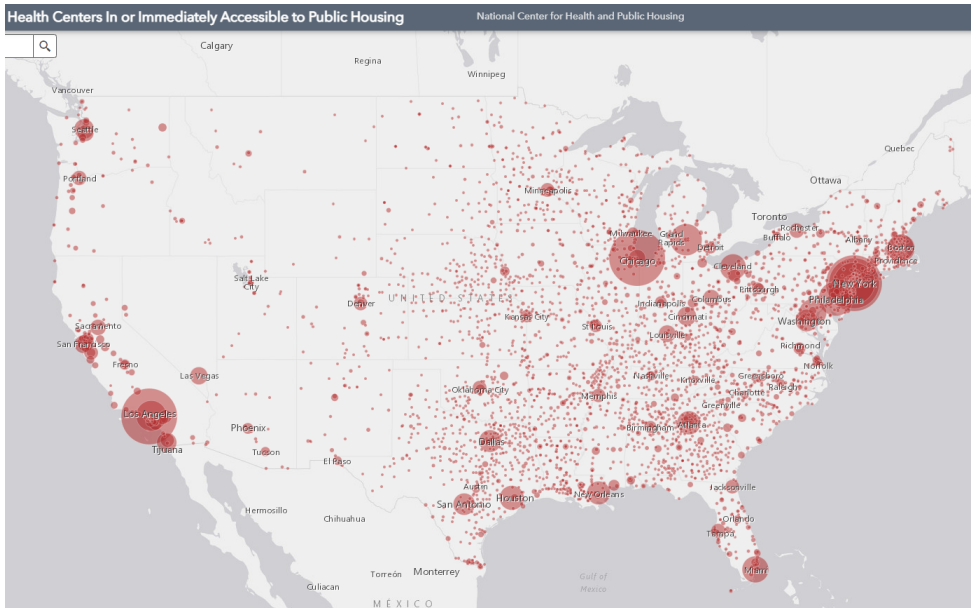
Health Centers Close to Public Housing

- 1,370 Federally Qualified Health Centers (FQHC) = **30.5 million patients**
- 483 FQHCs In or Immediately Accessible to Public Housing = **6.1 million patients**
- 107 Public Housing Primary Care (PHPC) = **935,823 patients**



Source: [Health Centers in or Immediately Accessible to Public Housing Map]

Source: [2022 Health Center Data]

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Public Housing Demographics

1.5 Million Residents

2 Persons Per Household

38% Disabled

52% White

91% Low Income

43% African-American

26% Latinx

19% Elderly

36% Children

32% Female Headed Households with Children

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This session is designed to illicit discussion, process sharing and support between colleagues. The session framework will reflect these priorities. The – Discussion – Support – Assistance model describes NCHPHs approach to Training and Technical Assistance

Discussion

- Two discussion questions are integrated into the session material.
- Participants are asked to please write or type their response and to be open to share.

Support

- Participants include a range of clinical and non-clinical professionals from FQHC's, PHPCs and PHAs around the country.
- This interdisciplinary support can be an asset to better understanding the challenges your organization is facing.

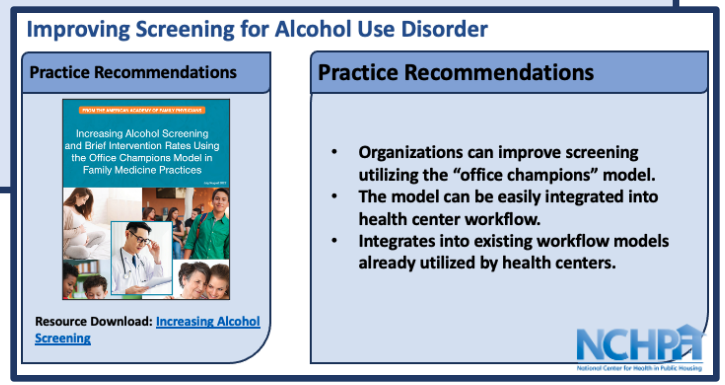
Assistance

- Discussion session format is designed to illicit the main themes in the learning objectives and are related to the resources and recommendations reviewed in this session

NCHPH presentations are designed to be utilized as external resources by FQHCs PHPCs and PHAs these can be freely circulated to partners and colleagues as needed.

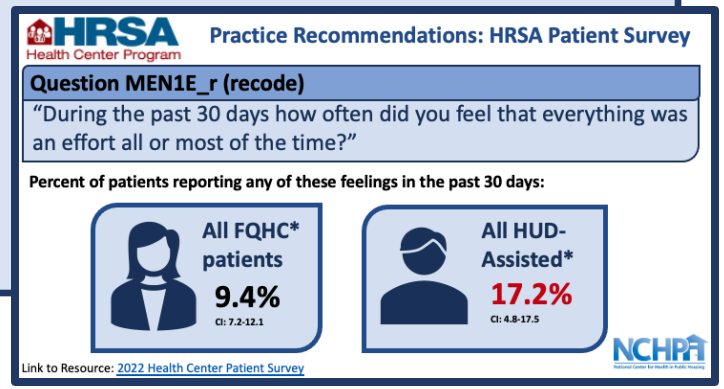
Research and Clinical Resources

- Cited resource links are located at the bottom right of the slides.
- Resources are publicly available and can shared internally or externally.
- Cited research is investigated and validated during a structured review process.



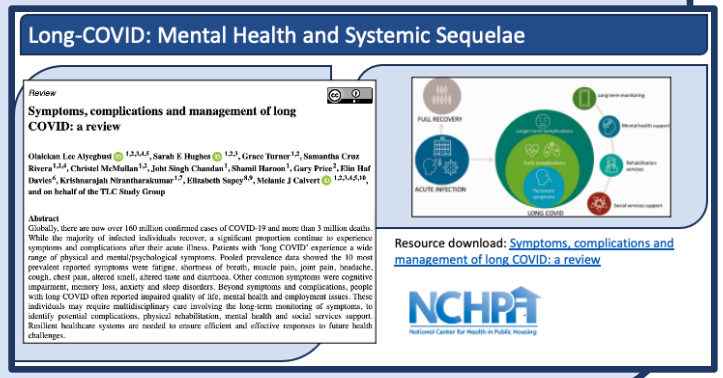
Guidance and Recommendations

- Recommendations are based on NCHPH internal research or validated external research.
- Practice recommendations presented are reviewed and validated by the NCHPH team.



Support and Consultation Resources

- NCHPH staff members and SMEs are available to FQHCs, PHPCs, PHAs and partner organization for consulting and advising services.



