ENVISION

COMMUNITY

Proposal for Longitudinal Program Evaluation of Envision Community

Draft for Community Review and Improvement

Executive Summary

Objective: The goal of this project is to evaluate a novel micro-housing project called "Envision Community" using a set of outcome measures developed in partnership with stakeholders that reflect broad social interests and political expectations.

Background: Homelessness in the United States is a public health concern, particularly in cities where resources are low and service need is high. Current costs associated with homelessness include high utilization of health care services by people who experience homelessness and the unaddressed health needs of these same individuals (Lin et al. 2015). Research on policies to mitigate homelessness is growing, with more and more emphasis being placed on the overlap of housing and public health. Some programs have shown promise and these include permanent supportive housing, residential treatment first, and housing first models (Tsai, Mares, and Rosenheck 2010; "Housing First - National Alliance to End Homelessness" n.d.). While 'Housing first' models have demonstrated modest success, key features that need further examination include ways to accommodate wide ranging preferences and needs, such as privacy, ownership, personal autonomy, and community engagement. The purpose of this evaluation is to deepen our understanding around the effectiveness of one community-based housing innovation, designed to meet the needs of various residential, healthcare, governmental, and community stakeholders.

Methods: A program evaluation informed by principles of community-based participatory research (CBPR) seeks to survey and assess multiple stakeholders using patient-reported and clinical outcomes. Programmatic goals being assessed include: reintegration into community, perceptions of safety, self-efficacy, perceptions of responsibility and collective action, use of services, health outcomes, health care utilization, community engagement, interpersonal communication, and independence.

Participants: Individuals living in Envision Community, care providers, city officials, community members, police, and Envision Community management.

Program overview: Envision Community is designed to be an intentional, long-term housing community that offers supportive programs in a low-barrier, extremely affordable micro-homes. The goal of Envision is to create health equity - the opportunity for everyone, including people experiencing housing instability, to be their healthiest - through a community that fosters stability, learning, and dignity for residents.

Discussion: Findings will demonstrate the efficacy of this intentional community to meet expected goals and proposed outcomes. The evaluation will answer whether or not Envision Community achieved programmatic expectations as defined by residents and other community members. Health outcomes and health care utilization data will show changes in health and health care access over time and will give project backers a better understanding of how this intentional community model influenced resident attitudes and behaviors. Addressing changes in these over time will characterize the practical, ethical, professional, and organizational demands associated with intentional communities to inform future housing initiatives with similar goals.

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Background

On any given night, nearly 500,000 people are homeless in the U.S. (Feldman et al. 2017). The consequences of homelessness and experiences of housing instability of stable housing is far reaching, debilitating, and long-lasting. Factors that contribute to chronic housing instability include, debt, income, tobacco use, mental illness, victimization, suicidal ideation, and previous incarceration (Tsai 2018). People living with chronic housing insecurity or chronic homelessness face myriad levels of adversity for which there are few advantageous resource solutions to help get them back on their feet (Tsai, Mares, and Rosenheck 2012; Rosenheck 2012; Gabrielian et al. 2018). Historically, several factors have contributed to homelessness. The deinstitutionalization of mental illness, a reduction of hospital beds for patients in state hospitals, a reduction of federal funding for housing and urban development, and cuts to Social Security in the late 1980s have all been cited as contributing factors (National Academies of Sciences, Engineering, and Medicine et al. 2018). While policy changes have modified how states and governments manage and combat homelessness, there are still long-term challenges to reducing the debilitating effects of homelessness at the state and local levels (Lehman et al. 1995). Research has demonstrated that homelessness affects more than just the individuals, it is a concern for communities, healthcare systems, and public health departments. Homelessness disproportionately impacts survivors of domestic violence as well as those who have experienced a hospitalization due to serious injury or personal loss, and those with undiagnosed and untreated mental illness. In most cases, people experiencing housing insecurity do not choose this as a way of life, and are most often seeking ways to find permanent and dignified solutions.

