

UNIVERSITY of HOUSTON

COLLEGE of NURSING HEALTH CLINIC



Humana Report – Phase 1 July 2020-April 2022

This report presents the activities conducted during Phase 1 for the University of Houston College of Nursing Health Clinic (referred to as the Nurse Managed Telehealth Clinic in the original grant request to Humana). The report will focus on activities supported by the Humana seed funding, which provided the infrastructure for the establishment of the clinic and its opening on September 2021.

The activities include:

- Establishing infrastructure
- Implementation of clinic services
- Baseline assessment of client population from September 2021 through January 2022

Background

The 2020 annual point in time count, organized by the Coalition of Homeless Houston, recorded 3,567 homeless residents in Harris County, making up the bulk of the Houston area homeless population (Impact, 2020). Homelessness is closely connected to declines in physical and mental health, and high rates of chronic illnesses and communicable diseases (American Psychological Association, Nd). Homeless people have higher rates of illness and die on average 12 years sooner than the general U. S. population (National Healthcare for Homeless Council, 2019). Expanding access to healthcare and preventive services is crucial in improving population health and reducing healthcare disparities among the homeless.

The University of Houston College of Nursing (UHCON) Health Clinic opened in September of 2021 to provide primary care services for people who have limited or intermittent access to health care in a traditional setting because they lack health insurance, have limited ability to pay, or are experiencing

homelessness. The Clinic has been a part of the strategic plan of the College of Nursing for five years, reflecting its commitment to serving the Houston community. The UHCON Health Clinic aims to improve health outcomes and quality of life for vulnerable populations and to provide the next generation of healthcare providers, particularly nurses, with clinical experiences that allow them to understand the social determinants of health (SDOH) and how to address the healthcare needs of the people the clinic serves.

The UH College of Nursing Health Clinic is supported by a community partnership with the Emergency Aid Coalition (EAC) and St. Paul's United Methodist Church (SPUMC), in Midtown Houston, and several corporate and private funders. The UHCON Health Clinic is adjacent to the EAC in Midtown Houston, at the Abraham Station, in space owned and operated by SPUMC.

An important aspect for the UHCON Health Clinic's effectiveness and sustainability is a comprehensive and continued program evaluation. By capturing data on its services and clients, the UHCON Health Clinic tests an innovative model of care for the underserved, which can inform and improve future efforts that can be replicated wherever a need exists. The baseline assessment, funded by a grant from the Provost office, is the first step in gaining knowledge about the clinic's services and client population.

Goals

1. To create a nurse managed health clinic at a social services delivery location (Emergency Aid Coalition – EAC), which will provide primary care services for homeless persons with limited or intermittent access to health care in a traditional setting.
2. To provide inter-professional clinical education for nursing, medical, optometry, social work and pharmacy students from an integrated health care model and team-based approach.

Project Activities

1. Planning and establishment of the UH College of Nursing Health Clinic

The formal planning stages of the clinic lasted through August 2021. After informal discussions over two years between Rev. Andrew Wolfe for St. Paul's UMC and Dr. Shainy Varghese, University of Houston Nursing faculty and clinic director, several steps were taken to create the legal and operational infrastructure for the establishment of the UH College of Nursing Health Clinic. **Humana was an early partner** from Spring 2020, through a Charter established with UH College of Nursing, its project period extending through December 2022. Humana's funding was critical to provide furnishings, equipment and services needed to outfit, open and run the clinic over its first 2 years of operations. Funding from the *Texas Methodist Foundation* and the *Hawkins' Family Foundation* supported clinic staffing costs and the program evaluation, allowing the **clinic to open for service September 15 of 2021.**

The major features of planning and establishment of the UHCON Health Clinic are outlined in Table 1. This process was arduous and complex, involving many steps and activities on multiple fronts. Dr. Shainy Varghese, UHCON Associate Professor and Clinic Director led this process on the UH side, supported by the Provost Office, UHCON Dean Kathryn Tart, the Director of Development, LaDawn Fletcher, Program Evaluation Director, Dr. Teresa McIntyre, and Dr. Andrea Brooks (IPE Coordinator). Numerous other UHCON staff supported this initiative such as UHCON administration (Samer Shammam) and IT (Cesar Banda). Rev. Andrew Wolfe led this process on the UMC side, and Jean Evans (EAC Director) for EAC. **The legal framework** was developed from a collaboration between the University of Houston's General

