University of Southern Indiana

Impact of Indiana Permanent Supportive Housing Initiative

Prepared for:

The Indiana Housing and Community Development Authority (IHCDA)

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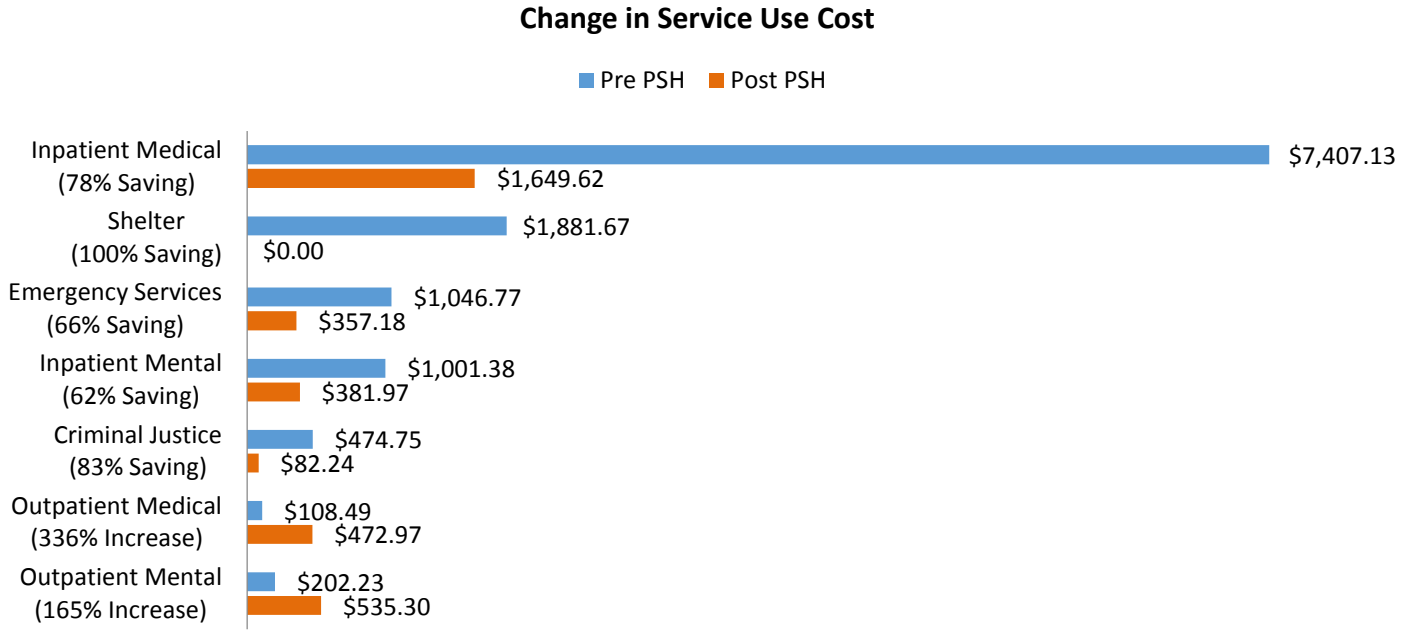
Executive Summary

The Indiana Housing and Community Development Authority (IHCDA) is a state agency that creates housing opportunities, generates and preserves assets, and revitalizes neighborhoods by investing financial and technical resources in the development efforts of qualified partners throughout Indiana. The mission of IHCDA is to help communities build upon their strengths to create places with ready access to opportunity, goods, and services. IHCDA is spearheading the Indiana Permanent Supportive Housing Initiative (IPSHI), which aims to build the capacity of local housing and service providers to develop and operate permanent supportive housing for homeless individuals throughout the state of Indiana. This study conducted under the auspices of the Center for Applied Research and Economic Development (CARED) at the University of Southern Indiana (USI) evaluated permanent supportive housing developed in Evansville through Aurora, Inc. and ECHO Housing Corporation as a result of IPSHI.

The results of this study showed significant public cost savings from permanent supportive housing compared to traditional means of treating chronic homelessness even when controlling for the extra costs associated with providing housing. The results suggests a net saving of $1,149 per person, or a saving of 9.7%, by allocating resources to permanent supportive housing to treat chronic homelessness.



Key Findings

Change in Service Costs Post-entry:

- 100% reduction in use of emergency shelters
- 83% savings associated with incarceration
- 78% savings for medical hospitalizations
- 66% savings for emergency room services
- 62% savings for mental health hospitalizations

Reported Quality of Life Post-entry:

- 81% of tenants have lived in their IPSHI apartment for over one year
- 76% reported a decrease in domestic violence
- 72% increase in more healthy eating habits (eat fruits and vegetables on daily basis)
- 69% reported increased school attendance for their children
- 67% reported higher level of involvement in their children's education
- 63% reported better relationships with family members
- 53% increase in community involvement
- 58% reported that conditions of their neighborhood as better
- 36% reported neighborhood to be safer

Qualitative Interviews with IPSHI Tenants reveal:

- Not having to worry about where they are going to sleep at night.
- Case managers help ensure they have transportation to appointments and are able to obtain prescribed medications.
- Feel less stressed, more stable, and better able to focus on life goals.
- Caring now about their physical and emotional well-being.
- Having more control over their lives.
- Being able to focus more on what is important.
- Having a better support system.
- Better relationships with family members.
- Increased involvement with their children.
- Decrease in use of alcohol and street drugs largely due to being able to obtain prescribed medications.

Introduction

The Indiana Housing and Community Development Authority (IHCDA) is a state agency that creates housing opportunities, generates and preserves assets, and revitalizes neighborhoods by investing financial and technical resources in the development efforts of qualified partners throughout Indiana. The mission of IHCDA is to help communities build upon their strengths to create places with ready access to opportunity, goods, and services. IHCDA is spearheading the Indiana Permanent Supportive Housing Initiative (IPSHI), which aims to build the capacity of local housing and service providers to develop and operate permanent supportive housing for homeless individuals throughout the state of Indiana. This study conducted under the auspices of the Center for Applied Research and Economic Development (CARED) at the University of Southern Indiana (USI) evaluated permanent supportive housing developed in Evansville through Aurora, Inc. and ECHO Housing Corporation as a result of IPSHI.

IPSHI utilizes a Housing First approach to address and combat chronic homelessness. According to the federal definition adopted by the U.S. Department of Housing and Urban Development (HUD) and developed by a collection of federal agencies such as the U.S. Interagency Council on Homelessness, the Departments of Veterans Affairs, Labor, and Health and Human Services, a chronically homeless person is defined as "either (1) an unaccompanied homeless individual with a disabling condition who has been continuously homeless for a year or more, or (2) an unaccompanied individual with a disabling condition who has had at least four episodes of homelessness in the past three years" (HUD, 2007).

HUD defines homeless as "a person sleeping in a place not meant for human habitation (e.g. living on the streets) or living in a homeless emergency shelter" (HUD, 2007). There is a distinction between individuals who are temporarily homeless, such as falling on hard times, living paycheck to paycheck, losing a job, and requiring temporary assistance, versus those individuals and families who experiencing long term chronic homelessness.

Kuhn and Culhane (1998) and Culhane, Metraux, Park, Schretzman, and Valente (2007) identify three categories of homelessness: transitional, episodic, and chronic. The vast majority (80 percent) of the homeless population are transitional or temporary. Members of this population are temporarily in the system for a short period, are often younger and white, and with fewer mental health, substance abuse, and other medical issues than the episodic and chronic homeless populations. Episodic homeless shuttle in and out of homelessness and have repeated short shelter stays over several years. Those that are episodically homeless are more often non-white than the transitional homeless, comprising 10 percent of the homeless population.

Individuals and families who identify themselves as chronically homeless make up 10 percent of the homeless population. They are entrenched in the system, are often older, and have disabilities, long term substance abuse and mental health problems that impact their ability to

remove themselves from homelessness without subsidized housing and social services (Culhane et al., 2007). Although the chronically homeless represent 10 percent of the homeless population, this population uses half of the total resources provided to the homeless (Kuhn & Culhane, 1998).

The traditional approach to combatting temporary and chronic homelessness, sometimes called the Treatment First approach, requires clients to fulfill a series of prerequisites such as sobriety, a clean criminal record, psychiatric stability, abstinence, and an intensive service plan that follows steps in housing readiness (emergency sheltering and transitional housing) before receiving permanent supportive housing (Montgomery et al., 2013; Tsemberis, 2010). Oftentimes, individuals experiencing homelessness go back and forth between homelessness and transitional housing, and many have chronic medical and mental health issues that they deal with every day that prevent them from staying out of homelessness.

The Housing First approach, through permanent supportive housing, is a client-centered approach that houses chronically homeless individuals and families, often the hardest to house, without any prerequisites of treatment or service involvement (Tsemberis, 2010, cited in Montgomery et al., 2013). Permanent supportive housing focuses on providing safe, permanent, and stable subsidized housing for individuals and families, combined with ongoing flexible community-based supportive services. These services are often located on-site where the clients are residing, which allows for recovery from mental illness and substance abuse addictions into community stability and independence (Culhane & Byrne, 2010). Permanent supportive housing is not a one-size-fits-all model, but includes different housing arrangements and program types (Culhane & Byrne, 2010), ranging from facilities of multiple sizes to housing for single individuals and large families. These sites also can be scattered throughout a community, as described later in this study.

In addition to identifying permanent supportive housing's effectiveness at promoting residential stability among the finite and aging chronically homeless population, Culhane and Byrne (2010) argue that the cost of permanent supportive housing can be offset by reductions in the high cost of acute care services, such as emergency room visits, inpatient and outpatient medical and mental hospital stays, and usage of emergency shelters and the criminal justice system (arrests, jail time, police contacts and possibly court costs).

What is the impact of permanent supportive housing in Indiana versus traditional approaches to address chronic homelessness? This study examined whether permanent supportive housing in Evansville resulted in a reduction of the usage and cost of these expensive long-term services, and whether PSH has improved client outcomes and residential stability.

Background: Permanent Supportive Housing in Evansville

Evansville, Indiana is not immune to the growing problem of chronic homelessness. According to a 2012 survey by Destination Home, 445 individuals are living in shelters or transitional housing on any given night in Evansville (Destination Home website). Two community organizations have embraced the Housing First approach in their efforts to end homelessness. These facilities are operated by Evansville's two major providers of permanent supportive housing: Aurora, Inc. and ECHO Housing Corporation (ECHO). Evansville has five permanent supportive housing facilities that include 140 total units that will be the focus of the study.

Aurora was founded in 1988 as one of 30 organizations that make up the Evansville Coalition for the Homeless. According to the beliefs found on the organization's website, Aurora believes in the value of each person, and believes in a "Housing First" and strength-based approach to delivering services to its clients.

Aurora operates several permanent supportive housing facilities, including the Vision 1505 development, which opened on January 31, 2013 and consists of 32 units (one, two, or three bedroom apartments) for families ranging between 950-1100 square feet, including two units that are ADA accessible. All units are fully furnished, and rent (which includes utilities) is based on 30 percent of the tenant's income. Tenants must receive a referral from an agency in order to qualify for a unit at Vision 1505. Aurora provides case management services at Vision 1505, but also provides a community engagement specialist on-site that helps build relationships among residents and in the community with outside groups, clubs, and schools through family activities, community gatherings, field trips, and educational workshops (Aurora, 2014).

Vision 1505 was converted from the former Vanderburgh County Corrections Safe House (Aurora, 2014). Vision 1505 is a partnership between the Evansville Housing Authority (EHA) and Aurora, Inc. and opened in January 2013. Aurora serves as the case manager, but contracts out the property management to Flaherty and Collins (F&C), an EHA contractor that manages other properties designed for the homeless.

Aurora also manages Shelter Plus Care, a program funded from a HUD grant that provides rental assistance for disabled tenants in 20 scattered-site units. In 2012, Shelter Plus Care served 25 individuals. The Aids Resource Group (ARG) and Southwestern Behavioral Health Services serve as the case managers for the Shelter Plus Care units, while Aurora manages and inspects the units, processes the rental payments, and ensures compliance with the HUD grant (Aurora, 2014).

ECHO's history is inextricably linked to Aurora's, since they were also founded in 1988 as a member of the Evansville's Coalition for the Homeless. ECHO operates Lucas Place for children and families. Lucas Place has 20 units that are two, three, or four bedrooms. Lucas Place has a

children's enrichment center, and provides services to families such as financial and computer literacy classes, housing classes, employment and educational assistance (including on-site tutoring), and counseling and substance abuse treatment services (ECHO, 2014).