In Minneapolis, a city with a long history of residential segregation by race and income (read zoning laws), the Metropolitan council proposed a new long-term development plan called Minneapolis 2040, which hopes to address a loss of affordable housing. According to a HUD report, the cost burden by race in Minneapolis calls attention to major disparities that disproportionately impact communities of color and poor. In Minneapolis the most severely cost burdened communities are American Indian/Alaskan Native and Black or African-American (“Housing” n.d.). One of the key problems is the single-family zoning laws in Minneapolis which impact poorer families and individuals struggling to qualify for home mortgages. According to Hennepin County Office to End Homelessness, close to 500 individuals were unsheltered between Jan and Jul of 2018. Close to 40% of those unsheltered were Black or African-American and close to 17% were Native American. Of this group close to 27% experience chronic homelessness. Of a sample of 310 unsheltered individuals close to 61% self-identified as being long-term homeless. Between 2017 and 2018 the number of single adults in sheltered housing increased by 5%. Among those surveyed, in July of 2018, 21% self-reported as having drug or alcohol addiction, and 24% report having a mental illness (Human Services and Public Health n.d.).

There are competing views and data on the prevalence of homelessness in the US. Some data collected by modelling evidence from random digit dialing studies found that between 1985 and 1990 the lifetime prevalence of homelessness was 3.1% or 5.7 million people (Link et al 1990). The current estimates according to the national alliance on homelessness report a rate of 17.7 individuals per 10,000, and 24 per 10,000 among Veterans (Feldman et al. 2017). For people facing chronic homelessness there is a cycle of social and economic instability that often is complicated by mental illness, social isolation, barriers to reentry into society, stigma, and histories of oppression and poverty. Such cycles of instability can be minimized through thoughtful, affordable, and human-centered housing solutions. Many researchers and local organizations are working to explore better strategies to break the cycle of instability through innovative non-traditional programs. This is where public health plays a critical role in the fight to end homelessness.

Homelessness and public health

The CDC states that homelessness in the US is a Public Health issue. Based on issues related to costs or value, the principle behind the CDC's position is that people who experience homelessness are not the problem, but they are the outcome of a system that has failed them in some way. Nowhere is this more evident than within Veteran's communities, especially those who return from active duty experiencing PTSD or other mental health concerns. In addition, communities and cities across the US face growing concerns related to trends in illicit drug use as well as the insidious opioid crisis in urban and rural communities. In many cases, people who are chronically homeless struggle with cognitive limitations, and have undocumented or severe mental illness. Further, many who live in the liminal space (on the virtual edge of losing housing) between housed and homeless experience higher rates of perceived bias in their clinical care than those with more permanent housing (Kirkpatrick and Byrne 2009). Researchers have written about the hidden worlds of abuse, neglect, and addiction, which by no fault of their own have cost many people, who may not have had access to the right care or treatment at the right time, to lose control of their lives. As a consequence of uncertainty around access to treatment, people living in this liminal space have very little resource support to hold them up when unforeseen events occur such as a job loss, death in the family, or personal injury (Harter et al. 2005). In fact, one of the key challenges to people experiencing homelessness is the perpetual stigma associated with crime, drugs, and homelessness. In many cases, there may be co-occuring issues of addiction and substance abuse, but often, individuals who experience homelessness also have untreated or undiagnosed mental health concerns, which leaves them unable to maintain a job or pay bills on time.

Consequently, programs that are needed must be focused on re-establishing confidence to hold a job and the security to pay bills as needed. Part of the CDCs efforts to combat the continuing issues of homelessness across the US includes promoting a Housing First model that seeks to funnel federal and state dollars into community based strategies designed to support individuals who experience housing insecurity. The Housing First model views housing as the first step to recovery or stability, and it is now widely supported as the gold standard of supportive housing across the globe (Baker and Evans 2016). Residents are not required to have resolved addiction or health concerns to access housing. Other innovative

programs include health systems funding residential programs and mental illness support systems to reduce costs and improve outcomes .