Counsel, Risk Management, UH College of Nursing leadership, and St. Paul’s UMC Board. The UH Counsel and Risk Management teams also addressed liability issues and insurance needs for both UH Clinic and UMC. This process took several months until an agreement was reached, resulting in a **lease agreement with St. Paul’s UMC in the Spring of 2021. Operational procedures** for the clinic and its premises, as well as articulation with the EAC and UMC were also developed, and approved by the UH General Counsel and clinic partners (e.g. scheduling, staff procedural manual, security, patient recruitment from EAC, signage).

At the same time, UHCON Nursing was **establishing the clinic infrastructure** by purchasing the necessary equipment and procuring needed support services for clinic operations (e.g. security, IT, cleaning/disinfection, waste management, laboratory, pharmacy, etc.). **Humana funding** supported the purchase of clinic furniture (e.g. patient examination room, office furniture, privacy blinds), clinical equipment (e.g. telehealth equipment, ophthalmoscope, blood pressure monitoring equipment, freezer), and medical supplies. Several needed services were also contracted and supported by Humana, such as telehealth training, internet/phone services, data storage, and electronic health record system. Other clinical support services were supported by other funding, including laboratory services and onsite pharmacy prescription filling.

Table 1. Planning and Establishment of the UH College of Nursing Health Clinic

Activities	Items	Status
Infra-structure	Furniture Organization of clinic space Electrical and UH electronic set-up	Completed Humana funding
Legal	Lease agreement with St. Paul’s UMC MOU with Emergency Aid Coalition Liability Insurance Clinic Forms Approval by UH General Counsel HIPPA Training	Completed
Equipment	Medical equipment Office equipment	Completed Humana funding
Immunization	Refrigerator and Freezer	Purchased Humana funding
Telehealth	AMD Global Telehealth Equipment	Purchased and training completed Humana funding
Supplies	Medical supplies Office supplies	Purchased Humana funding
Services		
Communication	ComCast E-mail Phone number Website	Established Humana funding
Other services	Cleaning Service Medical Waste Management Security	Established
Medical records	Practice Fusion - Electronic Health Record	Purchased and being used Humana funding
Pharmacy Services	Pro-script America – On site delivery of medications	Established
Laboratory Services	CLIA Waived tests: Flu, COVID-19 Rapid antigen tests, Strep test, Urine Analysis Quest Diagnostics – Specimen pick up from the clinic	Established

Clinic Staffing	Collaborating Physician Nurse Practitioner Provider Registered Nurse Receptionist	Completed
	Mental Health Provider Medical Assistant Administrative Billing	To be completed Fall 2022
Operations	Policy and Procedure Manual	Completed
Medicaid/Medicare enrollment	Establishing clinic for credentialing with Medicaid/Medicare	In process
	Clinic Opening	September 13, 2021

Procuring and vetting the needed **clinical staff** was key to providing quality and culturally sensitive services. The collaborating physician is Dr. David Buck, Associate Dean and faculty at the UH College of Medicine, an experienced clinician and reference in serving underserved populations. During the summer of 2021, the nurse practitioner, nurse, and receptionist—were hired and trained, a mock run of the clinic having been conducted prior to its opening. As a result of this process and activities, **the clinic opened for service on September 13, 2021.**

The UHCON Health Clinic’s Advisory Board has been a constant presence in the establishment of the UHCON Health Clinic and its successful development. Chaired by Rev. Wolfe, the board includes the director of the EAC (Jean Evans), three additional members of the UMC (Dr. Mike Mann; Dave Morris; Donna Meyers), and four members of the UH College of Nursing (Dean K. Tart, Dr. S. Varghese, Dr. T. McIntyre, LaDawn Fletcher, and Dr. Simi Varghese). The board has been instrumental in advising on clinic’s development and funding.

