



**NATIONAL  
NURSE-LED CARE  
CONSORTIUM**  
a PHMC affiliate

AN EVALUATION BY  
**NATIONAL NURSE-LED  
CARE CONSORTIUM**

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# **Project Evaluation: Viral Hepatitis Clinical Rotation**

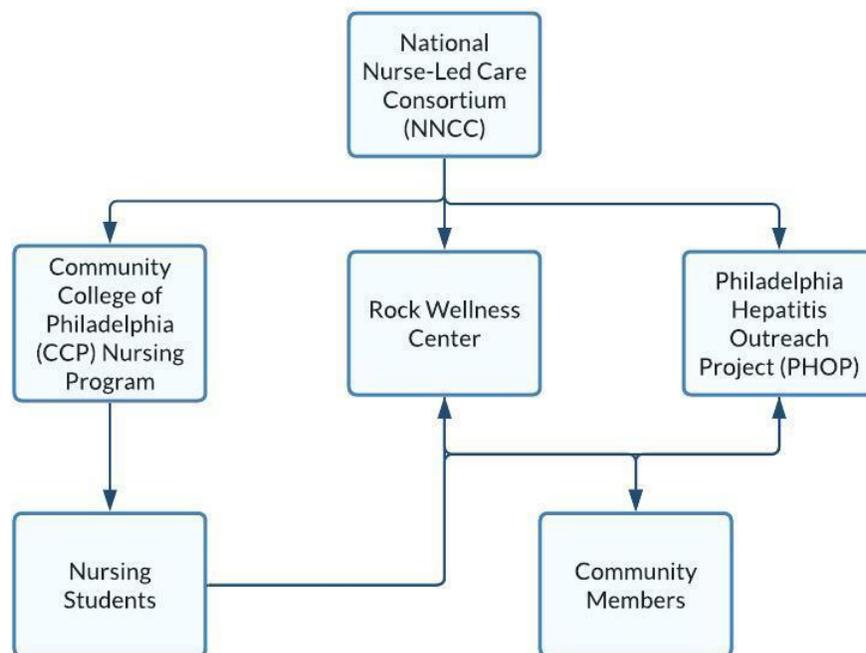
In partnership with the Community College of Philadelphia Nursing Program, the Philadelphia Hepatitis Outreach Project, and Rock Wellness Center

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## I. Purpose of the Evaluation

The purpose of this evaluation is to provide information to the National Nurse-Led Care Consortium (NNCC) and involved stakeholders regarding the implementation and outcomes associated with the Community College of Philadelphia (CCP) Community Clinical Rotation in partnership with the Philadelphia Hepatitis Outreach Project (PHOP). To properly leverage these stakeholder relationships, a stakeholder specialization tree was completed to assess the influences and impacts of these roles within the scope of the project's vision (Figure 1). Findings that arise from this project evaluation will support data-driven decision-making, quality improvement efforts, and accountability to stakeholders. Analyses and interpretation of results will lead to conclusions about program effectiveness and recommendations for consideration to guide program sustainability and expansion.

Figure 1: Stakeholders Specialization Tree



## II. Program Description

### a. Need or Issue Addressed

The program was designed to address the prevalence rates of hepatitis B virus (HBV) and hepatitis C virus (HCV) in Philadelphia, PA, specifically through outreach, education, and screening services. Further, the program recognizes and seeks to address health care disparities within the community by providing referrals to Public Health Management Corporation's (PHMC) five federally qualified health centers (FQHCs) and partnering with medical-assisted treatment (MAT) services. Since the beginning of the COVID-19 stay-at-home order, Philadelphia's residents have been afflicted with higher rates of drug overdoses, increases in the opioid epidemic, and the spread of infectious diseases.<sup>1</sup> Particularly within North Philadelphia and West Philadelphia,

substance use disorder and drug overdoses exhibited a significant increase during the pandemic, particularly among Black and Latinx Philadelphians.<sup>1</sup> According to Williams et al. in the Journal of Substance Use Treatment, social determinants of health play a role in deciphering the health outcome of those positively diagnosed with HBV and/or HCV due to education level, poverty, socioeconomic status, social support, and employment.<sup>2</sup> Barriers associated with substance use disorder characteristics are positively correlated with HBV and HCV access to care due to ineffective resource allocation along with social, behavioral, and environmental factors.<sup>2</sup>