Homelessness and current systems

Research on structural competency points to the importance of addressing built systems and infrastructures as a means to mitigating effects of health inequities as well as homelessness (Metzl and Hansen 2014). Current housing models are supported by government controlled criteria and are usually designed by top-down governance strategies that often contribute to human suffering, perpetuate stigma, and minimize individual autonomy and decision making (Rubin, Wright, and Devine 1992; Kertesz et al. 2015; Early 1998). Review data identifies comprehensive, social support systems work to improve health outcomes of the homeless when paired with housing first models to ensure that residents receive treatment, follow-up, and needed mental health supports (Fitzpatrick-Lewis et al. 2011). Has shown benefit is offering alternatives, including access to comprehensive services that are inexpensive and quick to build . Examples of this has been illustrated by Massachusetts Institute of Technology's initiative called RCHI or "Archie" to operationalize ways housing can act to support and strengthen a city,(Vale et al. 2014). Concepts identified by the MIT group include: housing that supports community structure and the economic livelihood of residents, reduces vulnerability of residents to environmental risks and stresses, empowers communities through enhanced capacities to share their own governance, and enhances the personal security of residents in the face of violence or threats of displacement ("RCHI" n.d.). All of these current systems support the need for housing solutions that are cost-effective, sustainable, engage social support systems, and provide access to supportive services for residents (Fitzpatrick-Lewis et al. 2011).

Stories of overcoming or breaking cycles of housing instability are rarely told. Misunderstanding homelessness and the social implications associated with missed opportunities to aid recovery and reentry into society will continue the cycle. A long history of what has been labeled the "institutional circuit" calls attention to gaps in services for homelessness and the arbitrary nature of caring for people with homelessness (Hopper et al. 1997). Grass-roots, or bottom-up evaluation processes are needed to shape solutions that will prevent the recurrence of homelessness. In this way, we hope this work will provide stories and methods to measure the impact of new models of housing on individuals, their communities, and community partners.

The purpose of this evaluation is to conduct a resident-led formative evaluation of Envision Community from inception to completion. The proposed evaluation seeks to examine intentional micro-communities, that were designed in partnership with end-users and emphasize a Housing First approach. The goal of this evaluation is to design sound criteria on which to build future housing models that seek to leverage the strengths of intentional community, which include concepts of shared responsibility and self-determination. This proposal seeks to evaluate conceptions of housing and community for individuals wanting to live together to foster healthy living.

A grass roots proposal driven by a community of people experiencing homelessness requires a thoughtful research approach grounded in community engagement. Community-based participatory research (CBPR) aligns with and supports the co-design and value-driven approach promoted by Envision Community. This uniquely community-focused approach has many advantages in settings where resources are scarce, minimal investment present, and where community-values are prioritized. According to Minkler and Wallerstein "CBPR involves all partners … and begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health...(Minkler and Wallerstein 2008, 4). As deeper truths remain hidden in local narratives, CBPR is an effective method for guiding community engagement and co-design strategies based on relevant needs and preferences of local residents. Findings from this work will identify how social interaction (intentional community living) and returning autonomy and decision making (human dignity) in a housing environment contribute to breaking the cycle of housing insecurity. The research team and community partners assembled to conduct this research are experts in their field have a proven track record of delivering community-based outcomes.

Program description: Envision Community

The overall mission of Envision Community is to promote health equity through intentional living. Envision Community is guided by six values:

- Autonomy - honoring individual choice
- Trust - earning trust rather than expecting it to be readily given
- Letting Go - making room for others and new opportunity
- Open to Learning - respecting each person as a teacher we can learn from
- Shared responsibility – sharing responsibility for cultivating the community
- Social change - modeling community living to achieve health equity for others

This mission and values encompass Envision Community, which is a user-designed product of both entrepreneurial spirit and observed community need, reflecting the mission of a local healthcare system to improve the health of the community as well as the direct guidance and leadership of potential residents. The Envision Community project emerged from a design team within Upstream Health Innovations. Upstream is a group of engaged patients, human-centered designers, clinicians, and community partners who identify various needs in the community and work collaboratively to develop new types of health solutions as an alternative to traditional models of health care.

Envision Community's six values are informed by clinical, design, patient, and healthcare innovation. As a housing solution, Envision Community seeks to be innovative in five specific ways: Diverse and Integrated Living, Cost-effective for healthcare, Resident-centered, Affordable for residents, and Grounded in Shared Values.