Lucas Place II serves single homeless veterans and is located adjacent to Lucas Place with 27 units with one-bedroom and a living room. The facility includes of a community room and wireless access for residents. Services include educational seminars and programs that provide training and employment assistance for these residents. ECHO serves as the case manager and property manager for both Lucas Place and Lucas Place II.

ECHO manages two scattered sites, the New Start site for single individuals and families and the Renaissance 16 site for single individuals. Both scattered sites have a total of 36 units. According to ECHO's website, clients eligible to live in the New Start and Renaissance 16 scattered site facilities must have a disability, function independently, and have the need for supportive services. Like Vision 1505, New Start and Renaissance 16's rent are based on 30 percent of the tenant's monthly income (ECHO, 2014).

Like Lucas Place and Lucas Place II, these scattered sites provide case management, counseling services, substance abuse treatment and recovery services, employment and educational assistance, along with advocacy and assistance with legal, financial, or school system issues, transportation assistance, and conflict resolution assistance for tenants (ECHO Housing Corporation website). ECHO serves as the case manager for New Start, while Southwestern Behavioral Health Services acts as the case manager for Renaissance 16.

Research Question and Methodology

IHCDA has commissioned research from the University of Southern Indiana (USI) to determine effectiveness and impact of the IPSHI initiative in the Evansville market. The main research question answered by the study is: *What is the impact of permanent supportive housing (PSH) in Indiana versus traditional means of addressing homelessness?* That is, does a permanent supportive housing approach based on "housing first" yield greater cost savings and more favorable outcomes than a traditional approach relying on emergency shelter and transitional housing use? There are several sub-questions to be addressed as part of this work:

1) Does PSH versus traditional approaches result in diminished use of public services?
2) Does PSH versus traditional approaches result in diminished costs to the public service system?
3) Does PSH versus traditional approaches result in an increase in positive client outcomes in terms of access to mainstream resources, housing stability, health and quality of life?

The variables used in this research to answer these questions include:

- Physical Health Care: medical appointments, inpatient medical admissions, emergency room visits, domestic violence.
- Mental Health Care: Drug and alcohol use and treatment, mental health appointments, in-patient mental health admissions.
- Emergency shelter visits
- Criminal Justice Usage
- Quality of Life: safety and physical conditions of neighborhoods, community involvement, employment, nutritional health, children's school attendance and parental involvement, and relationships with family members.

Research into complex societal issues such as chronic homelessness are complex and multifaceted. In order to design a research plan that encompasses the many variables that need to be taken into consideration, the Center for Applied Research at the University of Southern Indiana developed an interdisciplinary research team approach. Research team members included faculty in social work, economics, public administration, and public health. A project leader was appointed by the Center for Applied Research to provide comprehensive project management and administrative support.

Evansville has six permanent supportive housing facilities that are run by Aurora and ECHO, as discussed in depth earlier in this report. The USI team studied five of those IPSHI programs including Vision 1505, Shelter Care Plus, Lucas Place II, New Beginnings, and New Start.

The research team designed a three-tier or "triangulation" research design consisting of 1) face-to-face interviews with IPSHI tenants, 2) case manager interviews, and 3) case file analysis using agency case managers' files.

1) Face-to-Face Interviews with IPSHI Tenants:

This method was included to provide in-depth perspectives regarding the effects of PSH that cannot be captured in case files. The face-to-face interviews consisted of two parts. The first part of the interview was open-ended qualitative questions to "dig deep" into the experiences of the tenants in the IPSHI program. The research team used structured interviews with IPSHI tenants versus a pen and paper survey format. The second part of the face-to-face interviews asked specific questions in regard to the research questions. Both interviews occurred during the same visit with the ISPH tenants. The face-to-face interview instrument is included in appendix A.

2) Case Managers Interviews:

The research team validated face-to-face interview results with case manager interviews and used these interviews as a second source of data to provide additional insights. These, along with the face-to-face interviews and case file studies, will provide a more complete picture of the experiences of tenants in the PSH program. The case manager interview instrument is shown in appendix B.

3) Case File Analysis:

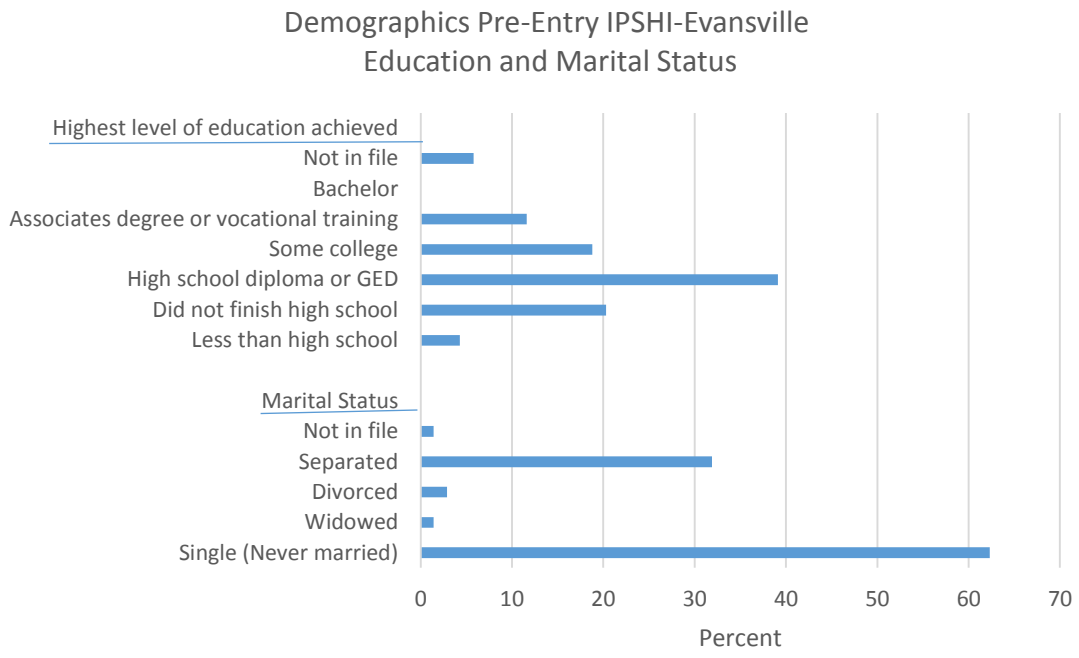
The second validation procedure pulled data from case manager's files in parallel with the face-to-face interviews. This provided another validation of the information from the clients. A variable input form was developed for use in the case studies; ensuring researchers are evaluating the files in a consistent and reliable manner. The form is attached in appendix C.

Demographics of IPSHI-Evansville Tenants: Pre-entry

The full demographics for this population are shown in Appendix D, Table 1 and 2. A graphical summary is below.

GRAPH #1

Pre-entry education and marital status obtained from case files of IPSHI-Evansville tenants.

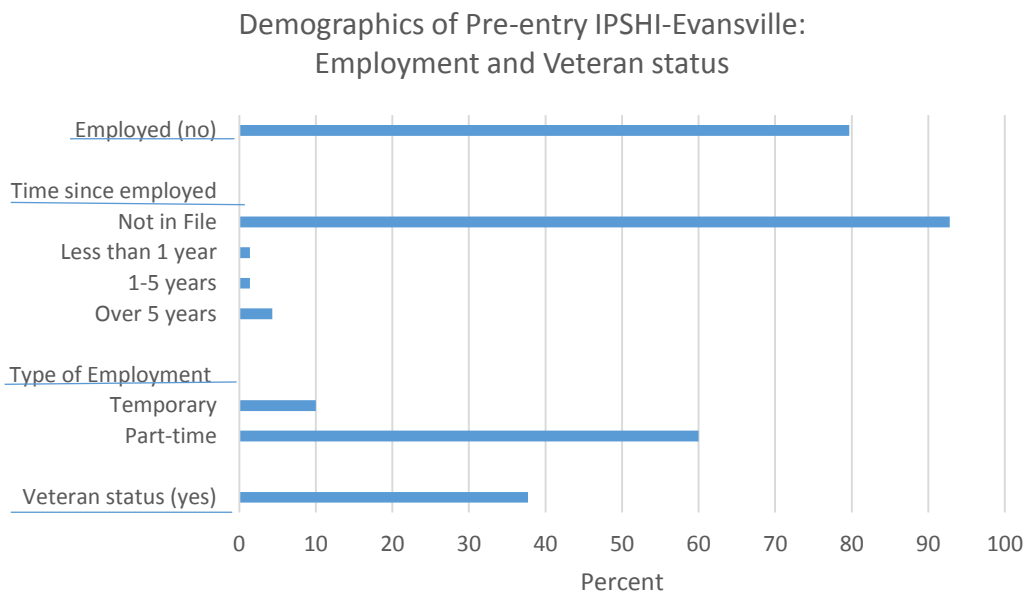


The majority of this tenant population has received their high school diploma or their GED and are single/never married (See Graph #1). The majority of the tenants are unemployed, often for an extended period of time, although the length of unemployment was frequently (92.8%) missing from the case file (See Graph #2). Nationally, loss of a job is one of the major causes of homelessness (National Alliance to End Homelessness, 2013).

Three quarters of the population have been homeless in the past, with duration exceeding more than one year for 29% of the tenants (See Graph #3). While a reason for the most recent homelessness was not listed in half of the tenants' case files, the most common reasons for those who did answer were loss of income and domestic violence. Most of the tenants have been in their apartment for more than one year. Generally, Housing First programs provide additional stability for tenants and result in better tenancy rates long term (greater than 12 months) (Martinez & Burt, 2006; Pearson, Montgomery, & Locke, 2009). This aligns with the Evansville PSH tenant population, with 81.2% of the population residing in their units for more than one year.

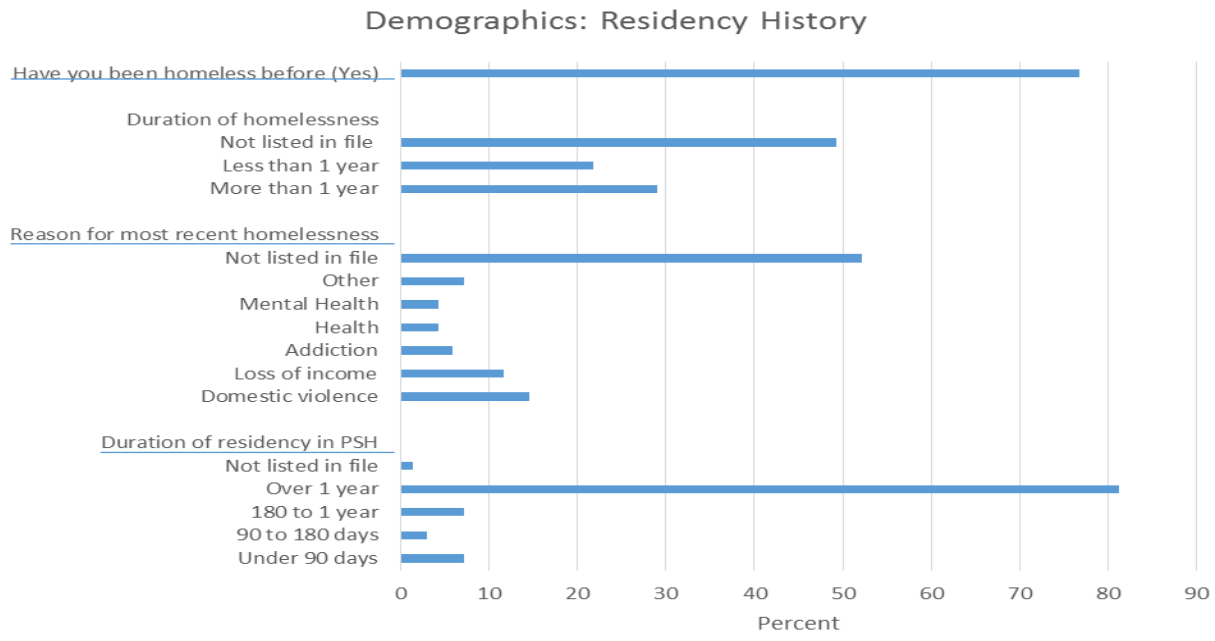
GRAPH #2

Pre-entry employment and veteran status obtained from case files of IPSHI-Evansville tenants.



GRAPH #3

Pre-entry residency status obtained from case files of IPSHI-Evansville tenant.