2. Providing primary care services for the homeless and working poor in Midtown Houston

The primary goal of the UHCON Health Clinic is to provide healthcare to people experiencing homelessness, or who are uninsured and cannot otherwise afford to access care in traditional healthcare settings. Funding for the 1st year of operations permitted services to be offered one day per week. The one day per week schedule also allowed clinic staff to refine clinic operating procedures. **The clinic will expand its services to 2 days per week, starting August 1st 2022,** which will increase continuity of care and assist a higher number of clients.

Primary Care Services. Services are provided for acute and chronic conditions, such as diabetes and high blood pressure, that when managed lead to better health outcomes and reduced emergency care visits and expenses. The clinic also provides preventive services such as vision screening, and screening/referral to mental health services. Telehealth is an innovative component of the Clinic, which is supported by equipment purchased with Humana funding. The clinic staff has completed training on its use. Telehealth services are scheduled to start in Fall 2022, beginning with mental health services. Compliance with treatment and medication will also be monitored using a telemedicine app and/or with follow-up visits.

The purpose of the UH College of Nursing Health Clinic is to provide health care to residents of Midtown, Houston who are experiencing homelessness or housing instability, using traditional and telehealth modalities and an integrated model of care that is sensitive to the social determinants of health.

A summary of services provided through January 31st, 2022 is presented in Tables 1 and 2. A total of 61 appointments and 42 visits were completed; 36 were new patients and 25 were follow-up visits. Patient flow has increased substantially since this baseline data, program evaluation data in the summer-fall of 2022 being able to document the growth of clinic services.

Table 1. Services offered

Table 2. Services Provided (9/13/21 – 1/31/22)

Wellness exams		Chronic Disease management	Services Provided	<i>n</i>	%
Sick visits	Referrals		New patients	36	59%
Mental health screening	Vaccinations		Follow up Visits	25	41%
Well women exams	Blood Pressure Clinics at EAC		Total	61	100%
Lab Testing	Assistance with finding healthcare resources		Visits completed	42	68.9%
Vision and hearing screening	Medication Management/Assistance		Cancelled	13	21.3%
			No-show	6	9.8%

Prescriptions, Laboratory and Other Services. Table 3 presents data on referrals, prescriptions filled, and discharge recommendations issued during the baseline report period.

- *Prescriptions:* The clinic has an agreement with a pharmacy that delivers to the site when the patient is seen, allowing him or her to have their medication in hand when they leave the Clinic. Removal of the barrier of acquiring the meds is expected to increase the likelihood that the medication will be taken. Nineteen prescriptions were filled and delivered by the pharmacy.
- *Laboratory services:* The Clinic performs Clinical Laboratory Improvement Amendments (CLIA) waived diagnostic testing including CLIP COVID-19 tests as needed. Quest Lab performs the lab work for the clinic. Lab reports are sent to the clinic through Electronic Health Records and the provider follows up with the lab report. Eight labs were completed during the report period.
- *Referrals:* There were a total of 23 referrals—8 patients referred to lab testing, 13 referred to a specialist, 1 to the ER, and 1 for a diagnostic exam. Lifestyle recommendations (e.g. alcohol, smoking, diet, exercise) were given to 18 patients. Not having insurance or a county issued public health benefits Gold Card is limiting available referral services (see challenges).
- *Mental health screening:* Mental health issues are common among this population, all patients being screened for depression using a standardized instrument (PHQ 9). Ten patients were referred to the appropriate services.

- *Immunizations:* One of the goals of the clinic is to provide free immunizations to clients. The clinic has just completed a site visit and is enrolled as a provider with Texas Adult Safety Net Program.
- *Telehealth:* The Clinic has acquired all equipment necessary for Telehealth visits and completed staff training. A Tele-Mental Health service will open by Fall 2022. Monitoring compliance with treatment and medication using a telemedicine app and/or with follow-up visits needs to be initiated.