Envision community includes a range of residents from across the housing stability spectrum (including people who have never experienced housing instability) to provide stability and capacity to ground the community, and to establish a diverse group of people to learn from and grow with.

Envision community seeks to be cost-effective for the healthcare system by inviting local providers and payers to make a cost-neutral investment in housing that promotes health and appropriate health care utilization as well as mitigates the daily stressors that force people with housing insecurity to experience inpatient hospital admissions and multiple readmissions to emergency rooms. .

Envision Community is resident-centered in its design, implementation, and financing. From the outset, the development team included members of a local group called Street Voices for Change to directly inform the development process of this project. Members of Street Voices for Change are community consultants that ground any strategy for innovation in their lived experience of housing instability.

Envision Community is designed to be "extremely" affordable to its residents. By identifying those who already receive supplemental income from the Federal and/or State government, costs of housing must be relative to their ability to pay. In many cases people receiving these funds are unable to manage other housing commitments due to inability to pay or inability to meet the requirements of accessing affordable housing. Consequently, the design of Envision Community is centered on keeping costs down, which translates to highly sustainable, extremely affordable designs.

Envision Community is firmly grounded in the shared values of those who this project is designed to impact. Over 100 people who have experienced housing instability helped design the core values of Envision Community based on what matters most to them: autonomy, trust, letting go, learning, shared responsibility, and social change. These values guide everything at Envision, including the evaluation process.

Residents:
Envision community is designed to be a place for those who wish to live small and in intentional community. The individual spaces are proposed to be small, but relative to other residents, they will be consistent and equitable. People who choose to join Envision community will believe in this type of living and recognize that living in Envision means sharing certain resources and living space. The community of residents will be diverse and include those from across the housing stability spectrum. The current plan is based on a 20-60-20 formulation where 20% of residents will have experienced chronic homelessness and high utilization of health care, 60% will have some experience with housing instability but are not high utilizers of health care, and 20% will have never experienced housing instability.

Process:
Envision Community has been developed using human-centered design principles as well as key features of Community-Based Participatory Research (CBPR). What research in these respective fields shows is that interventions with targeted strategies have much better outcomes when participants or end-users are part of the design process. Examples of these principles come from the field of quality improvement and emphasize strategies that involve iterative (plan, do, study, act) steps where innovations are tested, evaluated, and re-tested over time with direct feedback from users. In the case of Envision, the development process has been iterative, coordinated, and collaborative. As part of the planning and

development stages, Envision has sought broad stakeholder involvement (Table 2) and is intended to meet the needs of each stakeholder by designing based on stakeholder engagement. Part of this evaluation will capture that collaborative design process.

Approach:
To conduct a formative evaluation of a novel collaborative-community housing project, we will thoughtfully partner with Street Voices of Change and local stakeholders to track, measure, and assess the development, incorporation, and sustainability of an intentional community. First, we will capture baseline data on knowledge, attitudes and beliefs (KAB) of residents to characterize underlying KAB prior to joining the community. Next we will use ethnographic methods to track and note the daily experiences of residents over time as they transition into the community and begin the process of establishing their living space and habits. In parallel to the ethnographic portion of the study, we will conduct formal and informal interviews with residents, stakeholders, and neighbors to determine the impact of specific outcomes of interest. Finally, we will be conducting focus groups and holding community roundtables at three-month intervals over two years to capture group feedback and interactions among residents living at Envision Community. The proposed evaluation works towards the goal of establishing a case that supports intentional micro-communities as a feasible model for promoting and delivering health equity.

Mission: People have the ability to live their healthiest lives			
Value: Cost effective, Community Driven, Health Equity, Shared/Collective Responsibilities			
Objectives/Goals	**Activities**	**Partners**	**Measures**
Health Equity	**-Network sessions** **-Low barrier, streamlined primary care** **-Access to tailored health services**	**Hennepin Healthcare** **Tasks Unlimited** **U of Mn** **Upstream Health**	**Attendance** **Self-Assessments** **Self-Confidence** **Perception of Access to services**
Create Community Engagement	**-Community meetings** **-New resident events (See List)**	**Envision Service Providers** **Local community groups** **Local faith communities** **Tasks Unlimited** **Upstream Health**	
Healthcare Savings for highest utilizers	**-Community as social support system**	**Hennepin Healthcare**	**Outpatient visits** **ED visits**