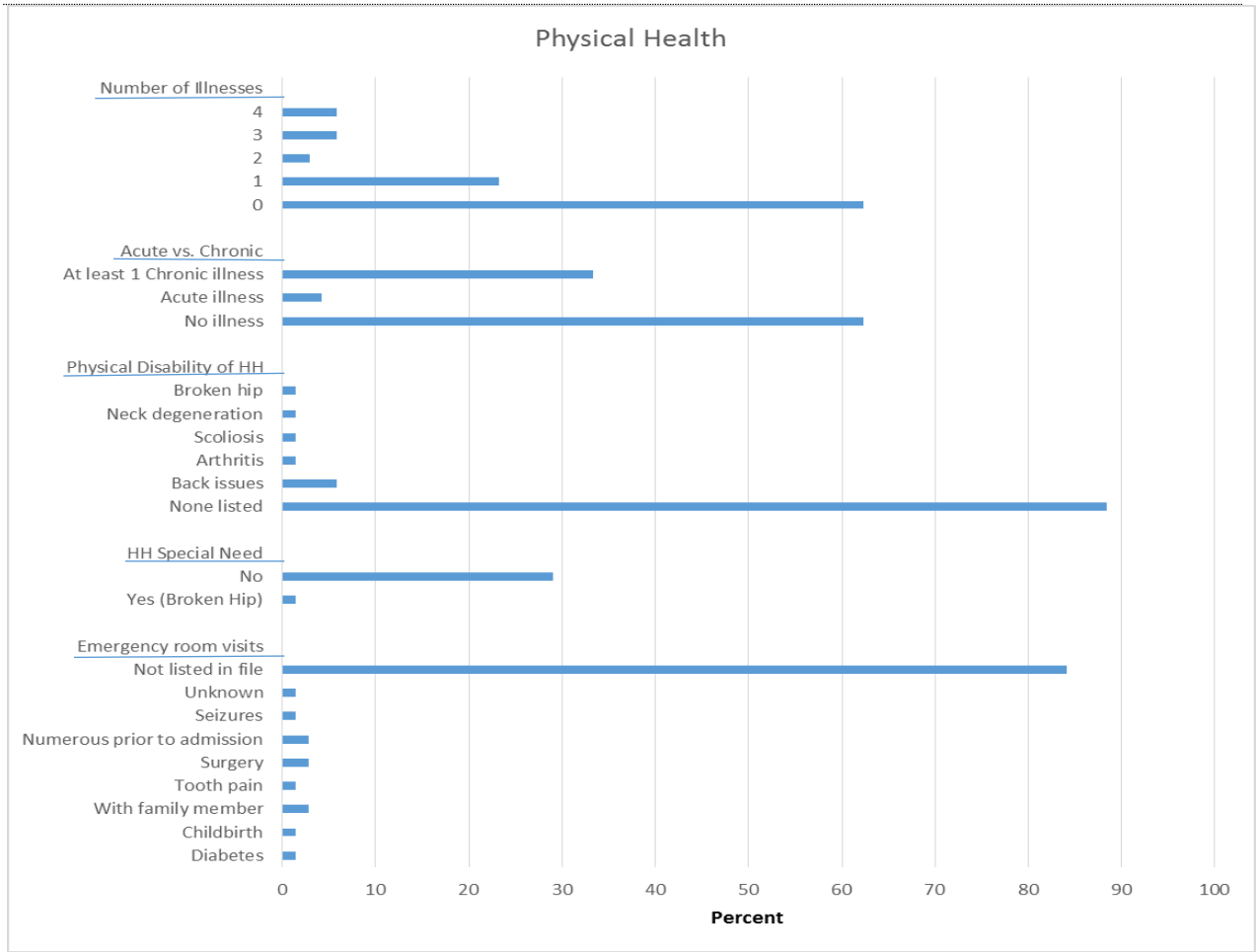
Physical Health Care

Pre-Entry Permanent Supportive Housing

The majority of tenants (62.3%) did not have a physical illness listed in their file, while 11.6% had three or more. Physical illness is an important contributing factor to homelessness, but also a consequence of homelessness. Medical conditions are broken down into acute and at least one chronic conditions. Very few of the residents have only an acute condition, one-third of the subjects reported at least one chronic condition. While the majority of the residents did not report a physical disability for the head of household, 17.4% did report a disability (n=8). A total of 9 residents utilized an emergency room since joining PSH (13.1%). Visits included surgery, diabetes, child birth, seizures and tooth pain. One head of household was listed as needing special care, with the reason relating to a recently broken hip (Graph #4).

GRAPH #4

Pre-entry physical health information of IPSHI-Evansville tenants obtained from case files of tenants



It is well established in the academic literature that homeless individuals have higher rates of physical illnesses (Doran et al., 2013; Henwood et al., 2013; Hwang, et al., 2011; Reid, et al., 2008; Weinstein et al., 2013). Increased rates of chronic and acute illnesses are due in part to difficulty accessing care and the low priority of health care compared to other needs (Doran et al, 2013; Hwang et al, 2010; Reid et al., 2008).

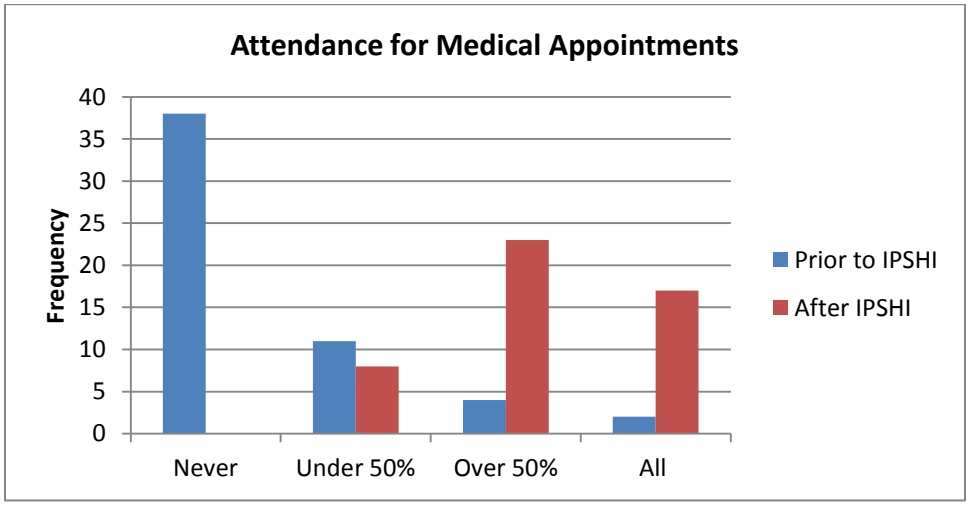
Post-Entry Permanent Supportive Housing

Medical Appointments

Homeless individuals are more likely than the general population to have higher rates of unmet needs, especially when it comes to medical and mental health care needs (Hwang et al., 2010; Reid et al., 2008). The stability provided by PSH programs allows those individuals with unmet needs to begin to address their health issues, beginning with attendance to medical appointments. As reflected in the tenant comments regarding attending their medical appointments prior to PSH, there were many competing priorities that prevented making and keeping medical appointments and also resulted in more reliance on emergency medicine. With PSH comes stability for this population of tenants in Evansville. Attendance at medical appointments showed a highly significant increase from prior to after PSH (Graph #5).

GRAPH # *5*

IPSHI-Evansville tenants' attendance at medical appointments pre/post tenancy as reported during interviews.



Tenant comments regarding factors influencing the keeping of scheduled medical appointments post PSH entry: Multiple responses indicated in parentheses.

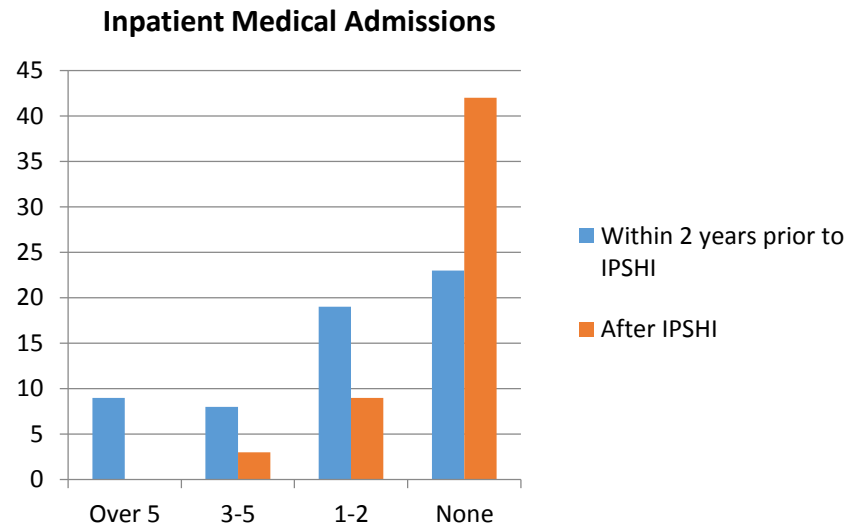
- "I don't have to worry about where I am going to sleep at night" (5)
- "Before I had other more important things on my mind. I am able to focus more now and am less stressed."
- "I'm more stable." (6)
- "I now can get my medicines I need for my diabetes."
- "I was very depressed before and didn't care."
- "I was so worried about other things that I didn't care about taking care of my health."(6)
- "They (staff) make sure you get to your doctor appointments."
- "I have much more control over my environment now."
- "Able to take bus to appointments." (3)
- "I am always doing something now. Sometimes I forget about my appointments and staff reminds me."
- "I deal with things now that I didn't before, such as health issues."
- "My health has been restored since I've been here."
- "Didn't have money for gas before to get to my appointments. I do now."
- "I do now (keep appointments). We get bus tokens.(4)

In Patient Medical Admissions:

The numbers of inpatient medical admissions also showed a highly statistically significant decrease from pre- to post- PSH entry (See Graph#6). Not all studies show significant decreases in inpatient medical admissions (Martinez & Burt, 2006). Martinez and Burt (2006) were unable to show a statistical change in inpatient admissions after one year in PSH. So even with the short time frame associated with Evansville PSH, the program is showing progress in reducing the numbers of inpatient medical admissions.

GRAPH # *6*

IPSHI-Evansville tenants' in-patient medical admissions pre/post tenancy as reported during interviews.



Tenant's comments regarding in-patient medical admissions post PSH entry:

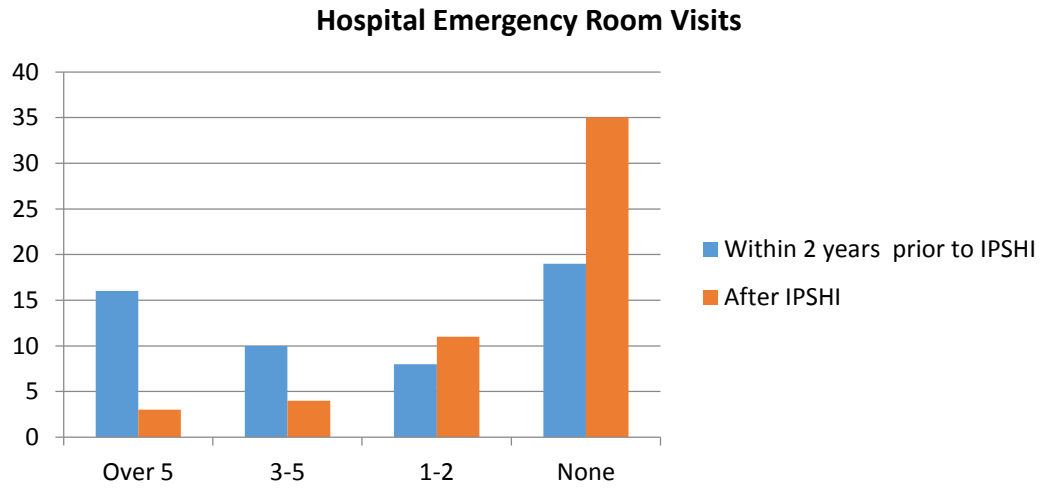
- "Much less since I am able to keep my doctor appointment."
- "More because I didn't care before and going to doctor was last thing on my mind."
- "Case manager makes sure that I get to my appointments (6)

Emergency Room Visits

The numbers of hospital Emergency Room visits showed a statistically significant decrease from prior to after PSH (Graph #7).

GRAPH # *7*

IPSHI-Evansville tenants' hospital emergency room visits pre/post tenancy as reported during interviews.