Link to Resource: NCHPH

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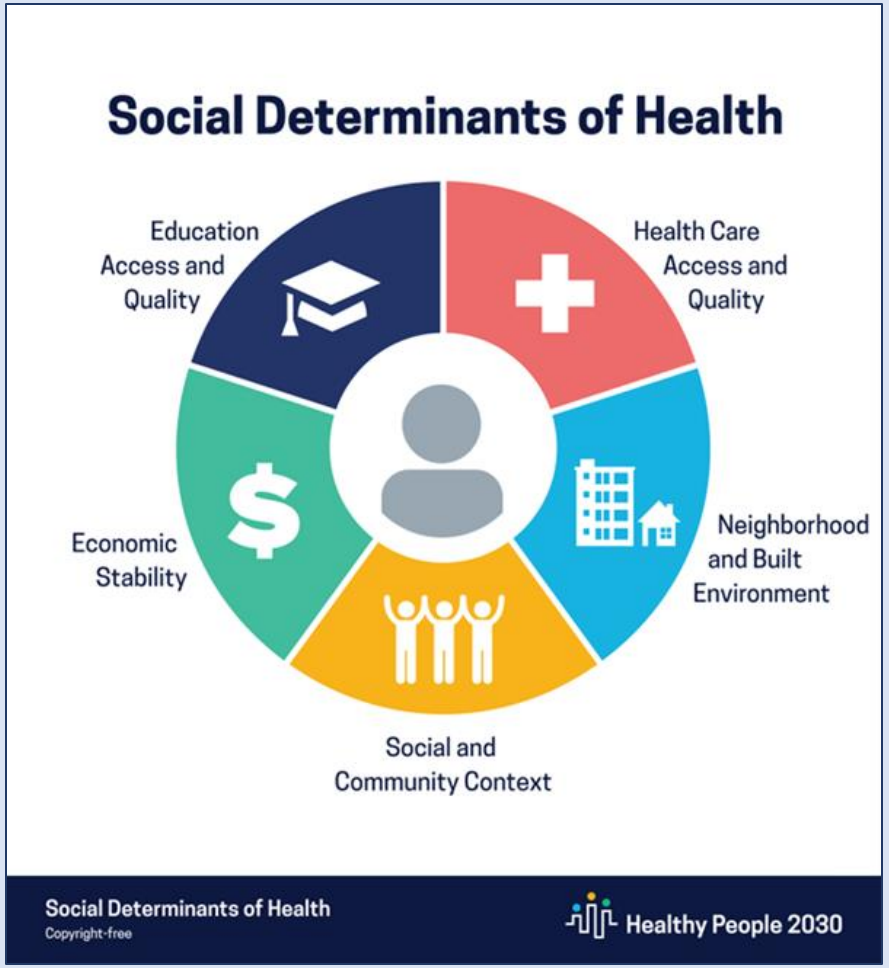
The Social Determinants of Health: Conceptual Overview



Link to resource: [Healthy People 2030]

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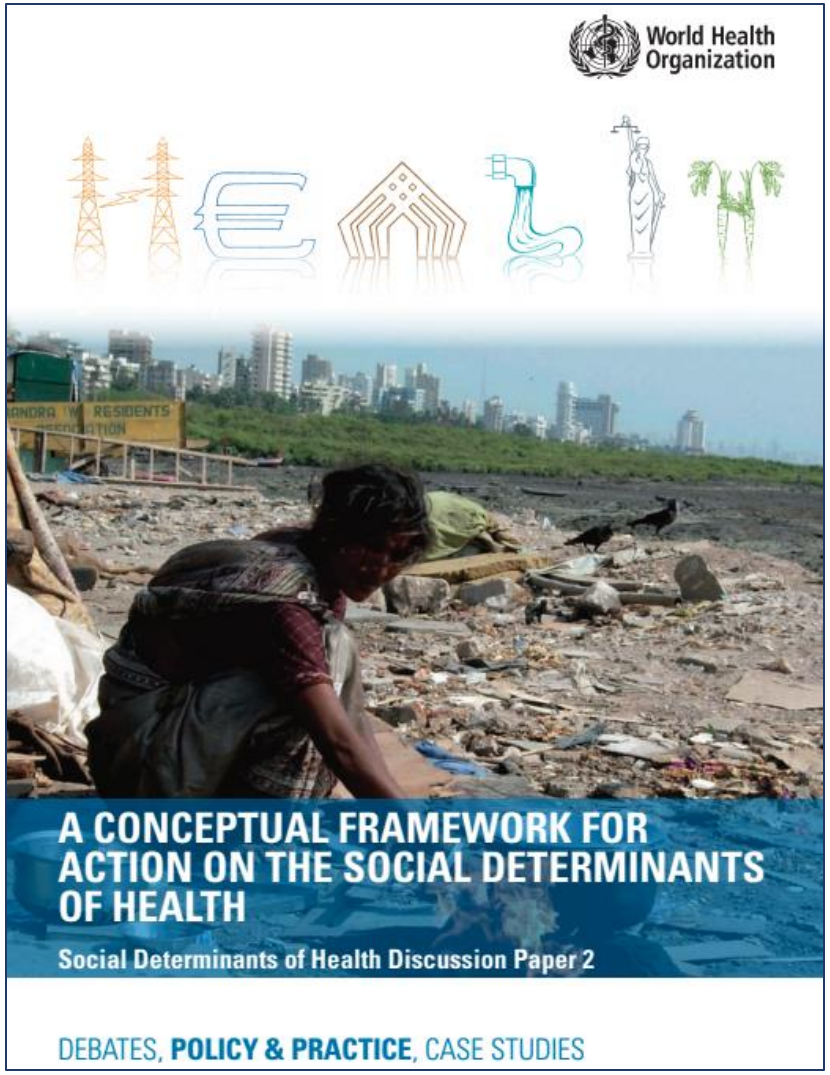
The Social Determinants of Health: Conceptual Overview



Human Rights → Policy Choices → More equitable outcomes

Link to Resource: [WHO Conceptual Framework]

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Poll Question 1

Which best describes your type of organization?

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Please take a moment to type your response to the following:

Where are you joining us from?

What is your role at your organization?

Claim 1:

HUD-assisted families are more likely to experience chronic disease than members of the general U.S. population.

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Contrasting Residents of Public Housing and HUD-assisted from the general FQHC patient population: HRSA Health Center Patient Survey (2022)

n (weighted) = 27,224,243	All other Housing (%)	95% CI	All HUD-assisted* (%)	95% CI	*p*	Public Housing (%)	95% CI	*p*
Patient has obesity	46.5	42.4-50.6	52.7	41.3-63.8	0.43	48.4	35.4-61.6	0.93
Patient has been diagnosed with hypertension		9.6	45		3	41.5		
Patient has been diagnosed with Asthma		2.1	26		5	22.5		4
Patient has had asthma attack in past 12 months	47.1	38.9-55.4	66.2	48.1-80.5	0.12	63.9	39.0-83.0	0.52
Patient has ever been diagnosed with diabetes	17.2	14.4-20.5	16.6	12.2-22.4	0.86	17.9	11.0-27.8	0.92
Patient has ever been diagnosed with pre-diabetes	11.6	9.3-14.3	20.3	14.2-28.4	0.14	18	10.8-28.6	0.57

All patients (reference group)

All HUD-assisted (comparison group 1)