#### **b. Program Goals and Objectives**

**Program Goal:** Improve Viral Hepatitis Health Outcomes Among Adult Residents of Philadelphia, Pennsylvania  
**Program Objective(s):** Community Outreach and Clinical Activities (Figure 2)

#### **c. Major Program Interventions/Activities**

In partnership with the CCP Nursing Program, NNCC implemented a community clinical rotation hosted by community organizations, namely, PHOP and the Rock Wellness Center. Incorporating preceptor goals, the clinical rotation has two main intervention strategies: expand outreach services and infectious disease health education to high-risk community members and provide access to HIV/HCV/HBV screening services to participants. Within this rotation, students will have the opportunity to conduct Outreach, Forms, Vital signs, Referrals, and Screening, defined as OFVRS, within the Kensington community (Figure 2). The goal of this diagram is to inform nursing students of their roles and responsibilities within the various activities they'll work to complete.

### **III. Evaluation Overview**

#### **a. Summary of the Program**

Assessing the health needs of community members within the Kensington area is essential in designing and implementing health promotion programs and outreach opportunities. In order to comprehensively incorporate harm reduction practices, a PRECEDE-PROCEED model was utilized to consider the social, epidemiological, environmental, ecological, and administrative components (Figure 3). As this framework suggests, a number of social determinants impact the quality of health of community members in Kensington, including: environmental contaminants, inadequate health care, homelessness, high-risk sexual behaviors, altered social functioning, and limited resources, all of which inform the increases in infectious disease outbreaks and substance use disorders.

At the time the pilot clinical rotation project was launched, the 2019 Viral Hepatitis Surveillance Report data demonstrated a 79.8% increase in estimated HCV acute infections from 2012 to 2019.<sup>3</sup> Within this increase, the highest rates of infection occurred in persons aged 20-39, thereby directly correlating the trending opioid epidemic with increases in viral hepatitis outbreaks.<sup>3</sup> The pilot clinical rotation project enacted in Spring 2021 projects a unique significance within public health nursing as it directly engages with high-risk community members and the increasing HCV prevalence within the United States.

In an effort to prepare CCP nursing students for a variety of professional experiences and guide their success within the field of public health nursing, NNCC and CCP collaborated to implement two rounds of 6-week community clinicals (spring and summer terms) focused on viral hepatitis among persons who inject drugs (PWIDs). Within this pilot project, two students were placed with PHOP and Rock Wellness Center to conduct 8-10 weekly clinical hours. To effectively illustrate the intended activities and results of the pilot viral hepatitis clinical rotation project, a programmatic logic model was constructed (Figure 4). In executing this project, establishing a partnership between CCP, PHOP, and Rock Wellness was an essential component in the provision

of project preceptors to successfully place students within the community and ensure proper screening infrastructure. NNCC’s Viral Hepatitis staff and AmeriCorps VISTA positions worked toward the development of educational toolkits, viral hepatitis training guides, and general quality improvement measures to prepare the recruited students for on-site activities. Throughout the 6-week clinical rotation, students conducted outreach services to expand the number of screened participants, completed pre-testing forms to decipher risk factors, collected vital sign information to gather health concerns, dispensed health care resources, and assisted with viral hepatitis screening services (Figure 4).

The immediate accomplishments of student activities is the ongoing support for community members seeking care, the provision of a diagnostic report, and linking participants to care (Figure 4). Within the summer 6-week rotation, NNCC had collaborated with PHMC FQHCs and PHOP to decipher streamlined linkage to care methodology for program participants, attempting to directly improve the HCV cascade of care model. By expanding the clinical rotation pilot project, increasing the number of high-risk community members referred to PHMC FQHCs, and increasing the number of participants retained in care, we hope to not only reduce the HCV/HBV prevalence rate in Philadelphia but also work toward increasing access to MAT and behavioral health services (BHS) in an effort to decrease opioid use disorder (Figure 4).

**a. Evaluation Design**

The overall evaluation approach has a **qualitative data design methodology** to assess program processes and outcomes, primarily utilizing nursing student feedback. The evaluation will seek to address the following fundamental questions:

- Was the program delivered as planned/were program process objectives met?
- What were the experiences of nursing student participants?
- Were the designed activities fully utilized?
- What were the strengths and successes, opportunities for improvement, and lessons learned that can be shared to guide future clinical rotations?