Tenant comments regarding information associated with ER visits post PSH entry:

- "Less, because I go to ECHO now to see doctor."
- "More----I developed serious health problems soon after moving in. Before I lived here I was using a lot and didn't take care of myself. I'm better now and going back to work."
- "More…..I have had seizures, have fallen and cracked my head open once, broke bones another time."
- "Much less now that I can keep appointments with my doctor" (3)

The emergency room is an important source of health care for individuals who are homeless (Doran et al., 2011; Reid et al., 2008). The homeless use the emergency room at higher rates, especially those with concurrent mental and substance abuse issues, than the average usage rates.

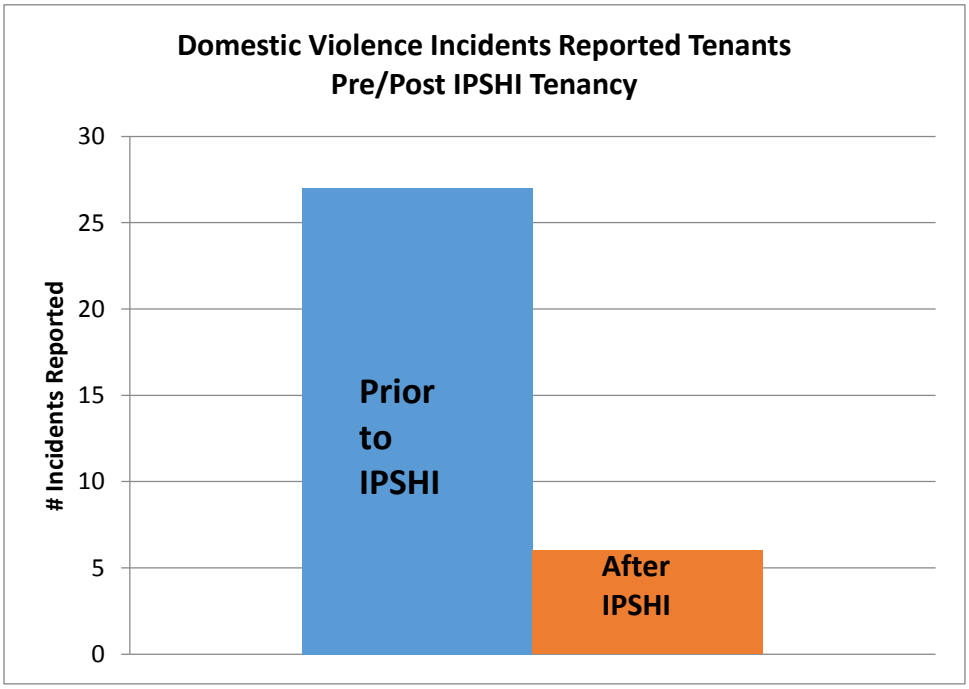
Emergency room use has been shown to decrease following entrance into supportive housing programs (Doran et al., 2011; Hwang et al, 2010 Hwang et al., 2011; Mackelprang et al., 2014; Martinez & Burt, 2006). Mackelprang et al. were able to show that emergency medical services decreased significantly (54%) in the two years following entry into a housing first program. The Evansville population does reflect a decline in use of emergency rooms following stability in their housing situation. The results in the Evansville PSH tenant population are similar to that in other populations.

Domestic Violence

Domestic violence is a strong predictor of unmet needs, particularly with regard to physical and mental health care (Hwang et al., 2010. In the Evansville PSH population, domestic violence was a leading cause of homelessness. Rates of domestic violence also decreased following PSH (Graph #8).

GRAPH #8

Number of incidents of domestic violence reported by IPSHI-Evansville tenant pre/post PSH entry. Incidents reported prior to PSH were taken from case files and verified with interviews.



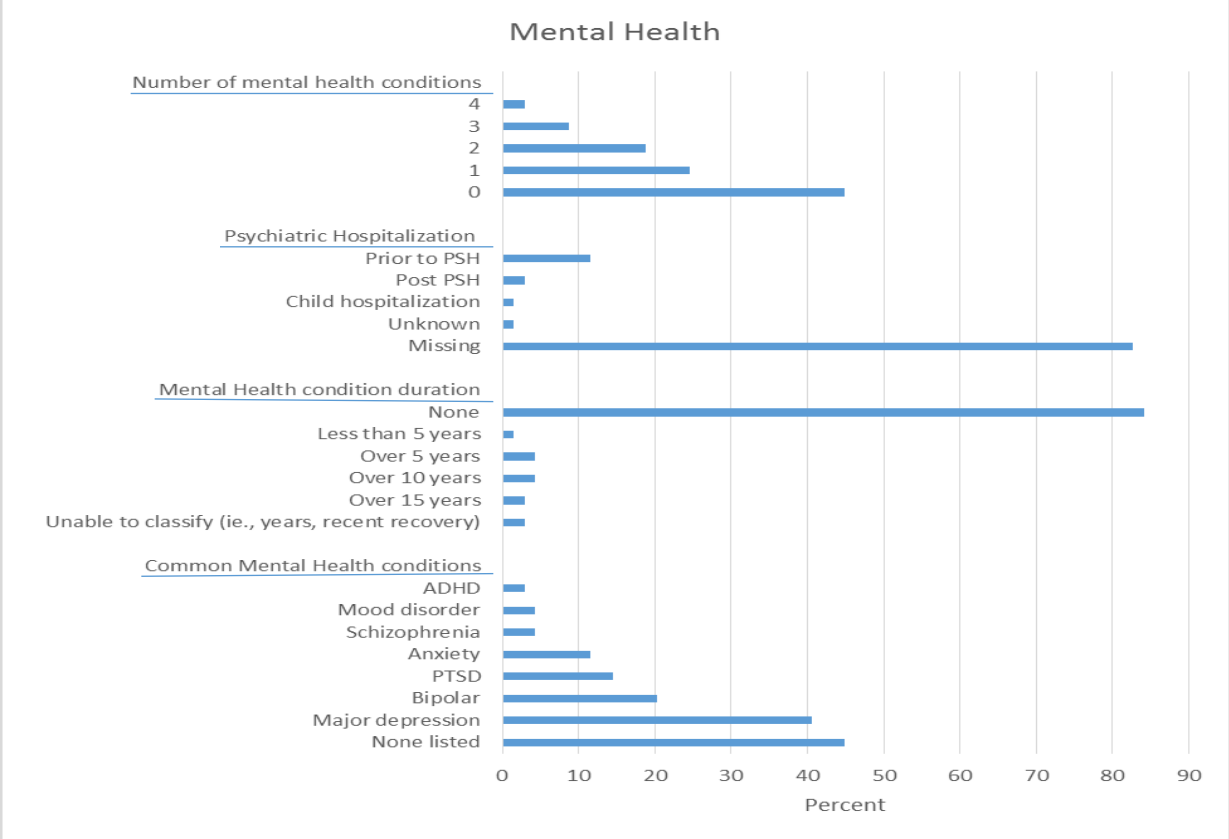
Mental Health Care of IPSHI-Evansville:

Pre-Entry Permanent Supportive Housing

Mental health issues are often linked to homelessness. In the study population of tenants, mental health conditions were common, with 55.1% listing at least one mental health condition. Depression was the most frequently cited condition (40.6%), followed by bipolar disorder (20.3%), PTSD (14.5%) and anxiety (11.6%). Schizophrenia, mood disorder, and ADHD were less frequently listed with less than 5% each. The duration of mental conditions ranged from less than five years to more than 15 years. Inpatient mental health hospitalizations were listed for 12 residents, with eight residents having a prior history of hospitalization. Two tenants reported an inpatient mental health hospitalization. See Graph #9 for a summary of mental health data.

GRAPH # *9*

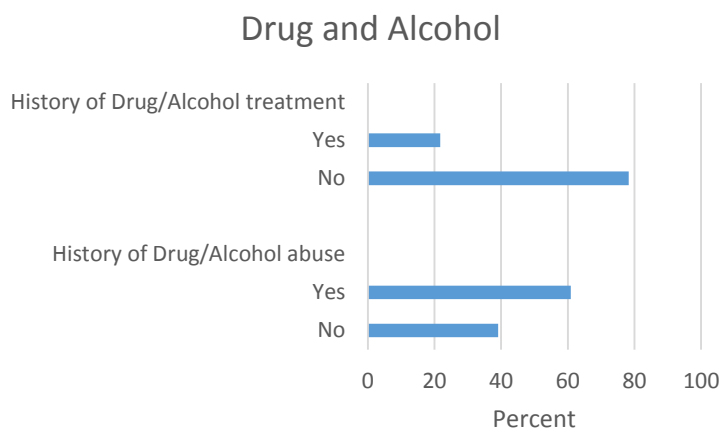
Pre-entry mental health information of IPSHI-Evansville tenants as obtained from case files



GRAPH # *10*

Pre-entry drug and alcohol information of IPSHI-Evansville tenants as obtained from case files

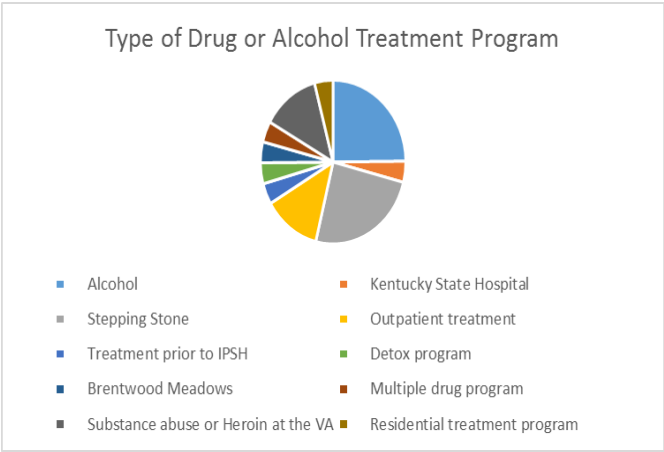
It is not uncommon for one half to two-thirds of homeless individuals to report a mental health issue (Hickert & Taylor, 2011, Hwang, 2011). Hickert and Taylor's (2011) results show supportive housing can help to provide tenants increased stability, leading to improved reintegration into the community and improved compliance with medications. Evansville shows similar rates of mental illnesses among the population (See Graph #10)

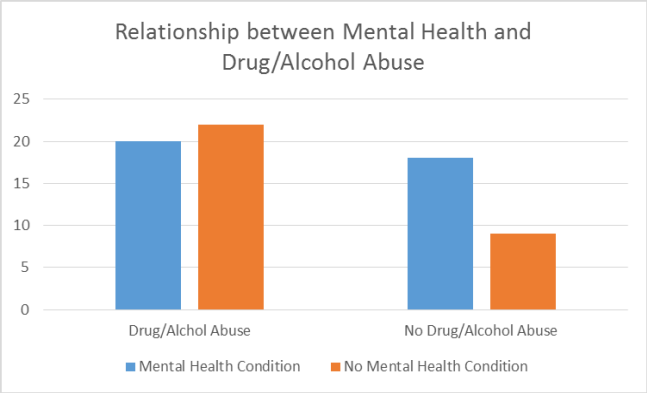


GRAPH # 11

Pre-entry drug and alcohol treatment program information of IPSHI-Evansville tenants as obtained from case files

The majority of the tenants reported a history of drug or alcohol abuse (60.9%), while a much smaller proportion (21.7%) reported history of drug or alcohol abuse treatment (Graph #11). Type of treatment was reported in many different formats ranging from specific places (Stepping Stone or Brentwood Manor) to vague descriptions. Treatment prior to PSH Housing can result in lower rates of reliance on residential substance abuse treatment services, and increased compliance with outpatient programs (Hickert & Taylor, 2011).





GRAPH # *12*

Pre-entry mental health and drug/alcohol abuse information of IPSHI-Evansville tenants as obtained from case files

In the literature, it is well established that there is a link between mental health issues and substance abuse, with the two often coexisting as comorbidities (Hwang et al., 2011; Reid et al., 2008; Weinstein et al., 2013). Evidence as to which issue, mental health or substance abuse, came first is more difficult to establish causally. As shown in Graph #12, the relationship between mental health and drug or alcohol abuse, the population of tenants in Evansville did not have evidence of coexisting mental health issues and substance abuse. While surprising considering the strong evidence for a link between these two issues in other populations, this is primarily due to the fact that the case files for many tenants in Evansville were lacking complete information for one or the other of these two variables.