Public housing only (comparison group 2)

** Includes Section 8 Voucher, Housing Choice Voucher, Project-based Section 8 and other HUD PH programs*

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Patient has been diagnosed with hypertension	**34**	**28.9-39.6**	**45.1**	**34.5-56.3**	**0.03**	**41.5**	**29.2-54.9**	**0.3**
Patient has been diagnosed with Asthma	19.2	16.6-22.1	26.9	20.2-34.4	0.05	22.5	14.9-32.3	0.44
Patient has had asthma attack in past 12 months	47.1	38.9-55.4	66.2	48.1-80.5	0.12	63.9	39.0-83.0	0.52
Patient has ever been diagnosed with diabetes	17.2	14.4-20.5	16.6	12.2-22.4	0.86	17.9	11.0-27.8	0.92
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** Includes Section 8 Voucher, Housing Choice Voucher, Project-based Section 8 and other HUD PH programs*

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Claim 2:

Chronic Diseases interact with each-other and with the SDOH to impact patient outcomes

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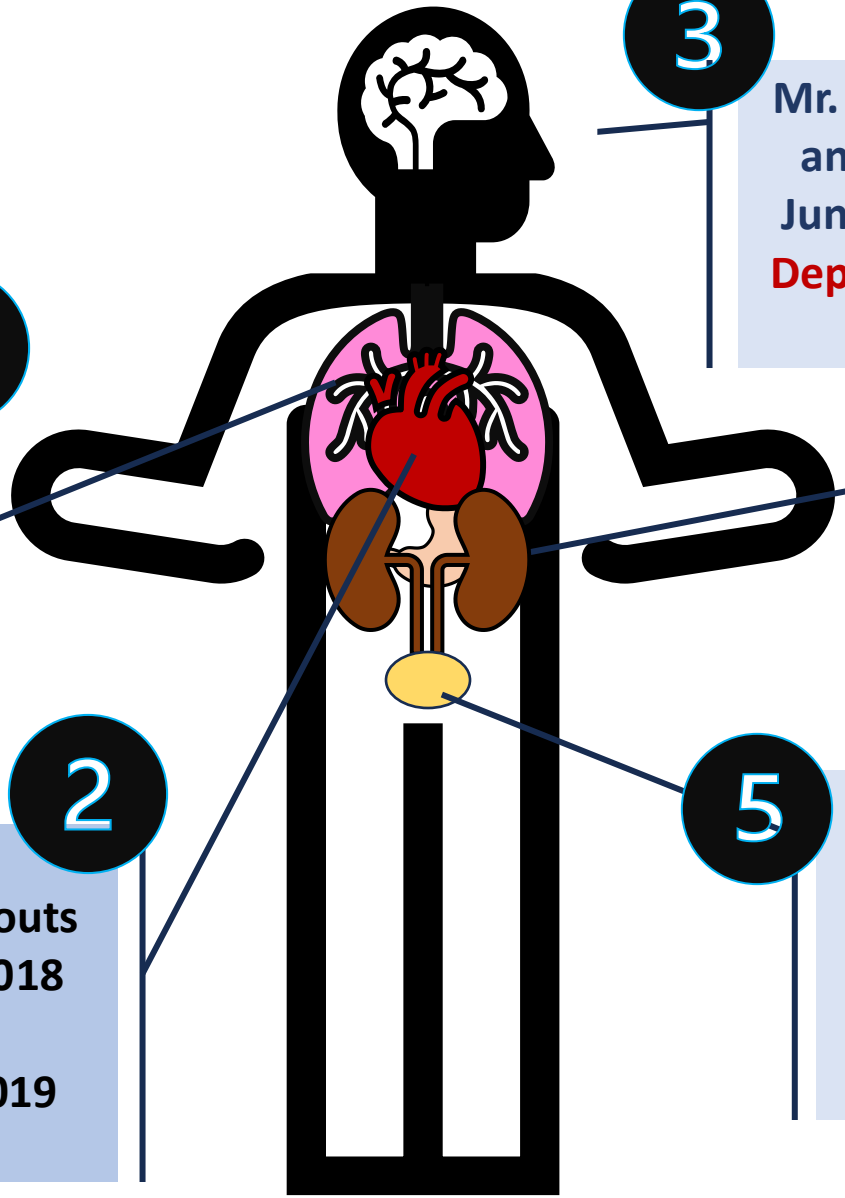
1

Mr. Jones (55, M) was diagnosed with **Congestive Heart Failure (CHF)** in 2017, the result of 30 years of poorly-controlled **Hypertension** complicated by cigarette smoking.

2

Mr. Jones began to experience bouts of **Acute Pulmonary Edema** in 2018 and diagnosed with **Chronic Pulmonary Edema** in January 2019



3

Mr. Jones went on SS disability in May 2019 and started struggling with depression in June of 2019 he was diagnosed with **Major Depressive Disorder (MDD)** in September of 2019