	-Access to broad range of services	**Upstream Health**	
Reduce permanent supportive housing costs	**Partner with HCHC** **Device novel financial schemes**	**Envision** **Developer** **Envision Service Providers**	
Quick development	**Planning meetings** **Low cost materials** **Low cost builders**	**Envision** **Developer**	**Final costs** **Donations** **Subsidies**

Table 1. Preliminary Conceptual Model / Logic Model

Input	Activities	Output	Outcomes
Resources dedicated to or consumed by the program	**What the program does with the inputs to fulfill its mission.**	**The direct products of program activities.**	**Benefits for participants during and after program activities.**
Funding $TBD Staff - Volunteer? - Property manager (part time) - Community Advocate (part time) Managers - Resident(s) - Street Voices Facilities uipment and supplies nstraints on the program (e.g. laws, regulations, requirements for funding) mbing ds ater ating aning supplies City Support - Mayor's office - Hennepin Health - Police, Fire County Support Community partnerships and support	Feeding and sheltering homeless adults Educating residents about health Providing Care coordination services Connecting residents to resources Provide training and programming Fostering environment for mentoring relationships Resident-led meetings Promoting Envision with community stakeholders Building Envision Community Referrals and connections to services Neighborhood meetings	Number of people introduced to Envision Number of people living at Envision Number of training sessions + classes (+attendance) Number of hours of residents volunteered + worked Number of self-run meetings Number of shared meals Number of stakeholders visiting Envision Number of rooms filled Number of applications received Time to build Envision Number of community partners	(Short-term) New knowledge Increased skills Changed attitudes or values Perceptions of Safety " of responsibility Collective action Improved health care access (Intermediate) Decrease in health disparities Improve resident health behaviors Resident quality of life improvement Interconnectedness Interpersonal communication Improved service utilization (Long-term) Improved public opinion about Envision Improved health status Improved mental health Increased self-confidence

		Established referral relationships Number of neighborhood meetings attended, and / or visits from neighborhood organization liaison	

Description of goals

Working in partnership with Street Voices of Change, a research team has developed a set of primary goals for Envision Community. Based on the values already expressed, these goals can be characterized by the following:

- Envision will leverage and encourage a sense of community that matches the strength and resiliency of community among many who experience homelessness;
- Envision will provide a safe and respectful environment where residents have the freedom and space to heal, create meaning for themselves, and build lasting skills to support independent living;
- Evision will guide residents to make healthy choices and the resources to support those choices given limited budgets, specific health needs, and personal goals

Evaluation design:

In order to demonstrate that programmatic goals match outcomes, we will measure a set of community-informed programmatic outcomes from inception to completion of the 2 year demonstration project (Table 4). The outcomes and evaluation are based on principles of Community Based Participatory Research (CPBR) (Israel et al. 1998; Minkler and Wallerstein 2008, 4). Community-based participatory research (CBPR) is a well-recognized approach for developing and implementing interventions where it is difficult to access and engage stakeholders. CBPR is a collaborative approach to public health research that emerged from Kurt Lewin's contribution to field theory (Lewin 1939) and Paulo Freire's community based learning (Freire 1970). CBPR breaks down hierarchy: researchers and the "community" of interest are considered equal in terms of their contribution to the work required, from conception to intervention design and deployment. CBPR requires iterative processes, where local ideas shape the progression of research questions. This places value on developing long-term reciprocal relationships with community members. Traditionally, CBPR viewed communities as primarily composed of neighborhoods, often marginalized or underserved. But the CBPR approach has broadened its view of communities to also include institutions like hospitals and healthcare organizations as communities where the principles of consultation, engagement and co-production are equally valuable for successful implementation.

Based on the logic model for Envision Community (Table 1) the design of this evaluation will focus on collecting data to capture how activities occur at Envision, as well as the lived experiences of residents, mapped onto planned outputs and outcomes. The outputs listed in the logic model must match in some way the activities planned. As presented, this outline only lists potential activities as the community has not yet been built. In keeping with the

overall program goal to create a place that promotes health equity, this evaluation plan will concentrate on a set of outcomes measured to characterize several domains. As part of the evaluation design, data will also be collected across stakeholders to examine and compare their feedback and reactions to Envision Community. This process will permit an analysis of project goals by stakeholders.