Table 3. Referrals, prescriptions and lifestyle recommendations

Discharge actions	<i>n</i>	%
Referrals:		
Lab Testing	8	30.8%
Diagnostic Exams	1	3.9%
Specialist	13	50.0%
ER	1	3.9%
Prescriptions	19	73.1%
Lifestyle changes	18	69.2%

Outreach. Gaining the trust of the EAC population is a gradual process. We implemented various strategies to improve clinic visibility such as starting a Blood Pressure (BP) clinic in the EAC parking lot and adding another sandwich board with clinic information on the EAC side. The BP clinic is manned by UH nursing alumni and St. Paul’s UMC volunteers. Approximately 25-30 people visit the BP clinic each Monday.



Clinic’s RN; Center: Dr. Varghese (Clinic Director) with an EAC client

3. Interprofessional Training

An important goal of the UHCON Health Clinic is to provide inter-professional clinical training for University of Houston students in Nursing, Medicine, Optometry, Pharmacy, and Graduate Social Work. Student participation at the Clinic will begin Fall 2022 with graduate nursing students. Other disciplines

will be added beginning Spring 2023. The goal is to have all clinic operations and staff well established prior to receiving students for clinical training.

Faculty from other Colleges within University of Houston have met to determine the interprofessional parameters for their respective programs. The Health colleges at University of Houston—Nursing, Medicine, Optometry and Pharmacy—and the College of Law, identified collaborators for the interprofessional component of clinic operations and began working independently to develop implementation plans specific to the requirements of their respective programs. The faculty are: College of Nursing – Dr. Shainy Varghese & Dr. Andrea Brooks, College of Medicine – Dr. David Buck, College of Optometry - Dr. Michael Twa, College of Pharmacy - Dr. Catherine Hatfield, Graduate School of Social Work - Dr. Sarah Narendorf, and College of Law – Dean Leonard Baynes, JD.

Interprofessional collaboration has already begun. This Spring, the College of Optometry and the College of Law joined the College of Nursing at an **“EAC Give-Away Mondays” event**. The College of Nursing conducted blood pressure screening and Optometry and Law provided information on vision screening and legal issues impacting people experiencing homelessness.

The UH College of Nursing Health Clinic offers a valuable context for Interprofessional Education whereby students from Nursing, Medicine, Optometry, Law, Pharmacy, and Social Work learn to address the role of social determinants of health in health .

4. Program evaluation

A comprehensive program evaluation is being conducted to determine whether the UH College of Nursing Health Clinic achieved its intended outcomes to date. A **baseline assessment** was completed for the first 3 months of clinic operations. In addition to services indicators (see Tables 1-3), data on patient sociodemographic profile, social determinants of health, physical and mental well-being, and patient satisfaction were collected and are available upon request. The **12-month program evaluation** is underway with estimated completion by September 2022.

Feedback and Impact

Patient growth has been steady and incremental. Anecdotally, the patients seen at the clinic are glad we are there. To help more people and raise awareness of what the clinic offers, alumni and other volunteers have begun weekly **blood pressure screenings** of Emergency Aid Coalition clients. Many of the EAC clients share the barriers they face trying to access care in traditional settings as indicated in the Figure below.

Patient Feedback and Stories

- “I know I have high blood pressure, I was on medication long back, not anymore, no one gave me to refill, I did not want to go there -----(the facility).”
- “They did not give me any follow up information or refills”
- “I don’t know who to call or where to go”
- “I don’t want to start all over again”
- “I don’t have any money to get the medicine. Where do I go?”
- “I lost all the hospital records.”
- “I don’t have any ID”
- “Do we need to be legal to be seen at the clinic?”
- “I don’t have any money to get bus passes”



Patient satisfaction

Patient satisfaction was assessed across the dimensions of access to care, communication with providers/information, and patient-provider interpersonal relations. A global satisfaction evaluation was captured, as well as suggestions for improvement.