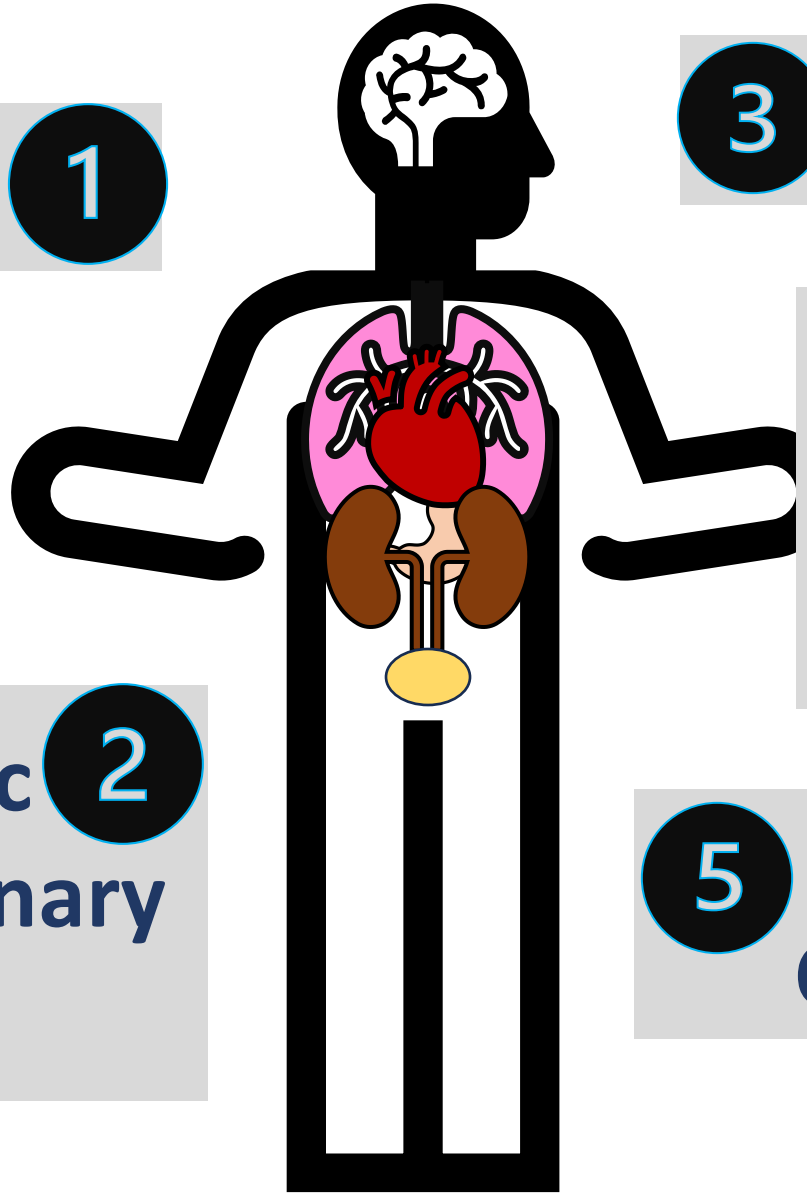
4

After his diagnosis with CHF Mr. Jones began to experience kidney damage. He was diagnosed with **CKD III** in 2020 and **CKD IV** in 2021

5

Due to years of cigarette smoking, in December of 2023 Mr. Jones was diagnosed with **Urothelial Carcinoma**.