**b. Evaluation Results**

A survey was distributed to each nursing student (n=4) to provide ongoing continuous quality improvement efforts to expand clinical rotations across organizations and nursing programs within Philadelphia. Survey results differ between the spring and summer rotations due to the adjustment in PHOP’s on-site placement locations. During the summer rotation, PHOP reduced the number of on-site activities at Rock Wellness Center to incorporate the New Pathways Project. New Pathways is a PHMC affiliate that serves adult men and women who are seeking addiction-related assistance while also supporting health promotion, medical assistance, skills building, and recovery services. The survey questions and responses were as follows:

Evaluation Question		Responses	
		Spring Rotation	Summer Rotation
1.	What percentage of your time is spent conducting community outreach?	• 85%	• 98%
2.	What percentage of your time is spent handing out flyers?	• 35%	• 68%
3.	What percentage of your time is spent referring participants to PHMC’s FQHCs?	• 65%	• 77.5%
4.	What percentage of your time was spent speaking with participants about their health concerns?	• 95%	• 100%

5.	What percentage of your time was spent educating community members about viral hepatitis and infectious diseases?	<ul style="list-style-type: none"> <li>• 63%</li> </ul>	<ul style="list-style-type: none"> <li>• 100%</li> </ul>
6.	What percentage of your time is spent collecting participant vital signs?	<ul style="list-style-type: none"> <li>• 92.5%</li> </ul>	<ul style="list-style-type: none"> <li>• 95%</li> </ul>
7.	What percentage of your time is spent assisting with rapid HCV & HIV screening tests?	<ul style="list-style-type: none"> <li>• 20%</li> </ul>	<ul style="list-style-type: none"> <li>• 82.5%</li> </ul>
8.	<b>Prior</b> to working with PHOP and Rock Wellness, how confident were you in the following tasks:		
a.	Engaging in conversation with community members	<ul style="list-style-type: none"> <li>• <i>Not too confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Not too confident</i></li> </ul>
b.	Providing viral hepatitis education	<ul style="list-style-type: none"> <li>• <i>Not too confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Not too confident</i></li> </ul>
c.	Providing health education resources	<ul style="list-style-type: none"> <li>• <i>Not too confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Not too confident – somewhat confident</i></li> </ul>
d.	Discussing an individual’s health concerns and referring/suggesting they be seen	<ul style="list-style-type: none"> <li>• <i>Not too confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Somewhat confident</i></li> </ul>
e.	Collecting vital signs	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Somewhat confident – very confident</i></li> </ul>
f.	Assisting in rapid screening tests	<ul style="list-style-type: none"> <li>• <i>Not at all confident – Not too confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Not at all confident – Somewhat confident</i></li> </ul>
9.	<b>After</b> completing this rotation, how confident were you in the following tasks:		
a.	Engaging in conversation with community members	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>
b.	Providing viral hepatitis education	<ul style="list-style-type: none"> <li>• <i>Somewhat confident – Very confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>
c.	Providing health education resources	<ul style="list-style-type: none"> <li>• <i>Somewhat confident – Very confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Somewhat confident – Very confident</i></li> </ul>
d.	Discussing an individual’s health concerns and referring/suggesting they be seen	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>
e.	Collecting vital signs	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>

f.	Assisting in rapid screening tests	<ul style="list-style-type: none"> <li>• <i>Somewhat confident</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Very confident</i></li> </ul>
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#### IV. Summary Interpretation of Findings

Improving viral hepatitis health outcomes among adult residents located in Philadelphia involves a variety of short-term, intermediate, and long-term goals, including: increasing the number of clinical rotations, community engagement interactions, individuals referred to PHMC FQHCs, individuals prescribed DAAs, and patients who achieve SVR, all with hopes of decreasing opioid dependencies and reducing HBV/HCV prevalence rates. While these project goals and aims are high-performing, we have a number of experiential outcomes nursing students shared in this clinical rotation that helps inform the future intentions of this work. Among the survey results, data results demonstrated an increased confidence in community engagement, providing viral hepatitis education, providing health education resources, discussing health concerns, and assisting in rapid screenings.