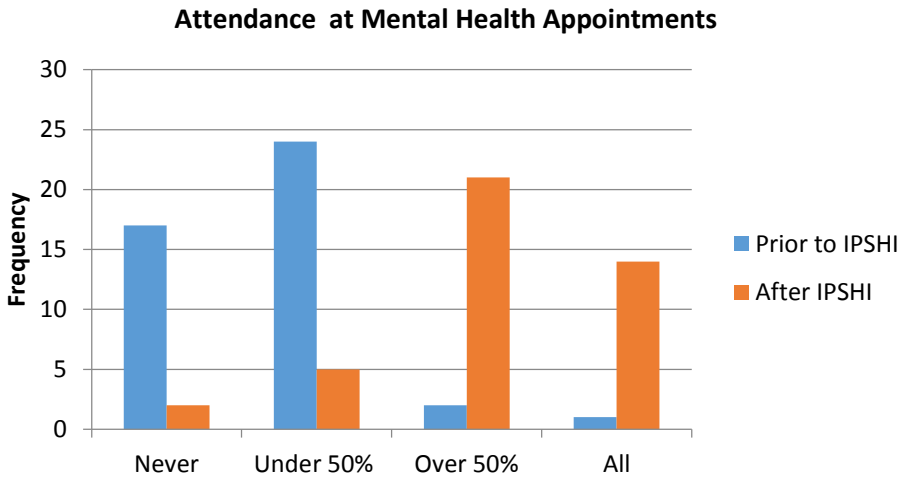
Post-Entry Permanent Supportive Housing

Mental Health Appointments

The numbers of mental health appointments attended showed a highly statistically significant increase from prior to after PSH (See Graph #13).

GRAPH *#13*

IPSHI-Evansville tenants' attendance at mental health appointments pre/post tenancy as reported during interviews.



Tenants identified several factors that contributed to being able to keep more mental health appointments post PSH entry:

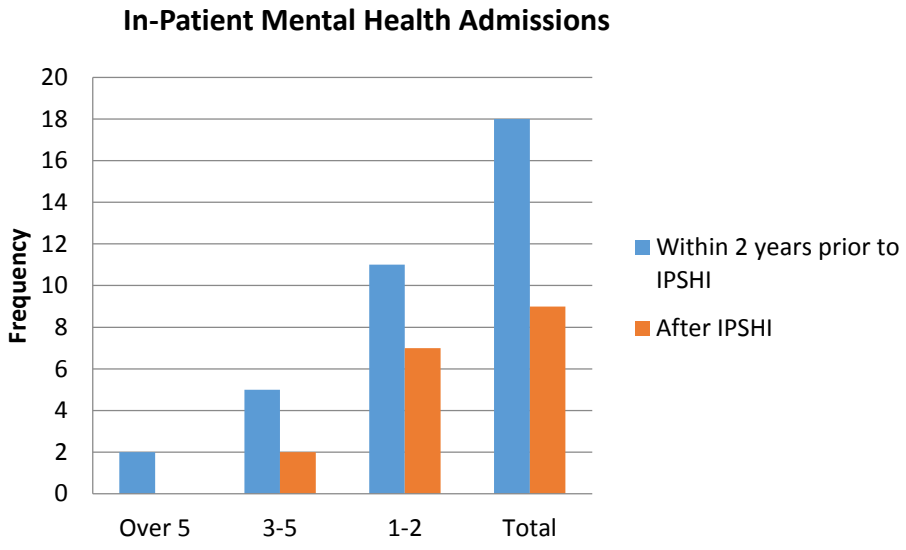
- "I am more stable since living here and can remember my appointments."
- "When on the streets, I didn't even think to go."
- "They (staff) remind me to go to my appointments."
- "Before, I couldn't afford meds or counseling. Had tried killing myself several times when I was living on street. Now I have support and am able to keep my appointments."
- "I keep my appointments now and take psych meds. My thinking is a lot different since taking meds. I am now able to "walk away" instead of punching someone. Now I stop and think."
- "I keep my appointments now. As long as I take my pills, I keep an "even keel". I was horrible with appointments before."

In-patient Mental Health Admissions

While there was some change in the numbers of in-patient mental health admissions, the change was not statistically significant from two years prior PSH to after PSH (see Graph #14).

GRAPH *# 14*

IPSHI-Evansville tenants' in-patient mental health admissions pre/post tenancy as reported during interviews.



Tenants identified several factors that have contributed to a decrease in mental health inpatient admissions post PSH entry:

- "I have better self-worth now. I want to keep this place, live and enjoy."
- "I think a lot differently now that I am taking (medication). I now walk away instead of punching someone. Now I stop and think."
- "Before, I couldn't afford meds or counseling."
- "I used to be anti-social. If it wasn't for the meds, I would not be talking with you today."

Emergency Shelter

Tenant case file and interview information indicated that no tenants have used emergency shelter post-entry.

Criminal Justice

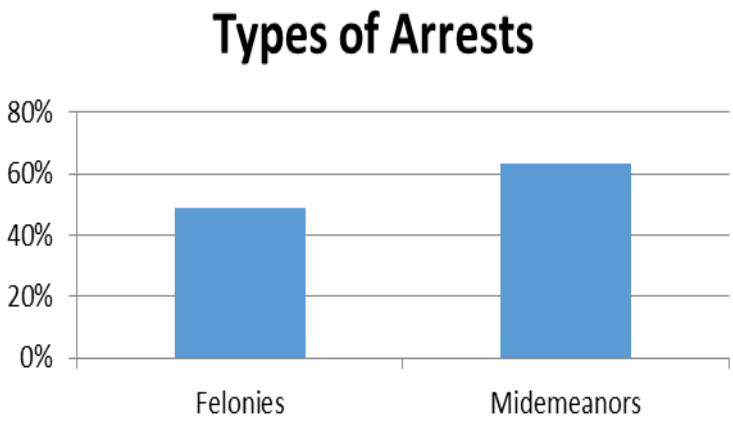
Pre-Entry Permanent Supportive Housing

Data regarding criminal history of IPSHI tenants prior to housing was obtained from case files. Limitations of this resource prevent a definitive quantification of incarceration of IPSHI tenants. Therefore, a tenant's actual criminal history was compared to the criminal histories of the chronically homeless as published in previous studies on criminal justice usage. The IPSHI baseline was then adjusted for variation. The adjustment calculation is described in detail in the appendix.

48.6% of IPSHI tenants had committed felonies and 63.2% committed misdemeanor offenses prior to housing (Graph 15). The types of felony and misdemeanor arrests are noted in Graph 16.

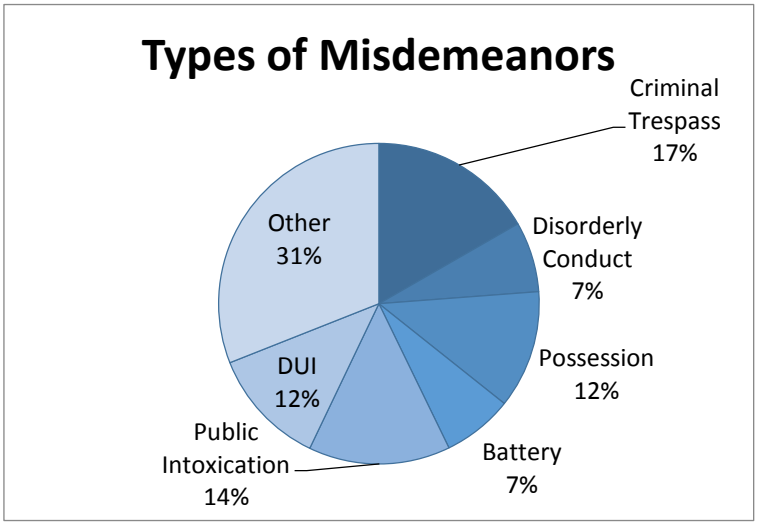
GRAPH *# 15*

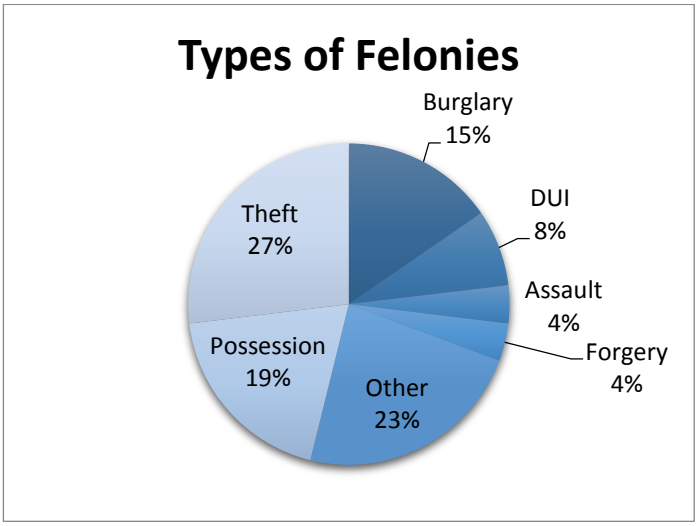
Pre-entry criminal history information of IPSHI-Evansville tenants as obtained from case files



GRAPH # *16*

Pre-entry types of arrests of IPSHI-Evansville tenants as obtained from case files



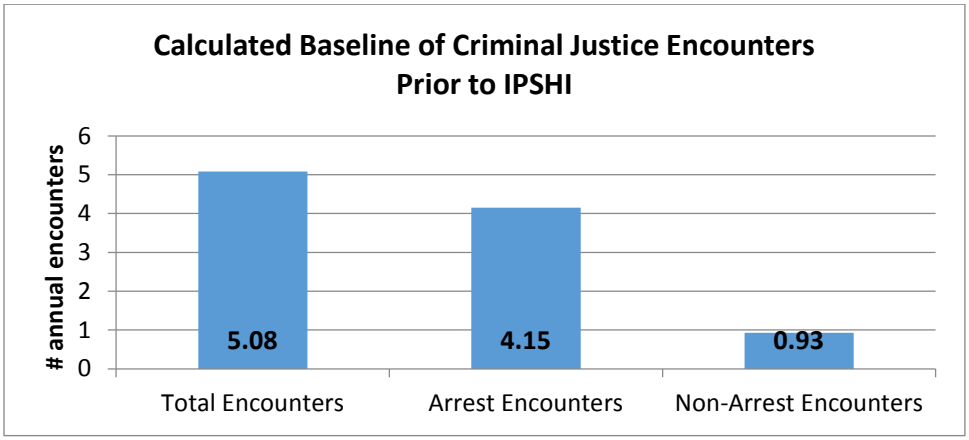


Reference to similar national studies show that the IPSHI-Evansville tenants have similar criminal history characteristics (See Appendix E for details). The next step of the research connected criminal history to recent criminal justice usage.

Wright (2007) tracked criminal justice use of 96 chronically homeless and "intensive users" of public services for three and a half years and found that the average arrest rate to be 0.84 per person per year with a 1.25 arrest multiplier (meaning multiple arrests per person) with the total number of arrest encounters (arrests plus days in jail) to be 18.43 per person per year or 17.72 encounters per arrest, similar to Clark, Ricketts, and McHugo (1999) whose average arrest rate was 0.44 per person per year with a 2.3 arrest multiplier. The latter study also tracked non-arrest encounters and found that each arrest was associated with 3.96 non-arrests encounters. Given the characteristics of the IPSHI-Evansville population and the previous literature, a baseline for the number of encounters prior to entry into IPSHI was calculated to be 4.15 arrest encounters, and 0.93 non-arrest encounters (Graph 17). Details of the calculation can also be found in Appendix E.

GRAPH # *17*

Calculated baseline of criminal justice encounters pre-entry IPSHI



Post-Entry Permanent Supportive Housing

Table 3 shows the change in arrests from the interview data. The results show that 82.8% of the tenants have not been arrested post-entry and only 3.4% have been arrested more than they were pre-entry.