Preventing Chronic Disease Eliminating obstacles to Healthy Living



1. CHF
2. Chronic Pulmonary Edema
3. MDD
4. Chronic Kidney Disease
5. Urothelial Carcinoma

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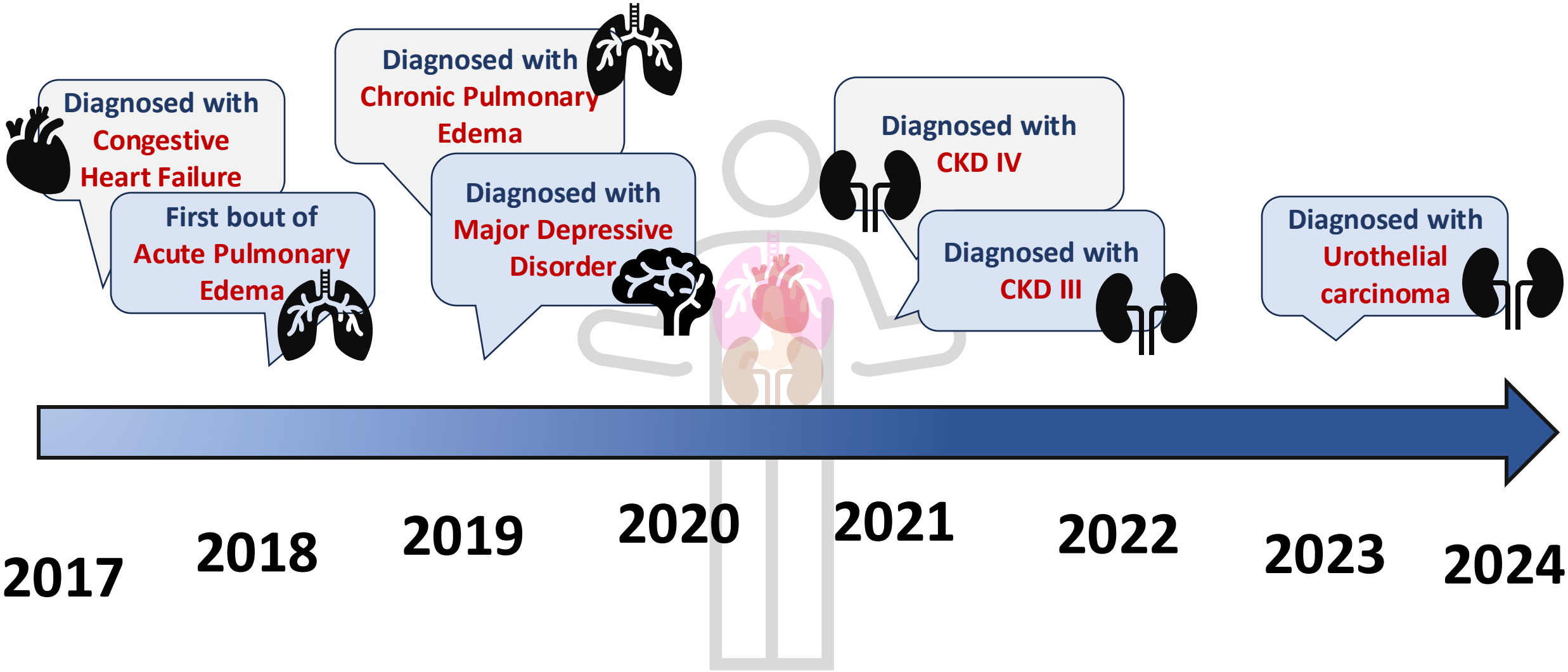
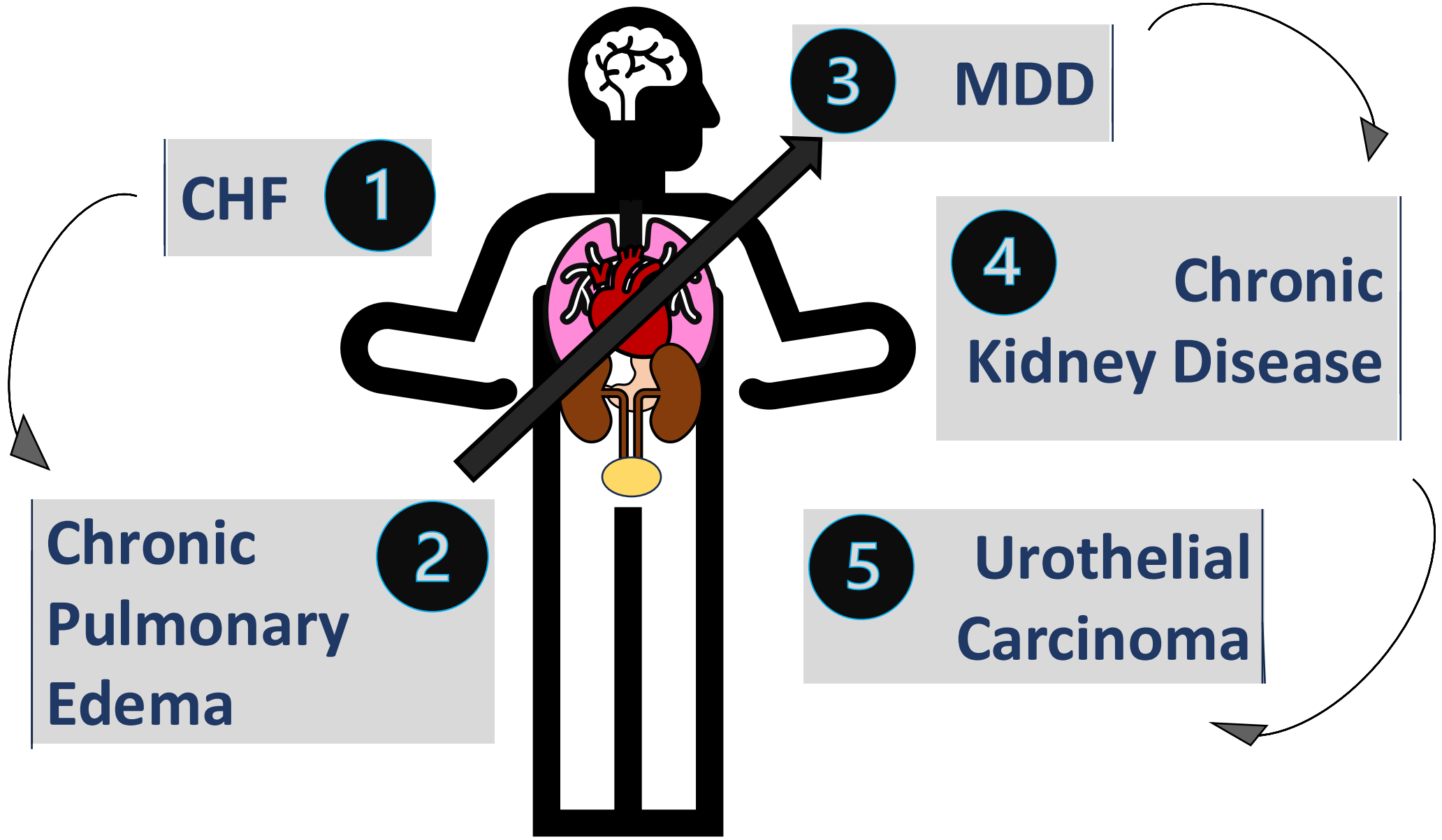
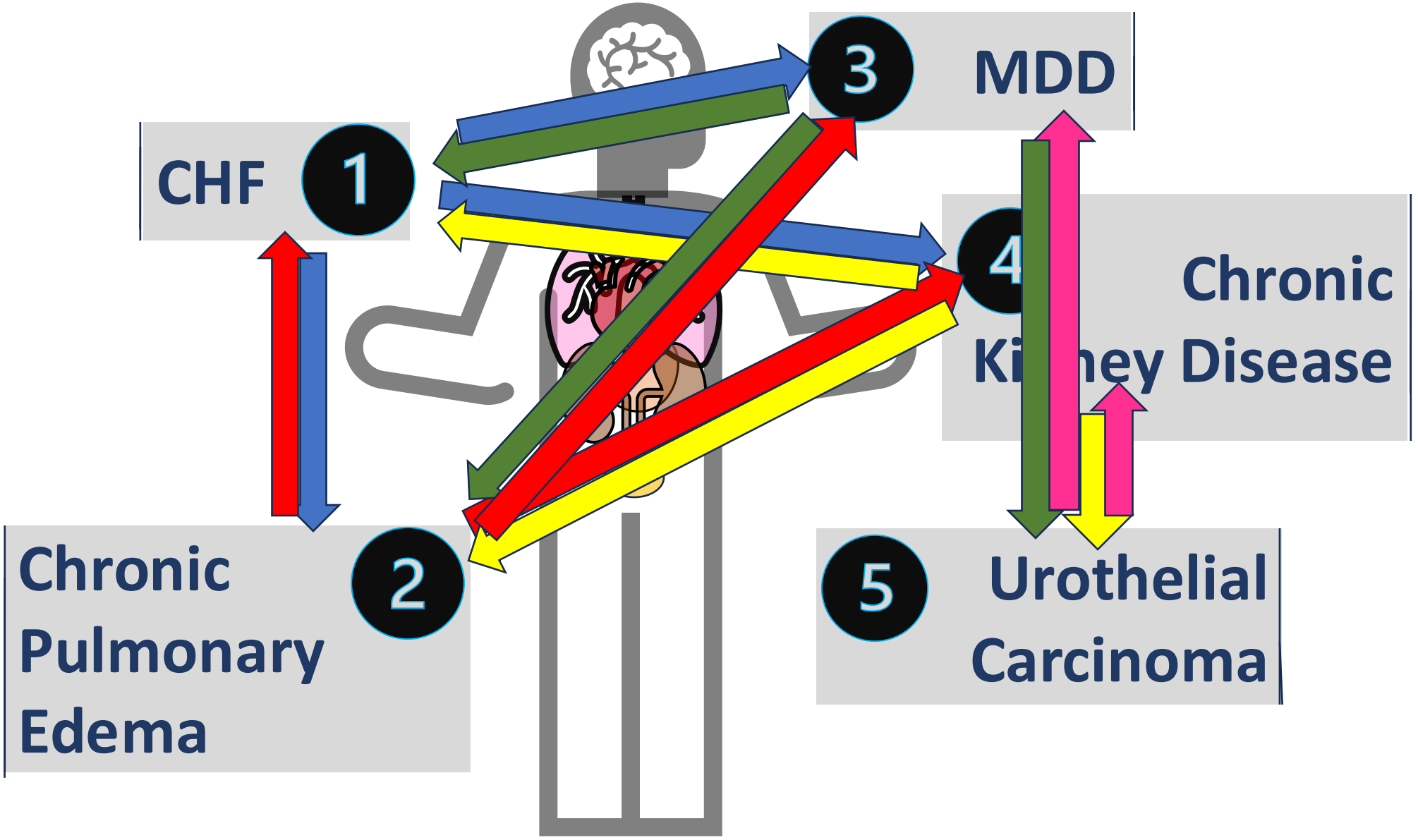
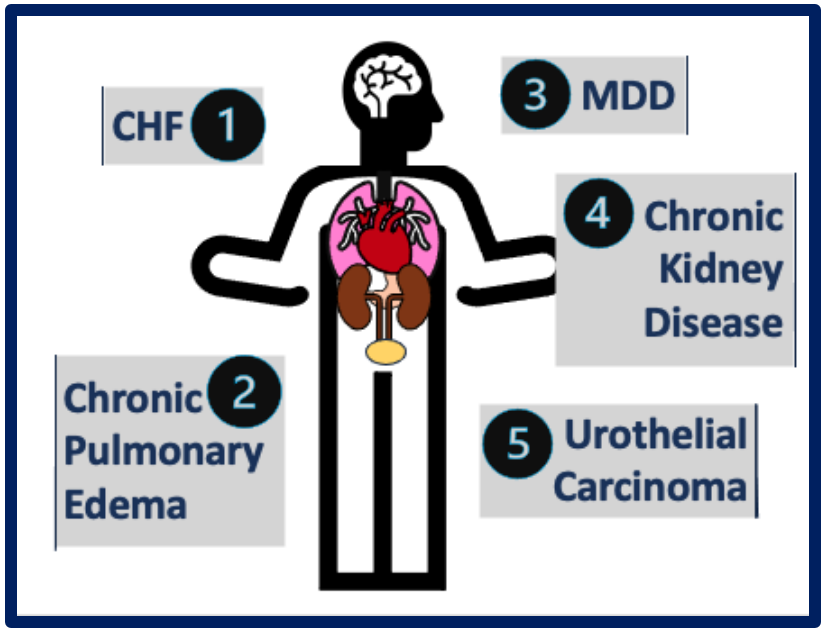