The Significance of the Evaluation:

A CBPR approach to evaluation of a novel intentional housing community is provocative. By forming a partnership between public health, health care, and community organizations, this evaluation design will measure success based on the social and health impact of an intentional community housing project in urban Minnesota. The difference in this housing project is the purpose of the design and the intentionality of the potential residents. Envision Community is a place where people who choose to live together as a community support each other to prevent loss of housing and promote better living. For example, chronic homelessness can perpetuate social and economic instability, which can be minimized through thoughtful, affordable, and human-centered housing solutions. In urban under-resourced communities, many people of color face the challenge of receiving better quality services at higher value. While previous health screenings, health education, and health promotion events have seen modest gains, health indicators in many communities and among people of color have worsened (Brown et al. 2015; Taylor 2018; Thornton et al. 2016), which suggests better community engagement is needed (Baranowski et al. 1997). Evidence is mounting for efforts to more fully engage social determinants of health to improve population health (Gottlieb et al. 2016). CBPR encourages the co-design of value-driven approaches and has many advantages in smaller geographic areas where resources are scarce, and community-values are central. Since deeper truths will remain hidden unless local narratives are sought, CBPR is an effective method for uncovering those truths by guiding community engagement and co-design strategies based on the needs and preferences of local residents. This project seeks to measure meaningful changes among those who contribute most to the success of Envision. Therefore, an additional strength of this evaluation will be characterized by a set of informed community-based outcomes as well as the independent research team who will lead the evaluation process.

Table 2. Stakeholders

Stakeholder Group	Rationale for inclusion	Estimated Number
Residents	Residents will represent those who live and work in Envision. Exploring differences in perceptions of meaningful engagement, privacy, and accountability will be valuable	15-30
Clinicians	Providers will be stratified by type, job title, and management level to include various clinical perspectives, dependent on access to patients and level of decision making at the organizational level.	2-4
HealthcareLeaders	Healthcare managers, directors, and administrators are key decision makers at the institutional level. Their perspectives will provide	2-4

	insight into the fiscal, budgetary, and liability responsibilities of the hospital.	
Health Plans	The potential cost savings for health insurers is not insignificant, and leaves many necessary questions unanswered. Health plans have a large stake in seeing programs like Envision succeed.	2
Public Officials	Community officials represent the interests of various stakeholders, positions often in conflict, and due to the nature of their representation, will have a unique perspective on community impact .	2-3
Policy and Thought Leaders	Policy leaders have experience on the challenges of governing, constituent demands, and concerns related to access, patient safety, and health equity. This group affects how these issues play out publicly, and in the political environment with direct impact on patient engagement.	12-18
Healthcare innovators	Healthcare innovators offer cutting edge perspectives reflective of the growing demand to improve care delivery systems and contain costs.	2

Primary Hypothesis:

An intentional community, built in partnership with residents and healthcare stakeholders (Table 1), will restore the health and wellbeing of residents (individuals who have faced housing insecurity) through a process of living intentionally, where feelings of safety and security, without compromising individual autonomy and agency, are respected and promoted.

The research questions that guide this evaluation proposal

Primary Research Question (s)

1. In what ways are residents being empowered to live and thrive at Envision Community?
2. How has Envision community improved the lives of people who have experienced homeless in Minneapolis and St. Paul?

Secondary Research Question (s)

1. How is the design impacting individual experiences?
2. How are group activities or group living arrangements modifying resident behavior?
3. How are shared values expressed by community residents or in community life?
4. How has the health status of residents changed over time?
5. What are resident rates of health care utilization?
6. How has occupation status changed over time?
7. How have key measures of well-being changed?