TABLE # *3*

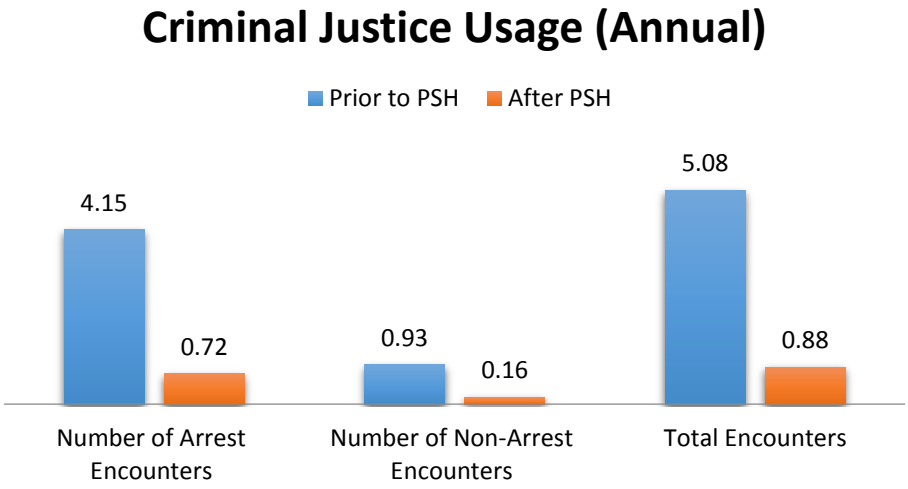
IPSHI-Evansville tenants' number of arrests post-entry as reported during interviews.

Number of Arrests	Post-entry IPSHI	Percent of Total
More	2	3.4%
Less	4	6.9%
Same	4	6.9%
None	48	82.8%

When combining the interview results with the baseline, those who had more arrests were balanced out by those who have fewer arrests; therefore, a total of ten tenants were assumed to maintain the baseline number of arrests they had pre-entry. Overall, the results seen in Graph 19 show an 82.8% reduction in annual criminal justice usage post IPSHI tenancy.

GRAPH # *19*

Calculated baseline of criminal justice encounters pre-entry IPSHI and number encounters post-entry PSH as reported during interviews.

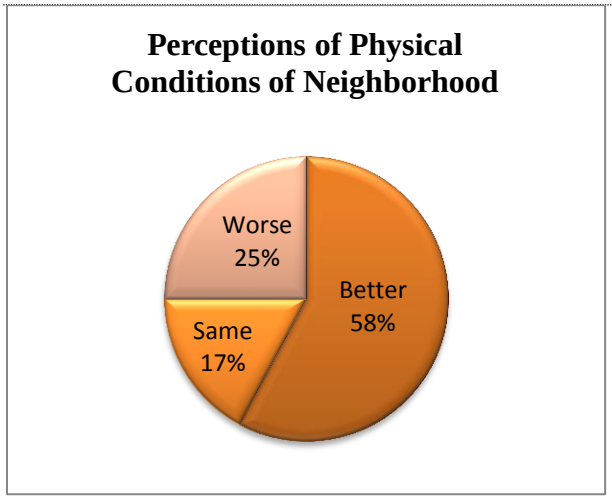


Safety and Physical Condition of the Neighborhoods

Perception of the physical condition and safety of the neighborhood was included in the face-to-face interviews with tenants (Graph 21). More than half (57.8%) felt that their physical conditions of post-entry neighborhood was better, while only about one third (35.8%) considered the neighborhood safer.

GRAPH # *21*

Perceptions of physical conditions and safety of neighborhoods from interviews with IPSHI tenants



Tenants' comments regarding physical condition of neighborhood

Vision 1505

- "There's a lot of abandoned buildings."
- "A lot of people don't keep their grass cut."
- "Many run-down buildings that people are living in."
- "You can tell that some people are trying to keep their place nice."
- "Took walk with my children and noticed a lot of litter on the streets and lawns."
- "Dirty, not too good."
- "Aged. Not highly kept."
- "A lot of abandoned houses and busted out car windows & graffiti".
- "It's pretty quiet. Where I lived before, I always had to worry about stuff I worry about being harassed."
- "It differs greatly from the middle class neighborhood I grew up in."
- "I don't like it. It's surrounded by factories. Some cars come by very fast. I have tried to get a "child at play" sign to put up."
- "Pretty nice."
- "I like the grocery store (a supermarket) being close by."

Lucas Place II

- "They tore many of the abandoned buildings down."
- "A lot of the buildings are getting fixed up."
- "I think it's quite peaceful."
- "Well, someone got murdered down the street a few months ago."
- "It's good." (4)

Tenant's comments regarding safety of neighborhood

Vision 1505

- "I feel safe inside here, but the neighborhood is rough."
- "I heard that someone got jumped recently about a block from here."
- "It's fine. I grew up in this neighborhood."
- "I heard gunshots out there the other night."
- "I wouldn't walk out there after dark."
- "More violent here. I've seen fights."
- "Wouldn't feel safe walking at night."
- "I feel safe here because I can lock my door as opposed to putting up a blanket over tent entrance."
- "It's been safe so far."
- "Don't care for the neighborhood type of people."
- "There are a number of registered child molesters in neighborhood."
- "It's ok. Better because of all the cameras." (2)
- "I've heard gun shots before."
- "My son got jumped by some boys trying to take his bike."
- "All good."

- "We are safe during the day as long as we don't talk to strangers."
- "I grew up in this neighborhood. It's good." (3)
- "I don't like walking in the area at night."

Lucas Place II

- "The neighborhood is getting a lot better with the community association."
- "It's a lot better than when I lived in it years ago."

Scattered Site

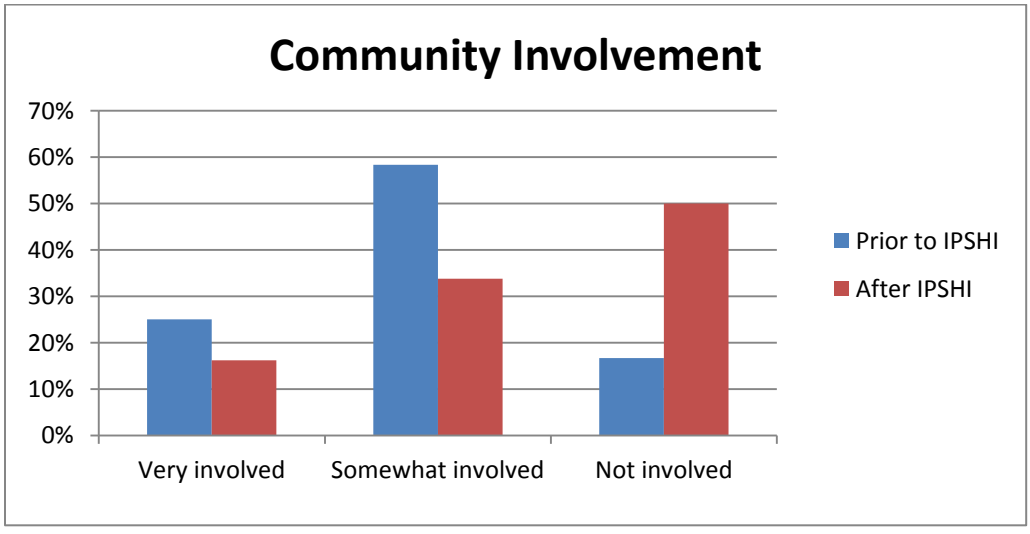
- "Kind of scary. My neighbor has lots of company all the time."
- "Much better. There are lights in the neighborhood now."
- "Neighborhood is rough, but it does feel safe in here (apartment)."
- "Friendly neighborhood. Eclectic mix of cultures. It's gotten much better."
- "In my block, everyone looks out for each other."
- "Neighborhood isn't too bad if I am in by a certain time."
- "I like how they're keeping it clean."

Community Involvement

While there does appear to be change in the numbers of subjects involved in their community (Graph 22), the change was not statistically significant for prior IPSHI to after IPSHI. Community involvement tended to be with church. The number of tenants responding to this question varied greatly. While 12 answered the question in regard to involvement in the community prior to IPSHI, 68 responded to the post IPSHI question.

GRAPH # *22*

Community Involvement of IPSHI tenants prior to and post-tenancy.



Tenants explained their community involvement post IPSHI entry:

- Lucas Place II---involvement w/Jacobsville Association (11)
- Attends church regularly (27)
- Attends community meetings (9)
- Two residents reported that they used to be active in community, but are no longer active due to health conditions that developed in past year.

Employment

TABLE # *3*

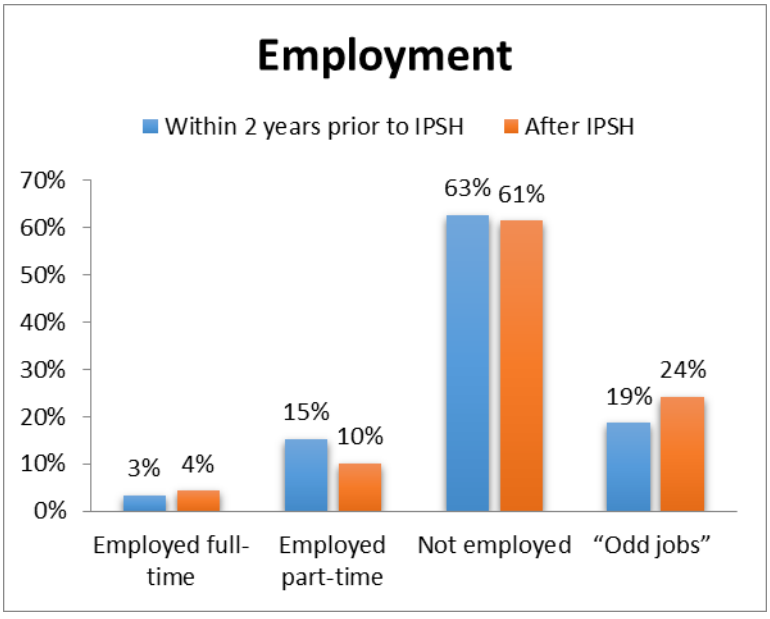
IPSHI-Evansville tenants' employment pre/post tenancy as reported during interviews.

Employment Status	Within 2 years prior to IPSHI	After IPSHI
Employed full-time	3%	4%
Employed part-time	15%	10%
Not employed	63%	61%
"Odd jobs"	19%	24%

As shown in Table 3 and Graph 23, results for IPSHI tenant employment situation show no significant difference prior to and after admittance to IPSHI. "Odd Jobs" are defined are temporary and inconsistent employment such as mowing lawns, handyman and "sweeping up". Three tenants reported having both a part-time job and working "odd jobs"

Graph #23

IPSHI-Evansville tenants' employment pre/post tenancy as reported during interviews.



Tenants discussed employment status post PSH entry:

- "I was working minimum wage job in a store, quit a few weeks ago because I was going to lose my food stamps and it was costing me more for childcare than I was bringing in."
- "I am currently taking community college classes" (4)
- Reported to recently submitting job application (4)
- Reported last employment was over five years ago. (23)
- Reported losing job, then house, then car within last 5 years (5)
- Individuals who reported to having part-time jobs reported holding the job for brief period of time before either quitting or being terminated. (7)
- "Was in severe car accident years ago and haven't been able to work since."
- "Hurt my back on job a few years ago and can't work."

Nutritional Health

Table *# 4*

IPSHI-Evansville tenants' healthy eating habits post tenancy as reported during interviews.

Eat Fruit and Vegetables on a Daily Basis	After IPSHI
More	49
Less	2
Same	17

IPSHI tenants were far more likely to engage in healthy eating habits defined as eating fruits and vegetables on a daily basis. Tenants reported that 72% engage in more healthy eating habits compared to only 3% who state less healthy eating habits (Table #4). Please note that both Lucas Place II and Vision 1505 have large vegetable gardens planted by residents and tended to by several residents.

Children's School Attendance and Involvement

Results for those tenant's with school-aged children show that IPSHI increases both school attendance and involvement, with 69% reporting higher school attendance and 67% reporting higher levels of involvement. It should be noted that Vision 1505 is the only location where school age children reside. There is a bus-stop on the corner of Vision 1505. Also, one person reported school attendance of her teenage children was "less" due to not wanting to leave her alone when she became ill, and they rotated staying home to care for her.

Table # *5*

IPSHI-Evansville tenants' school attendance and parental involvement with children post tenancy as reported during interviews.

School Attendance	After IPSHI
More	**69%**
Less	**8%**
Same	**23%**

Involvement With Children	After IPSHI
More	**67%**
Less	**0%**
Same	**33%**

Relationship with Family Members

Results for relationships with family members showed significant improvement for IPSHI tenants with 63% reporting better family relationships (Table#6). There were 11 IPSHI tenants who had no contact with any family members before or after admittance.

Table *#6*

IPSHI-Evansville tenants' relationships with family members post tenancy as reported during interviews.