Preventing Chronic Disease Eliminating obstacles to Healthy Living



Preventing Chronic Disease Eliminating obstacles to Healthy Living





Patient Outcomes

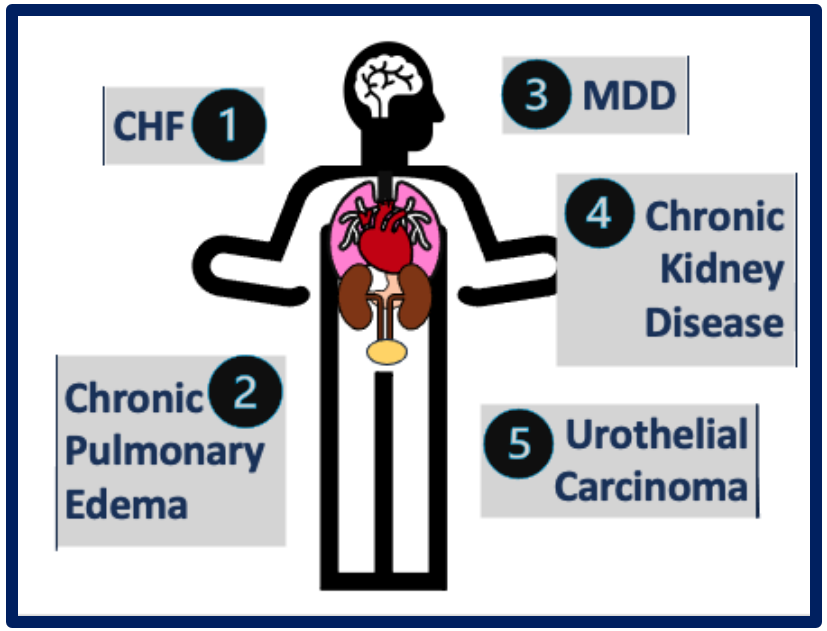
Poor Subjective Experience	+ Infection Risk	- Emotional wellbeing
+ Risk of Social Isolation	++ Economic cost of Care	- Income
+ Injury Risk	+ Disability Risk	+ Reliance on Social Support

Preventing Chronic Disease Eliminating obstacles to Healthy Living

Public Health Outcomes

- Quality Adjusted Life Year	+ Medically vulnerable population	+ Cost of Care
+ Cost of healthcare coverage	+ Strain on existing resources	+ Healthcare staff burnout
+ Emergency Dept. Use	+ Specialist Use	+ Strain on Social Services

Preventing Chronic Disease Eliminating obstacles to Healthy Living

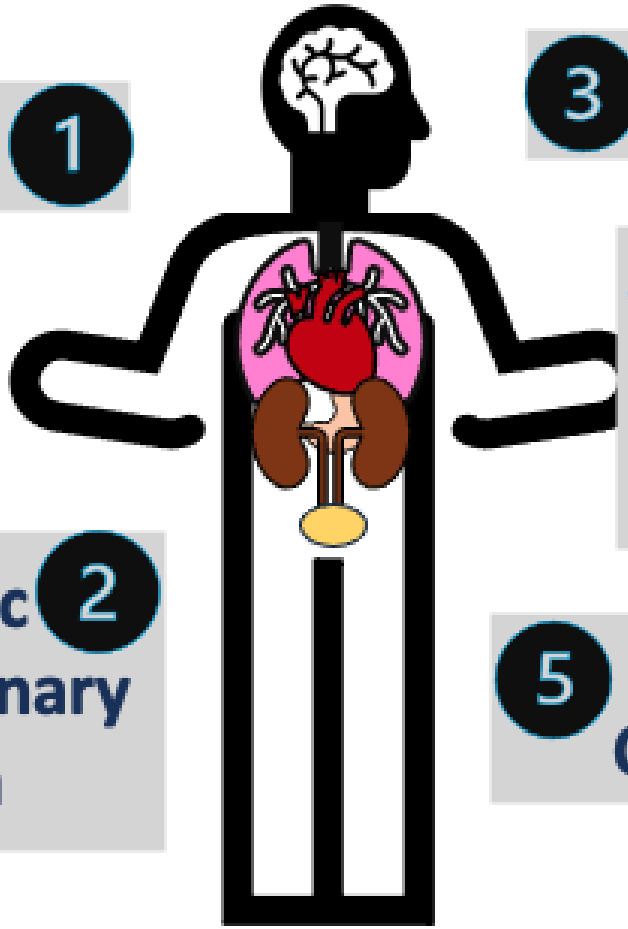


Link to resource: [Healthy People 2030]

Preventing Chronic Disease Eliminating obstacles to Healthy Living

Mr. Jones is HUD-assisted and risks loosing his voucher if he misses his rent

Mr. Jones works as a contractor, and lacks employer health and disability benefits



1 CHF

2 Chronic Pulmonary Edema

3 MDD

4 Chronic Kidney Disease

5 Urothelial Carcinoma

Mr. Jones is unable to attend usual social events and visit family/friends due to his health

Mr. Jones has a High School education and has struggled to retrain for new jobs

Mr. Jones is unable to work and depends on his SS disability for income

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Preventing Chronic Disease Eliminating obstacles to Healthy Living

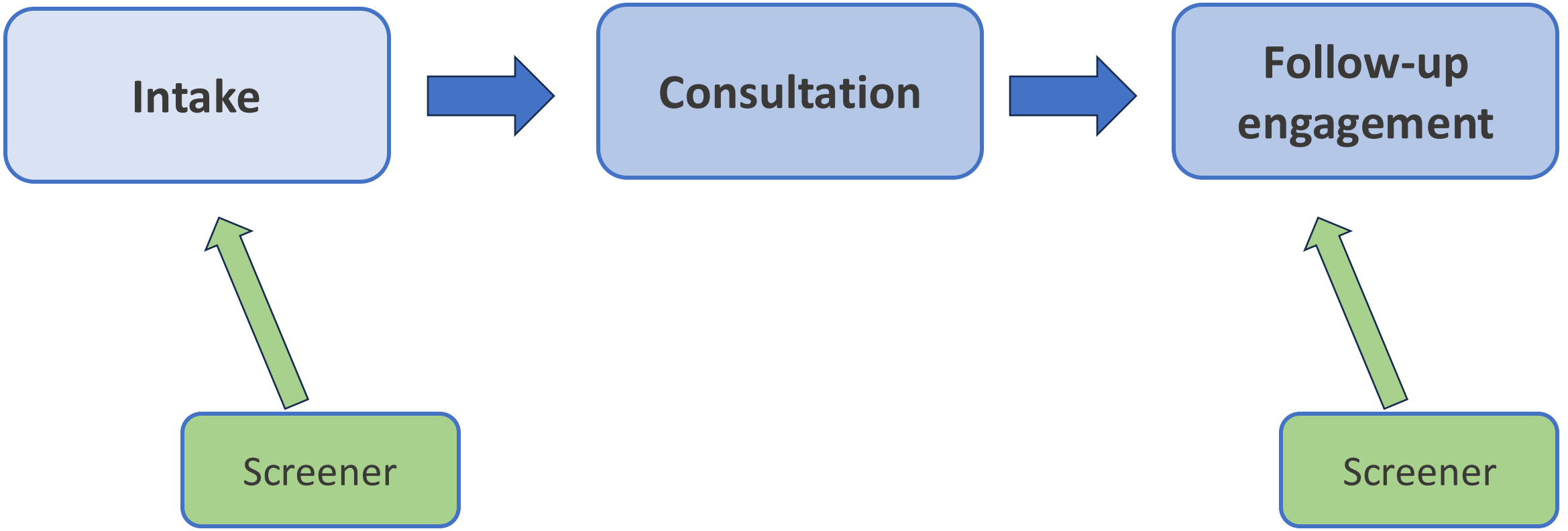
Please take a moment to type your response to the following:

Analysis of Health Center data indicates that **456** of your **3,999** patients have **5 or more chronic conditions**.

The national rate is 8.7%

If any, what steps can be taken to improve this issue in your patient population?

The use of SDOH Screening tools: Application



Case Study: Continuity of Care to Support Behavioral Health

Intake

- *Relationship building Screening*
- *Networking.*

Goal Setting

- *Goals set during SDOH Screening.*

Follow-up engagement

- *Keeping focus on goals.*
- *Encouragement and networking.*

Navigation

- *Relationship building, Screening*
- *Networking.*

Coaching

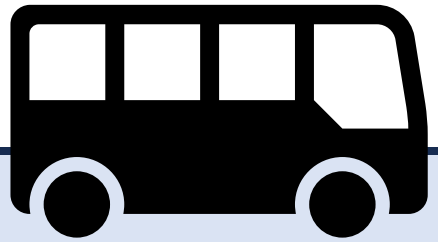
- *Relationship building Screening*
- *Goal achievement.*

Case Closure

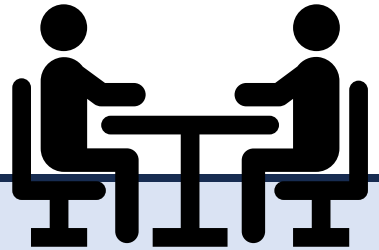
- *Closure when all goals are achieved.*

Promising Practices for Supporting Patients with Chronic Disease

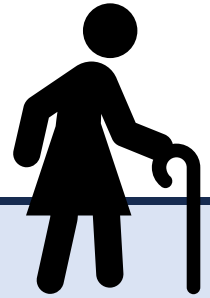
Health Centers utilize a variety of promising practices to support better outcomes in patients with chronic conditions



Investing in transportation access is among the most cost-effective interventions used by Health Centers



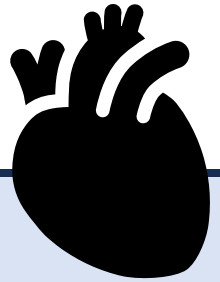
Many Health Centers have pursued partnerships with local organizations as a cost-effective manner of improving nutrition access



Home safety checks are utilized to lower fall risk for older adults who experience disability and/or chronic disease.

Home Visitation Services Utilized by Health Centers

Health Centers Utilize Home Visitation to improve patient and community health in a variety of areas



FQHCs have utilized CHWs and LPNs to perform home visit follow-ups for newly diagnosed Congestive Heart Failure

Nurse-led home visits are used by Health Centers to improve Hypertension self-management in older adults.

Long-acting Injectable antipsychotics are associated with a 71% of hospital admissions. Health Centers utilize RNs and advanced providers to provide these via home-visit.

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Home visitation and telehealth services at FQHCs and PHPC Grantees

n (weighted) = 27,224,243	All other FQHCs (%)	95% CI	PHPC's (%)	95% CI	*p*
Patients who receive home visit in past 12 months	**2.6**	**1.9-3.5**	**6.50**	**3.0-13.7**	**0.01**
Patients who ever received home safety consult	9.3	0.83-10.1	13.8	6.7-26.2	0.72
Patients receive Telehealth appointment in past 12 months	38.3	31.5-45.6	38.3	28.5-49.2	0.9
Patients who receive more than 5 telehealth appointments in past 12 months	7.4	4.8-11.2	14.7	7.6-26.5	0.05

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Practice Recommendations: UDS Data

What the data tells us:

FQHCs

2.6%

CI: 1.9-3.5

PHPCs

6.5%

CI: 3.0-13.7

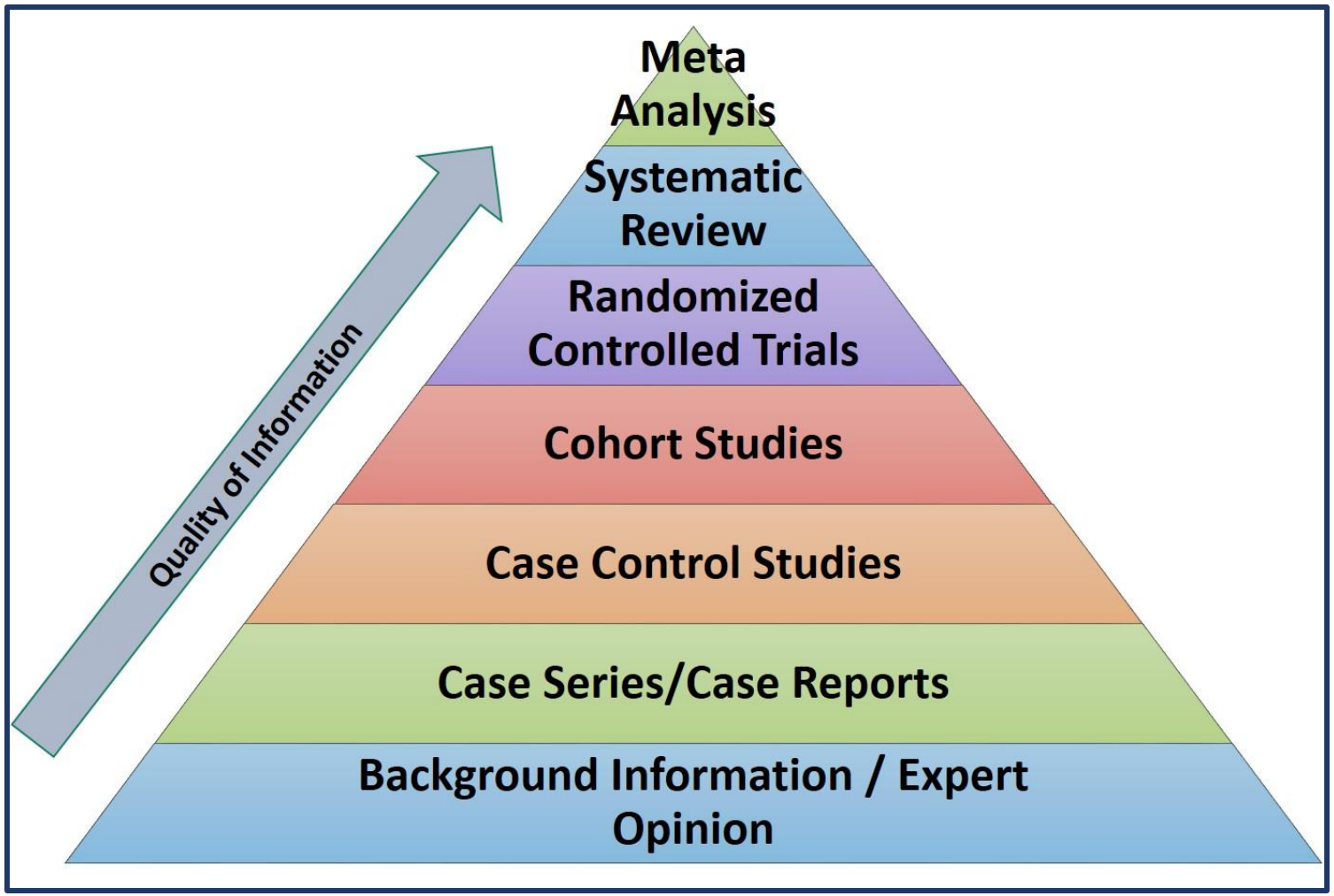
Patients of PHPCs are **2.5 times as likely** to have received a home visit by their Health Center than those from other FQHCs.