UHCON Health Clinic patients ($n=22$) rated their satisfaction with the services provided as follows:

- **Accessibility** of services (e.g. location, access to care and prescriptions) as 4.4 on a 1-5 scale (1 = Very dissatisfied to 5 = Very Satisfied).
- **Communication with providers and information** provided during visit (e.g. information about diagnostic exams, lifestyle recommendations, other services) as 4.7/5.
- **Interpersonal relations with providers** (e.g. care/dedication, friendliness, respect, emotional support) as 4.8/5.
- **Overall satisfaction with services** provided as 4.8/5; 82% reported being “Very Satisfied” with the healthcare received at this clinic.

Comments illustrating the high level of satisfaction with services provided included:

- *“I wouldn't say anything else. All is perfect. Excellent. Thank you. “;*
- *“Nothing Is Lacking, Great People, Great Service!”*

Under suggestions for improvements, patients indicated a need for more onsite services and lab testing.

Challenges and Needs

Since the clinic began seeing patients in September 2021, anticipated challenges have come into stark relief. Social Determinants of Health (SDOH) such as Economic Stability, Education and Health Care

Access, Neighborhood and Built Environment, and Social and Community Context, have a disparate impact on health outcomes and we see that in the clinic (Healthy People, 2030). The Essentials: Core Competencies for Professional Nursing Education (American Association of Colleges of Nursing) highlights nursing and SDOH as it informs patient care. These indicators of health are also associated with key challenges the UHCON Health Clinic faces, such as:

Continuity of care

Because the clinic is open only one day a week, the timely and seamless transition of patients to the next phase of their care is a challenge. Clients wait a week for test results, or to find out they need additional testing. Increasing services to at least two or three times a week will improve continuity of care. The Clinic has funding for expansion to two days per week in August 2022 but will need more funding to expand to 3 days per week.

Building Relationships and a Reputation

The homeless and poor historically mistrust and doubt the healthcare system can or will address their needs. Earning trust means showing up—repeatedly.

Eligibility and Access

While the vast majority of people using clinic services are eligible for state or federal assistance, a sizeable majority are unwilling to enroll or unable because they don't have IDs, or addresses. The application for the clinic to be a Medicaid/Medicare provider is underway.

We Can't Do It All, But We Are Committed To Doing What We Can

While the EAC provides 250 sack lunches each day to the homeless, and groceries and clothing for the working poor, fresh fruits and vegetables are not always readily available as we would like. The clinic provides information about healthy diets with fresh fruits, vegetables and fiber, but people wondering *if* they will eat are rightly unconcerned about *what* they eat even if it impacts their health. These challenges remain beyond the scope of the Clinic.

Looking forward

The 2022/2023 year is exciting for the clinic, bringing consolidation of services and expansion to better serve the homeless and working poor in midtown Houston. It will also inaugurate interprofessional education, providing a unique clinical training site. We look forward to:

- Beginning Nursing student clinical rotations at the clinic in Summer 2022;
- Continuing interprofessional collaboration on prevention activities (e.g. BP screening days)
- Beginning interprofessional collaboration of students from other disciplines (Medicine, Pharmacy, Optometry and Social Work) Spring of 2023;
- Implementing telehealth capabilities in Fall 2022;
- Providing Mental Health services starting in Summer-Fall 2022;
- Increasing the number of days the clinic is open to 2 days per week, to serve more people who need it, starting August of 2022;
- Increasing outreach through collaborations with other organizations providing services such as Harmony House and HISD, the Homeless Depot Houston (ongoing).
- Completing a 12-month program evaluation by end of 2022.

In Conclusion

The establishment of the UH College of Nursing Health Clinic was part of the strong commitment of the University of Houston and the College of Nursing to serving the Houston underserved community and educating health professionals to address the social determinants of health and their impact on health disparities. The opening of the Clinic is the result of strong partnerships with community, corporate and private partners who embraced this vision. Several partners contributed to this important project, including Humana. Nursing is relational, collaborative, and impactful, much like our partnership with Humana. As we incorporate the lessons learned over the last two years, we look forward to improving and expanding the work being done. We hope to continue to partner with Humana to increase access to much needed healthcare for the underserved communities in Houston and in educating nurses and other health professionals that have a passion to serve this population.

Thank you for your support!

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