Application of CBPR for Evaluation:

By partnering across stakeholder groups and applying the principles of CBPR, this evaluation will consist of achieving several key steps:
Step 1) Establishing a Community Research Advisory Board (CRAB) that includes members of the research team, Street Voices of Change, and Upstream Health Innovations;
Step 2) Ratify key outcome measures for success;
Step 3) Using expertise of the CRAB, design a research strategy informed by CBPR to implement data collection strategy;
Step 4) Include training of community partners for data collection and review;
Step 5) Define clear process for quality assurance, data collection, analysis, and dissemination; and
Step 6) Develop a dissemination strategy of findings to our broader community.

The six steps presented here are detailed below:

Step 1) Community Research Advisory Board (CRAB)
- Their principal role is the implementation and dissemination of evaluation. Members should be drawn from across stakeholder groups and include: clinicians, staff, patients, participants, researchers, city and state officials, and data managers

Step 2) Ratify key outcome measures of success
- This process has already begun. Currently there are a set of outcomes that have been determined as a priority based on iterative feedback over three CRAB meetings. These outcomes are designed to explore the primary research questions of this work.

Step 3) Data collection strategy
- Outcome data will be collected in three ways: Participant feedback and report (focus groups, interviews and surveys), Healthcare system data (medical record and claims review of participants), and Stakeholder responses (interviews and surveys)
- Interviews will be conducted by members of the research team in partnership with consultants from Street Voices of Change
- Focus groups will be facilitated by members of the CRAB who will be trained by an expert moderator
- Surveys of residents of Envision Community will be distributed over time from baseline to completion at 3 month intervals to explore changes in attitudes and behaviors overtime.
- Stakeholder (Table 2) interviews will be conducted by members of the research team. These will involve questions aimed at measuring and assessing stakeholder perceptions, attitudes, and beliefs over time from project inception to completion.

Step 4) Training of community members and CRAB will occur prior to the implementation of the research process. This will depend on the opening date of Envision Community.
- The training will be most effective when it is done in parallel to the building process. This way, interviews can begin while the process of registering residents continues until the doors to Envision Community open.

Step 5) CRAB will be charged with managing the research process.

- It is the responsibility of CRAB to check on data collection processes and data management. Overtime, this might include having monthly or quarterly meetings, inline with data collection procedures.

Step 6) Dissemination

- Planned in accordance to the values of the design team and CRAB. This includes monitoring data sharing and updates related to the progress of Envision Community.

Table 3. Proposed Outcome Variables

Variable / Factor	Intention	Example Question	Scale	Type of Data
Reintegration	Ability to measure residents desire to "get back on their feet"	On a scale from 0-5 how confident are you to find permanent housing?	Likert	Continuous
Personal Achievement	How individuals see themselves, set goals	I see myself leading a life of benefit...	(Open ended)	Qualitative
Self-Efficacy	Are residents gaining confidence to perform certain actions	I have been able to manage my addiction	Likert	Categorical / Continuous
Perceptions of Safety	Are residents feeling safe and protected	On a scale from 0 – 5, 0 being very unsafe and 5 very safe, how would you rate feeling safe at Envision	Likert	Continuous
Perceptions of Skill-building	How are Envision Community members learning from one another	How often do you feel like you learn from your neighbors	Never Sometimes Unsure Quite often Everyday	Categorical
Perceptions of Responsibility	How are residents viewing their role in the community	How much do you feel responsible for maintaining the quality of life at Envision	None A little Unsure Quite a bit Completely	Categorical
Collective Action	Are residents participating in the community, working together to solve problems	In the past 30 days how many times have you helped one of the other members of the Envision	0 1-3 4-6 7-9 10 or more	Categorical/ Continuous

		Community.		
Interconnectedness	How well are residents interacting with each other	How connected to you feel with members of Envision community	None A little Unsure Quite a bit Completely	Categorical
Interpersonal Communication	How willing are residents' to talk with each other	How often do you work with others at Envision to solve problems	Never Once a month Several times a month Every Week All the time	Categorical/ Continuous
Health Equity	How resources are allocated to residents	How confident are you in finding the right resources to live a healthy life	None A little Unsure Quite a bit Completely	Categorical

Use of outcome variables:

The primary research question, hypothesis, that was stated at the beginning reflects a consensus view that success at Envision Community includes notions of safety, autonomy, better health, and perceptions of responsibility. In addition to the primary research questions above, standard health and healthcare utilization measures will be evaluated during the demonstration project. Those measures will be defined by health plans and healthcare providers with the assistance of Envision's residents.