Program interventions:

Residents of Public Housing are more reliant on home visit than other demographics

For PHPCs home visits offer unique opportunities to reach patients

Link to Resource: [2022 Health Center Patient Survey]



Link to resource: [Evidence Pyramid]

Promising Practices: Program Support

A systematic review of interventions to minimize transportation barriers among people with chronic diseases

Laura E. Starbird, PhD, RN, Caitlin DiMaina, MSN, RN, Chun-An Sun, MPhil, RN, and Hae-Ra Han, PhD, RN, FAAN

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The publisher's final edited version of this article is available at J Community Health

Abstract Go to:

Transportation is an important social determinant of health. Transportation barriers disproportionately affect the most vulnerable groups of society who carry the highest burden of chronic diseases; therefore, it is critical to identify interventions that improve access to transportation. We synthesized evidence concerning the types and impact of interventions that address transportation to chronic care management. A systematic literature search of peer-reviewed studies that include an intervention with a transportation component was performed using three electronic databases —PubMed, EMBASE, and CINAHL—along with a hand-search. We screened 478 unique titles and abstracts. Two reviewers independently evaluated 41 full-text articles and 10 studies met eligibility criteria for inclusion. The transportation interventions included one or more of the following: providing bus passes (n=5), taxi/transport vouchers or reimbursement (n=3), arranging or connecting participants to transportation (n=2), and a free shuttle service (n=1). Transportation support was offered within multi-component interventions including counseling, care coordination, education, financial incentives, motivational interviewing, and navigation

Link to resource

Investing in Transportation has the following impact on community health:

- Improvements in cancer screening rates.
- Improvements in chronic disease management.
- Increased linkages to care.
- Improved maternal empathy.

The magnitude of the relationships were increased in medically vulnerable populations

Case Study: Supporting Patients with Chronic Disease

Mrs. Caputa is a 47 year-old man who presents for a wellness exam. His last exam was in 2020. He has a past medical history of hypertension, hyperlipidemia, CHF and T2DM. The patient has a behavioral health history of Major Depressive Disorder (MDD), and Generalized Anxiety Disorder (GAD).

The patient undergoes a standard intake, including vitals and an SDOH screener. The results are as follows:

BP: 178/98
HR: 78
RR: 26

A review of Mrs. Caputa's medical records indicates the following:

Vitals (2020):
BP: 138/98
HR: 60
RR: 18

Results (2020):
HbA1c: 7.0
Drug Screen: Pan-negative

Prescribed Medications:
- Metformin,
- Chlorothiazide
- Citalopram (Celexa)

The results of Mr. Rossi' SDOH screener reveal the following:

Appendix

WellRx Questionnaire

DOB_____ Male___ Female _____

WellRx Questions

---

1. In the past 2 months, did you or others you live with eat smaller meals or skip meals because you didn't have money for food?

☑ Yes ☐ No

2. Are you homeless or worried that you might be in the future?

☑ Yes ☐ No

3. Do you have trouble paying for your utilities (gas, electricity, phone)?

☐ Yes ☑ No

4. Do you have trouble finding or paying for a ride?

☑ Yes ☐ No

5. Do you need daycare, or better daycare, for your kids?

☑ Yes ☐ No

Link: To Resource

National Center for Health in Public Housing

_____ Yes _____ No

6. Are you unemployed or without regular income?

☑ Yes _____ No

7. Do you need help finding a better job?

☑ Yes _____ No

8. Do you need help getting more education?

_____ Yes ☑ No

9. Are you concerned about someone in your home using drugs or alcohol?

_____ Yes ☑ No

10. Do you feel unsafe in your daily life?

_____ Yes ☑ No

11. Is anyone in your home threatening or abusing you?

_____ Yes ☑ No

Link: To Resource

National Center for Health in Public Housing

Case Study: Supporting Patients with Chronic Disease

Mrs. Caputa is seen in her exam room by her provider, who does a full examination and focused interview. The following information was provided by **Mrs. Caputa** on her SDOH screen/focused exam:

- **Mrs. Caputa is a single mother of two (13F, 18M) she receives $750/month child support.**
- **Mrs. Caputa was diagnosed with CHF in an outside facility in 2022.**
- **She struggles to pay for her medication, is not sure of her whole lists of medications and has missed multiple cardiologist appointments since 2022.**
- **Mrs. Caputa previously worked 30 hrs/weeks as a convenience store clerk until 2022 but has steadily cut down hours due to inability to stand due to swelling in her feet.**
- **Mrs. Caputa uses your states Medicaid insurance**

Mrs. Caputa is provided with samples of medication for her chronic conditions and provided with follow-up and specialists appointments.

The provider also requests a referral to social services for SDOH support due to Mrs. Caputa's SDOH screener.

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Case Study: Supporting Patients with Chronic Disease

Please take a moment to type your response to the following:

Social work refers Mrs. Caputa to a Community Health Worker (CHW) for navigation.

What sorts of SDOH resources should the CHW consider for Mrs. Caputa?

Q&A Session

Complete our Post Evaluation Survey

National Center for Health in Public Housing

Contact us

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703-812-8822

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Thank you!