A thematic difference between the spring rotation (5/26/2021 – 7/01/2021) and the summer rotation (7/14/2021 – 8/19/2021) was the adjustment in PHOP’s on-site placement locations. During the summer rotation, PHOP reduced the number of on-site activities at Rock Wellness Center to incorporate the New Pathways Project – a PHMC affiliate that serves adult men and women in seeking addiction-related assistance. Based on a ≥10% difference in time spent, the following activities differ slightly between the two rotations: nursing students in the spring clinical suggested a smaller percentage of their time spent conducting community outreach (85%) compared to students in the summer clinical (98%); nursing students in the spring clinical suggested a smaller percentage of their time spent handing out flyers (35%) compared to students in the summer clinical (68%); nursing students in the spring clinical suggested a smaller percentage of their time spent referring participants to PHMC’s FQHCs (65%) compared to students in the summer clinical (77.5%); nursing students in the spring clinical suggested a smaller percentage of their time spent educating community members about viral hepatitis and infectious diseases (63%) compared to students in the summer clinical (100%); and nursing students in the spring clinical suggested a smaller percentage of their time spent assisting with rapid HCV & HIV screening tests (20%) compared to students in the summer clinical (82.5%).

While many of these indicators are subjective experiences, it’s critical to evaluate these two terms to identify any discrepancies in provided services. To better facilitate this effort moving forward, two components should be integrated for quality improvement purposes: 1) the incorporation of bi-weekly meetings between NNCC and outreach preceptors (PHOP and Rock Wellness), and; 2) the establishment of a data management collection system. Facilitating bi-weekly meetings between NNCC (host organization) and outreach organization preceptors (PHOP and Rock Wellness) will be helpful in deciphering project updates, ensuring student activities are appropriately tracked and monitored, and streamlining nursing program involvement upon expansion. Furthermore, the development of a data management system will assist in tracking HCV/HBV screens, test results, follow-up and linkage to care opportunities, participant referrals to PHMC FQHCs, and risk and demographic information, all of which can be utilized in streamlining workflow to track rotation activities while simultaneously ensuring positive participants are linked to care.

#### V. Recommendations

- Facilitate a bi-weekly meeting between NNCC (host organization) and outreach organization preceptors (PHOP and Rock Wellness) to ensure constant communication, applicable activities, and regular updates
- Devise a data management collection system to determine risk and demographic factors and track measurable components (referrals to PHMC FQHCs, HCV/HBV screens, test results, and participants that need further assistance to be linked to care)

- Inclusion of HCV/HBV virtual presentation to nursing students prior to on-site activities
- Introduce HBV screening tests and protocol system
  - Change the language of the liability waiver forms to include HBV
  - Communicate protocols of introducing test
  - Create system for feedback (survey, check-in, etc)
- Ensure streamlined linkage to care process is successful (e.g. – the relationship between PHMC’s Patient Navigators and PHOP preceptors) and provide additional streamlining assistance as needed
- Establish SMART goals for future clinical rotations
- Expand nursing programs to include different community outreach organizations, MAT services, and health centers to better facilitate comprehensive linkage to care

## References

1. City of Philadelphia. (2021, April). *Philadelphia Opioid Response - 2021 Action Plan*. Philadelphia Department of Public Health.
2. Williams, N., Bossert, N., & Chen, Y. (2019, July). *Influence of social determinants of health and substance use characteristics on persons who use drugs pursuit of care for hepatitis C virus infection*. [https://www.journalofsubstanceabusetreatment.com/article/S0740-5472\(18\)30634-2/pdf#relatedArticles](https://www.journalofsubstanceabusetreatment.com/article/S0740-5472(18)30634-2/pdf#relatedArticles).
3. Centers for Disease Control and Prevention (CDC). *Viral Hepatitis Surveillance 2019*. Atlanta: U.S. Department of Health and Human Services; 2021.

Figure 2: OFVRS Diagram



**Outreach**

Community Outreach

- Increase advertisements among local community members
- Expand outreach & testing hours to accommodate nursing student internship requirements



**Forms**

PHOP Questionnaire

- Complete PHOP questionnaire already in place
  - Demographic Information
  - Risk factors
  - Insurance
  - Immunization
  - Tattoos
  - Incarceration
  - Consent Forms
  - STD testings



**Vital Signs**

Gather signs and symptoms

- Gather symptoms/health concerns of participants to support them in seeking care
- Check the 5 primary vital signs of interested participants (temperature, heart rate, blood pressure, respiratory rate, SpO2).