These data will be collected at baseline (Timeline) and three month intervals for two years.

Potential Contribution:

This evaluation will contribute to the general health systems knowledge related to how community-based housing initiatives impact residents, costs, and utilization metrics at the point of care, using community-derived data. The findings from this program evaluation will contribute important intervention data to the various stakeholders represented in this work, who have supported the development and implementation of this community. Further, ethnographic data from this evaluation will provide a deeper understanding of the relationships and interactions that occur in real-time, as residents experience the process of living and working within a new community. The value of characterizing those interactions, the pitfalls associated with establishing a novel living community, and the unseen challenges of delivering care and support among individuals who have previously experienced housing instability will be highly compelling and insightful.

This work will determine the future role of intentional micro-communities funded by healthcare systems. Other service industries have been transformed by the ability to document and analyze transactions between providers and end-users. There is a clear link between public health and housing, which needs more data to generate better interventions that improve health outcomes and reduce costs for patients, providers, and society. Expectations for community-based housing are high, and the findings from this work will be some of the first in Minnesota to demonstrate their effectiveness in the Twin-Cities.

Healthcare as an organization may want to see care delivered more effectively and efficiently, but may also argue that barriers prevent them from adopting systems and strategies that support innovative ideas. Consequently, many health service researchers contend that the bureaucracy of healthcare stands alone as being slow to adopt a culture where safety and quality service are paramount. Positive momentum in Accountable Care Organizations, who place value on new payment models, and community-reinvestment, suggest healthcare is moving, but despite this momentum, the culture of change remains slow (Mishra et al. 2018). There is a reluctance to accept that members of the community face insurmountable barriers to reintegration into their communities after experiencing housing instability. The culture of homelessness is dominated by governmental oversight and experiences of isolation and stigma, where the goals and values of people who have experience with homelessness are either unknown or seldom considered. In addition, the lack of attention to eliciting the true wants and needs of people who have experienced homelessness drives harm, inefficiencies in service delivery and high cost. Healthcare is a service-industry that has been slow to realize that value is based on eliciting the informed preferences of end-users, and providing services that support long-term community-first solutions.

The underlying hypothesis for this evaluation has been: an intentional community, built in on the principle of health equity, which fosters partnership with residents and healthcare stakeholders that will return residents to a sense of community, restore feelings of safety and security, without compromising individual autonomy and agency.

However, we cannot be certain of this thesis. There are many risks to the building of an intentional community like this and a need to meet investor expectations. An additional contribution of this evaluation, therefore, will be to determine the policy-level implications (e.g., health funding of permanent housing might change how subsidized housing is designed, implemented, and evaluated in the future) of investing in local communities with healthcare funds to mitigate over-utilization of services, and promote healthy behaviors among residents. This will further demonstrate the relevant conditions that support or oppose the use of intentional micro-communities living as a new model of Housing First. Some potential advantages that may emerge include: improved access to services, increased sense of community responsibility, more fully developed self-management and communication skills, improved sense of accountability for self-management of well-being, and easier ability to finding social support. Some potential disadvantages that may emerge include: reduction of trust, more defensive behaviors, and increased vigilance with other residents. Each will be evaluated carefully from the perspective of multiple, relevant stakeholders.

Table 4. Evaluation Timeline

Process	Baseline	Year 1				Year 2			
		3	6	9	12	15	18	21	24
Recruit Research Assistant	X	X							
Human Subjects	X	X							
Recruit Stakeholders	X	X		X		X		X	
Develop Recruitment Materials	X	X							
Schedule Interviews	X		X		X		X		X
Community Training	X		X	X	X	X	X	X	X
Data Collection	X	X	X	X	X	X	X	X	X
Data Analysis			X	X	X	X	X	X	X
Interview Follow-up (If needed)				X			X		
Bi-Weekly Process Meetings		X	X	X	X	X	X	X	X
Yearly Report					X				X
Dissemination via papers, reports, community meetings								X	
Ethnography	X	X	X	X	X	X	X	X	X

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