Relationships with Family Members	After IPSHI
Better	**63%**
Worse	**0%**
Same	**37%**

Tenants' comments regarding the impact of PSH on relationships with family members:

- "My family is very proud of me"
- "Better----having my own apartment, I am now able to invite them over."
- "Not good due to past history"
- "Getting better every day"
- "Much better. Mother is now able to come over and help me with care of my children."
- "Better, because I've got my priorities in order and life straightened out."
- "We talk more."
- "Lots better. Can have family stay with me for up to 2 weeks."
- "Better cause I've had chance to stay clean."
- "Lots better. They don't have to worry about me dying out there."

- “Better. They see I’m OK.”
- “Better. Being here and getting help made the difference."

Additional Comments from Tenants

Please note that all comments are typed exactly as stated to interviewer. No edits or corrections have been made.

What are some things that you do now that you didn’t do before you moved here?

- “Buy groceries and cook my own dinner.”
- “Wash and dry my clothes.”
- “Take a shower.”
- “Sleep with a roof over my head.”
- “Not worry about what may happen to me on the streets.”
- “Have a safe place to sleep.”
- "I can go to my home and not worry about someone bothering or hurting me. When I lived in the tent I only had a blanket for a door.”
- “I take better care of myself. I’m not stressed out over where to stay.”
- “Eat.”
- “Work in the garden.”
- “Be around other people.”
- “Ask staff for advice and resources.”
- “Get mail.”
- “I found I am able to focus more on what is important. Before, I was stressed out all the time and not able to focus much on stuff going on. I can breathe now. I can think.”
- “Take care of my kids & clean my house.”
- “I can have family & friends over.”
- “I go to school.”
- “Have my children back living with me.”
- “I have a place where I can take care of my child.”
- “Fix own food. Have a normal life.”
- “Live life to the fullest.”
- “Do education activities with the other parents.”

What are some additional thoughts, information would you like to share regarding your life since you moved here?

- "Aurora is a blessing. They help with diapers and baby formula."
- "We've been very lucky. They (Vision 1505) has programs for children and adults."
- "People who live here really help you."
- "Life is a lot better. It takes some getting used to since being homeless since 2005….had to spend so much time in survival mode."
- "I think it's great. I get to live on own and be independent."
- "They genuinely care here. I'd like to be a person who works with the homeless."
- "This place is an absolute blessing from God. They take you to the food bank---that's amazing. I think it would be very beneficial if there were more programs like this. They give rides to Dr. appointments and other appointments. They take us to the grocery store."
- "This is a wonderful place to get your life together. I feel I have lots to offer since I've lived here and ended an abusive relationship."
- "I love my apartment. I'm at peace."
- "Aaron & Taylor are great!" (Vision 1505).
- "Everyone has a lot of support here. They help you if you need a ride to an appointment. I feel very safe living inside this building."
- "I think it's really good here. This is my first apartment. I was in a domestic violence situation in past. I am no longer with the abuser."
- "I think this place is very good place to live. Staff is very helpful."
- "I am finally off the cycle of abuse."
- "My health is a lot better since I moved here."
- "Haven't been in trouble since I've lived here."
- "It's helped me to change my life. Everybody here tries to help each other out."
- "I feel this place is a God-send. I feel I've been given another chance to be happy. Staff here is great."
- "It's a great place. I can stay here 'til I die."
- "I want to thank everyone for their efforts. I don't know what I would have done."
- "Everything is great. I didn't realize there are so many resources."
- "This program takes a lot of stress off of you. I can now stay focused on my goals."
- "Since I moved here, I've found a good church and friends. I now volunteer at a vacation Bible school."
- "I used to have a bad drinking problem, but not now. (Used to black out and end up in jail). Now I have something to care about."
- "I think it's an awesome program.. I'd like to give back to the community."
- "This program helped save my life, as I don't have health insurance."

Cost Analysis of IPSHI-Evansville

The medical and mental health services usage data of IPSHI tenants as presented in the previous section was used to estimate the change in associated service costs. After estimating those cost changes, a comparison of costs between the traditional means of addressing homelessness and permanent supportive housing was estimated from the data.

To estimate the change in costs associated with the change in IPSHI tenants use of services, this section relies on secondary cost data. The reason used is twofold. First, secondary costs data allows for greater uniformity as there may be large outliers in the direct data that drastically influences the analysis. A typical example of this is inpatient medical services usage where a small number of expensive visits can distort the results (see NERC 2012 and Patterson 2010 for specific examples of these impacts). The second reason is research constraints involved in tracking and gathering sensitive information from tenants. Located in appendix F, Tables 1 and 2, present the secondary research that is used as the primary references. The method used to populate this table involved analyzing dozens of research reports and articles on each type of service and then choosing three or four that were 1) not heavily impacted by outliers and 2) the most recent. Graph 24 and Table 7 summarize the change in service use costs of IPSHI tenants post-entry. Descriptions of the specific services use cost analysis follows.

Graph #24

Changes in estimated service costs per IPSHI tenant post-entry.

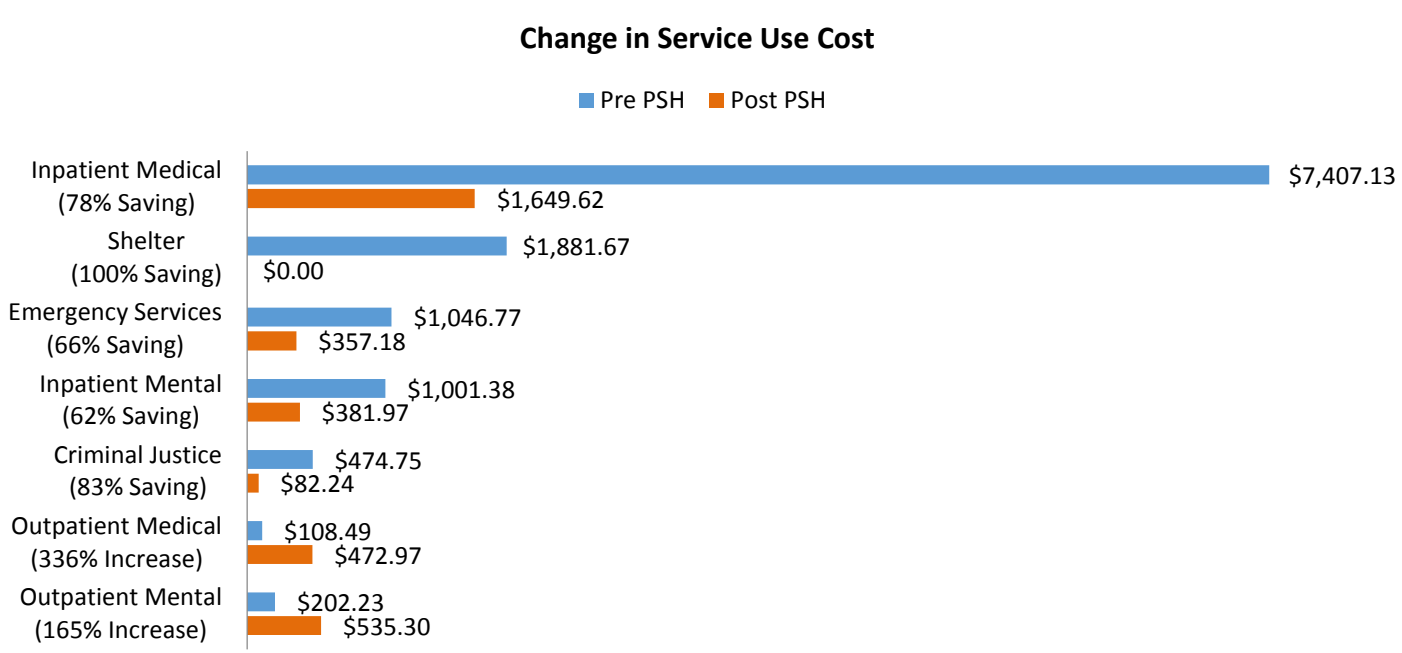


Table #7

Changes in service unit costs per IPSHI tenant post-entry.

Change in Service Use Costs

	Pre PSH	Post PSH	Change Cost	Percent Change
Criminal Justice	$474.75	$82.24	-$392.51	-82.7%
Emergency Services	$1,046.77	$357.18	-$689.60	-65.9%
Inpatient Medical	$7,407.13	$1,649.62	-$5,757.50	-77.7%
Inpatient Mental	$1,001.38	$381.97	-$619.41	-61.9%
Shelter Services	$1,881.67	$0.00	-$1,881.67	-100.0%
Outpatient Medical	$108.49	$472.97	$364.48	336.0%
Outpatient Mental	$202.23	$535.30	$333.08	164.7%

Criminal Justice

Calculating the change in criminal justice service usage costs for IPSHI tenants post-entry is straightforward. As shown earlier in the report (Graph #19), criminal justice use pre-entry per tenant averaged 5.08 uses compared to 0.88 uses post-entry. Using the average service use cost in Appendix F, Table 1, criminal justice service use costs decreased from $474.75 pre-entry to $82.24 post-entry for an estimated public saving of $392.51 per adult IPSHI tenant or a saving of 82.7%. This estimated reduction is similar to other research. McLaughlin (2011) estimates a 95% saving and Patterson (2010) estimates an 85.8% saving.

Emergency Room Services

To calculate the cost change in emergency room services, a pre-entry use value was derived from the interview data (as previously shown in Graph #7). Tenants were categorized into four groups: over 5 uses; from 3-5 uses; from 1-2 uses and no uses. To calculate the pre- and post-entry service use, it was assumed that tenants who responded with over 5 had 6 total uses, those who responded 3-5 had 4 uses, those who responded 1-2 had 1.5 uses and those with no uses had zero. It is important to note that not all tenants reported emergency services use. Given these assumptions, the estimated average pre-entry emergency services use was 2.14, compared to the average post-entry use of 0.73. Using the average service use cost in Appendix F, Table 1, emergency service use costs decreased from $1,046.77 pre-entry to $357.18 post-entry, for an estimated public saving of $689.60 per adult tenant or a saving of 65.7%. This estimated saving

is again similar to other research. CIR (2010) estimated a 55.9% saving and Patterson (2010) estimated a 66.7% decrease in emergency services use.

Inpatient Medical Services

A similar calculation was done for inpatient medical services. Tenants were categorized into four groups: over 5 uses; from 3-5 uses; from 1-2 uses and no uses (as previously shown in Graph #6). To calculate the pre- and post-entry service use, it was assumed that tenants who responded with Over 5 had 6 total uses, those who responded 3-5 had 4 uses, those who responded 1-2 had 1.5 uses and those with no uses had zero. It is important to note that not all tenants reported inpatient medical services use. Since this is a type of service with multiple units, the secondary research was combined to provide a cost per use in which the average cost per unit was multiplied by the average number of units (in this case the unit was hospital days). This estimate is found in Appendix F, Table 2. Given these assumptions, the estimated average pre-entry inpatient medical services use was 1.66 compared to the average post-entry use of 0.37. Using the average service use cost in Appendix F, Table 1, for inpatient medical services, inpatient medical use costs decreased from $7,407.13 pre-entry to $1,649.62 post-entry for an estimated public saving of $5,757.50 per adult tenant or a saving of 77.7%. This estimated saving is again similar to other research. Culhane (2002) estimated an 80% decrease in inpatient medical use and Moore (2006) estimated an 88% decrease.

Inpatient Mental Health Services

The inpatient mental health services use estimation method essentially follows the inpatient medical use method. Tenants were categorized into four groups: over 5 uses; from 3-5 uses; from 1-2 uses and no uses (as previously shown in Graph 14). To calculate the pre- and post-entry service use, it was assumed that tenants who responded with Over 5 had 6 total uses, those who responded 3-5 had 4 uses, those who responded 1-2 had 1.5 uses and those with no uses had zero. It is important to note that most tenants did not report inpatient mental health services use. Since this is a type of service with multiple units, the secondary research was combined to provide a cost per use in which the average cost per unit was multiplied by the average number of units (in this case the unit was hospital days). This estimate is found in Appendix F, Table 2. Given these assumptions, the estimated average pre-entry inpatient mental services use was 0.70 compared to the average post-entry use of 0.27. Using the average service use cost in Table B, inpatient mental health services use costs decreased from $1,001.38 pre-entry to $381.97 post-entry for an estimated public saving of $619.41 per adult tenant or a saving of 61.9%. This estimated saving is again similar to other research. Patterson (2010) estimated a 64.8% decrease in inpatient mental use and Culhane (2002) estimated a 60% decrease.