**Referral**

Provide health care resources

- Provide PHMC FQHC flyers and information to ALL participants
- Provide linkage to care to positive participants
- Provide follow-up phone calls and appointment scheduling assistance

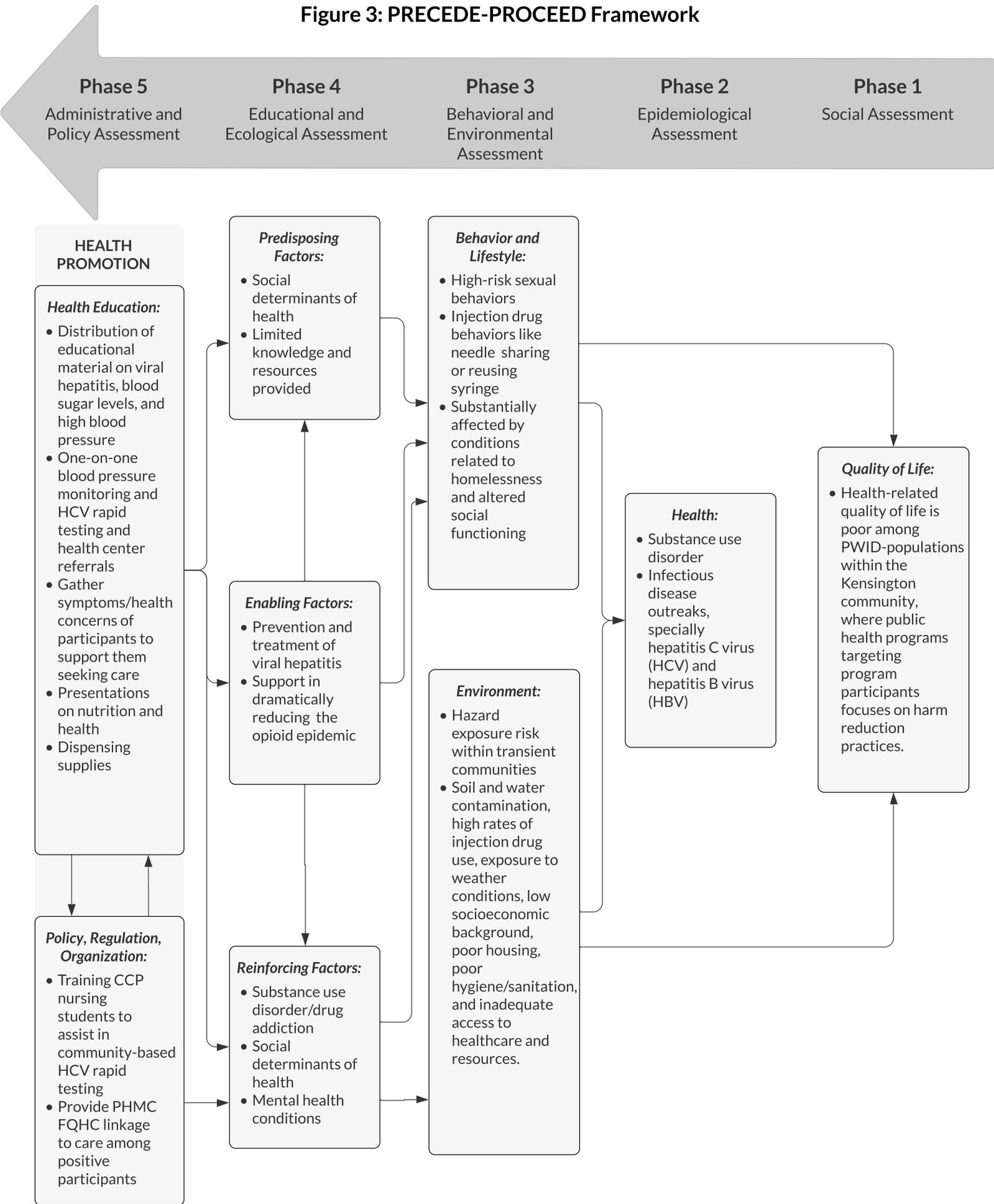


**Screening**

Rapid tests and HBV blood draw

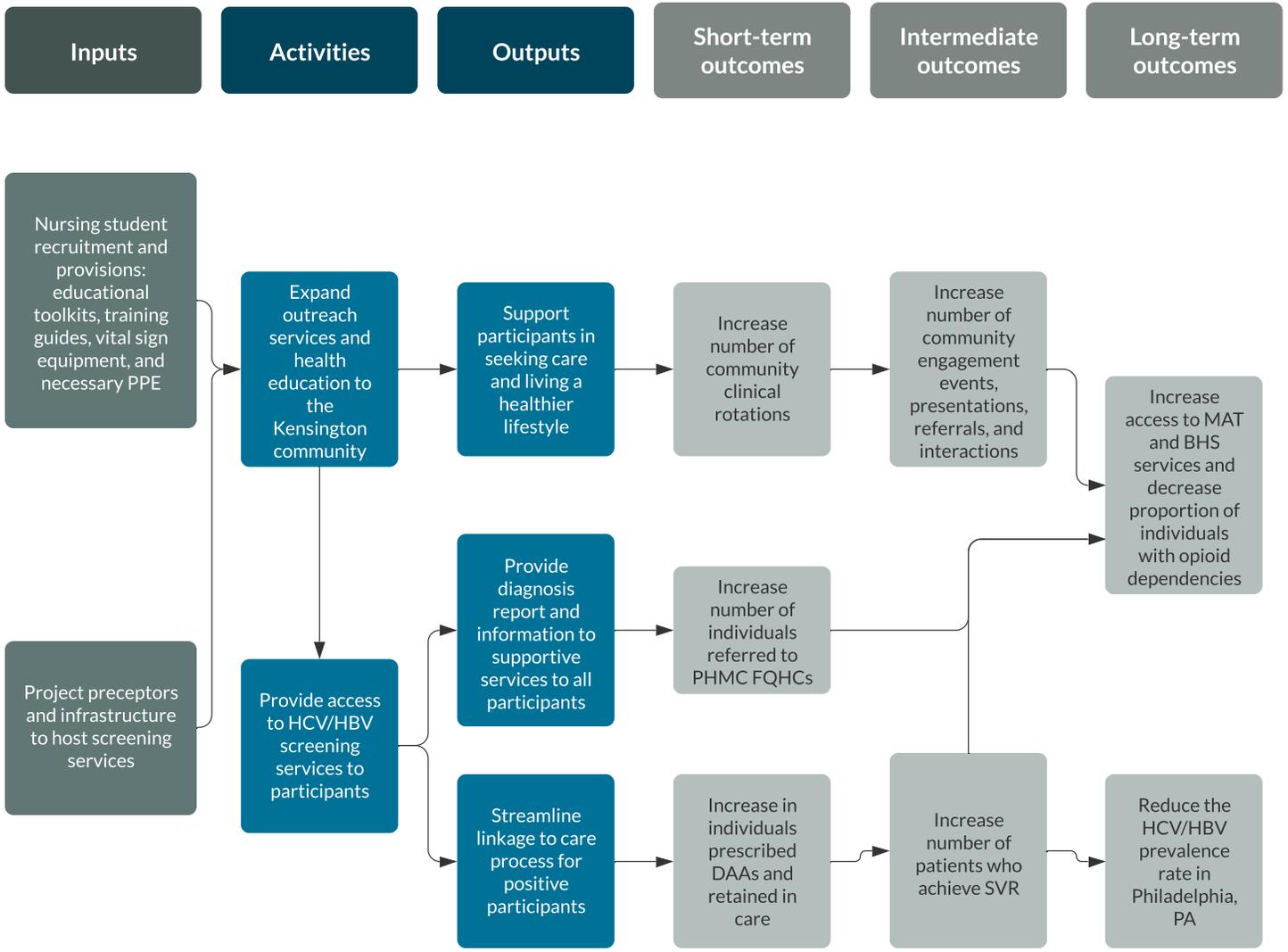
- HCV rapid test offered with confirmatory blood test if HCV+
- Blood sugar screenings
- Rapid HIV screenings, upon availability

**Figure 3: PRECEDE-PROCEED Framework**



**Figure 4: Logic Model**

CCP Viral Hepatitis Clinical Rotation | October 2021



**Assumptions:** Current processes don't meet the full needs of this high-risk community. Furthermore, a disproportionate low number of community health workers versus high-risk persons further complicates the model.

**Contextual factors:** The cascade of care in achieving sustained virologic response (SVR) is a difficult measure to achieve due to residential challenges, lack of awareness, and unequitable policy measures resulting in innumerable obstacles in receiving treatment.