Shelter Services

As mentioned in the previous section, there were no reports of shelter service use among tenants in IPSHI-Evansville, resulting in zero use after PSH. Secondary research was used to establish a pre-housing shelter service use baseline similar to criminal justice use in the previous section. The baseline established by secondary research is found in Appendix F, Table 1. It is assumed that the pre-housing baseline was 90.25 use (or days) in shelter services at $20.85 per use (day) for a total pre-entry service use value of $1,881.67. Given that there were no reports of shelter services use post-entry, this results in a saving of $1,881.67 per adult tenant or a 100% saving. This level of saving is consistent with other research. For example, McLaughlin (2011) reports a similar baseline value and a 97% reduction or shelter service savings. Patterson (2010) also reports a similar baseline and a 99.8% savings.

Medical Appointments – Outpatient Medical Use

To estimate the change in service costs for outpatient medical use, tenants were asked the frequency in which they attended medical appointments. Secondary research was used to establish a baseline number of appointments at 1.44 pre-entry to IPSHI (appendix F, Table 1). Some tenants reported that they did not have any medical outpatient use. When including these tenants, the average pre-entry outpatient medical use fell to 1.15.

To estimate the post-entry use, it was assumed that tenants who responded with "Never" attended 0% of their appointments. Tenants who responded post-entry with "Infrequently" attended 25%; those who responded "Most" attended 75%, and those who responded "All" attended 100%. This attendance rate was estimated pre-entry and compared to the post-entry attendance rate. This resulted in a 336% increase in outpatient medical use or a change in use from a pre-entry average of 1.15 to a post-entry average of 5.01. Using the use rate of $94.46, (appendix F, Table1) this results in an increase in post-entry outpatient medical service use of $364.48 per adult resident. This estimate in increase service use is somewhat higher than in other research. Mares and Rosenheck (2011) estimated a change in use from 1.7 pre-entry to 2.3 post-entry (a 35% increase) and Basu et al. (2011) estimated a change in use from 2.0 pre-housing to 5.4 post-housing (a 170% increase).

Mental Health Appointments – Outpatient Mental Health Services Use

The method for calculating the estimate of outpatient mental services use is identical to that for outpatient medical services. Secondary research was used to establish a baseline number of appointments at 3.83 pre-housing (appendix F, Table #1). Some tenants reported that they did not have any medical outpatient use. When including these tenants, the average pre-entry outpatient medical use fell to 2.25.

To estimate the post-entry use, it was assumed that tenants who responded with "Never" attended 0% of their appointments. Tenants who responded post-housing with "Infrequently" attended 25%; those who responded "Most" attended 75%, and those who responded "All" attended 100%. This attendance rate was estimated pre-entry and compared to the post-entry attendance rate. This resulted in a 165% increase in outpatient mental health services use or a change in use from a pre-entry average of 2.25 to a post-entry average of 5.96. Using the use rate of $89.88 (appendix F, Table 2), this resulted in an increase in post-entry outpatient medical service use of $333.08 per adult resident. This estimate for increased service use is somewhat higher than in other research. Basu et al. (2011) estimated a change in use from 2.2 pre-housing to 3.5 post-housing service use (a 59% increase), though Mares and Rosenheck (2011) estimated a change in use from 1.0 pre-housing to 2.8 post-housing service use (a 180% increase).

Traditional Means of Addressing Homelessness versus Permanent Supportive Housing

This section compares the cost-effectiveness between the traditional means of addressing homelessness and permanent supportive housing. While PSH tenants showed significant decreases to most service use resulting in lower service use costs, providing permanent housing to the chronically homeless results in additional costs. To estimate the additional housing cost associated with permanent supportive housing, each program was contacted. To be conservative, it was assumed that the program collected maximum reimbursement. In other words, tenants pay up to 30% of their income towards rent. Tenants with no income are fully subsidized. Given this variation, it was assumed all tenants were fully subsidized and the program collected maximum reimbursement. As tenant contributions rise, housing cost per person falls.

Table 8 compares the estimated cost per chronically homeless adult under traditional means of addressing homelessness to the estimated costs under permanent supportive housing. To simplify the results, all non-housing costs are summed under "Service Cost". The results show that service costs decreased by 68.1% under permanent supportive housing, while housing costs increased by $5,613 per person. Overall costs decreased by $1,149 per person for permanent supportive housing, saving 9.7%.

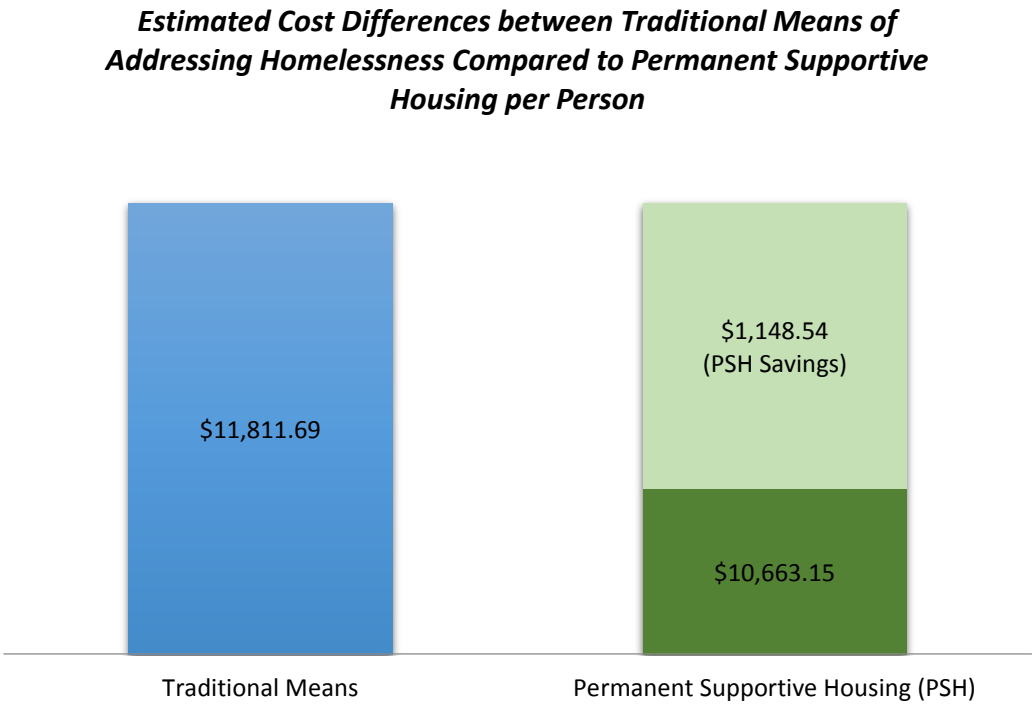
Table #8

Estimated Cost Differences between Traditional Means of Addressing Homelessness Compared to Permanent Supportive Housing per Person

	Traditional Means	Permanent Supportive Housing	Change	Percent Change
Service Cost	$9,930.02	$3,168.57	-$6,761.46	-68.1%
Shelter/Housing Cost	$1,881.67	$7,494.58	$5,612.92	298.3%
Overall Cost	$11,811.69	$10,663.15	-$1,148.54	-9.7%

Graph # 25

Estimated Cost Differences between Traditional Means of Addressing Homelessness Compared to Permanent Supportive Housing per Person



In comparing these results with other studies, Perlman (2006) estimate a 60% decrease in hospitalizations, substance abuse treatment, inpatient treatment and jail. Hirsch, Glasser and D'Addobbo (2007) estimated a service use reduction of $8,839 per person in permanent supportive housing. Moore (2006) estimated a 36.7% saving of permanent supportive housing and Mondello, Gass, McLaughlin and Shore (2007) estimated a net saving of $944 per person per year of permanent supportive housing. In more recent studies, McLaughlin (2011) estimated a net saving of $2,182 per person per year. Patterson (2010) estimated a pre-housing cost of $9,861 compared to a post-housing cost of $8,716 for a net saving of $1,145 once outliers were removed.

Points for Further Discussion/Research

Domestic Violence:

- In Evansville, domestic violence is a major cause of homelessness in women and can lead to unmet healthcare needs in the homeless population.

Physical Health

- PSH in Evansville creates a stable environment and provides opportunities for tenants to meet their health needs in a timely manner, leading to increased outpatient medical appointment attendance, a decrease in inpatient medical appointments, and fewer visits to the emergency room.

Mental Health Issues

- Mental health issues are common in the Evansville PSH tenant population.
- While there was not a relationship between mental health issues and substance abuse in this Evansville population, this is likely due to lack of documentation, rather than a true absence of a relationship.
- PSH in Evansville does impact the tenant's ability to attend mental health appointments which will positively influence the tenant's ability to remain in a stable housing environment.

Costs of IPSHI

- Further study should include looking at both physical and mental health treatment costs versus long term costs without treatment.

- Further study should look at long-term cost savings for children attending school and parental involvement

- Further examine the cost savings from increased nutritional health.

Community Involvement

- Community involvement after IPSHI was substantially higher at Vision 1505 and Lucas Place II.
    - Both of the above are residential sites, having staff on site and available to tenants during the day.
    - Vision 1505 utilizes individuals from several community organizations to involve tenants in various on-site activities (providing nutrition & social skills training and parenting skills training)
    - At Lucas Place II many of the residents reported that members of Jacobsville Community Association come to Lucas Place and have involved residents in the community Association Activities.

Scattered Sites

- Scattered Site Housing
    - 4 tenants were only able to answer 3-5 interview questions. These individuals were not able to focus attention and upon interviewer repeating questions, these tenants would provide information not pertaining to question or stare into space.
    - 5 tenants reported being arrested post-entry. One tenant has been arrested multiple times post-entry.
    - 4 tenants have been in their apartment less than 90 days
    - 6 tenants have been in their apartment 90-180 days.
    - 15 tenants have had emergency room visits post-entry.

Other IPSHI Markets

- These results apply to the Evansville market and the data available in this area. While the results were consistent with research conducted across the U.S., it is important to consider the Evansville results may not be generalizable across all IPSHI markets. Research in additional IPSHI markets using the methods developed in Evansville would validate that the Evansville results are generalizable across all IPSHI markets. While most aspects of this methodology could be used across IPSHI markets, it is important to customize instruments and data collection specifically for each market.

Additional Research Information

- A total of 69 tenants were interviewed (N = 69)
- It should be noted that that interview data (post-entry sections of the report) integrated the responses of both the tenants and case managers
- Not every tenant answered every question. This was fairly common for questions regarding "before IPSHI."
    - Common responses included: "I don't know"; "I have no idea"; "can't remember";
    - Some tenants stared blankly when asked a question.
        - This was common when asked question regarding "community involvement prior to IPSHI."
        - This was also more common when interviewing tenants who lived in scattered site housing
- Higher percentage of tenants at Visions 1505 and Lucas Place II consented to being interviewed than tenants living in scattered site housing.

Limitations

The current study had several limitations. First, only 69 out of 89 tenants consented to be interviewed, resulting in a lower amount of data pertaining to use of public services post-entry. Renters who did not consent to be interviewed may have differed in the amount and intensity of services utilized.

The use of gathering direct data through interviews allowed for the capture of specific information that could not be obtained using other techniques; however, as with any survey/interview, the validity of the data can be a concern. The Triangulation Methodology used in this study attempted to validate the interview data through two checks (case manager interviews and comparison with case file data). A limitation of this method was the incomplete data present in some case files. Incomplete data is typical when using pre-existing data that was collected for administrative purposes rather than research purposes and would be expected to be present if a similar study were conducted in other locations using the Triangulation Methodology. This research applied to the Evansville market and the data available in this area. While most aspects of this study could be generalized across IPSHI tenants, when using this method in other markets, it is important to know what data is best collected through interview, case files, or both.

Additional limitations included reliance on tenant self-reporting for services utilized post-entry due to current privacy and confidentiality regulations, and length of time (under two years) most renters have resided in their apartments.

While the use of secondary research in the cost analysis section has benefits such as greater uniformity as large outliers in the direct data can drastically influence the analysis, it can also mask location-specific circumstances. These location-specific circumstances, if any exist, can influence the results in both directions. They could contain additional costs that are not captured with the use of secondary data, but they could also contain specific benefits that, if discovered, could be used to benefit other areas.

Appendix A

IPSHI Questions for face-to-face interviews with Tenants:
Note spaces have been removed for formatting purposed in appendix.

Each resident will be asked the following questions. Follow-up questions will be tailored to specific responses provided by the resident.

1. Describe a typical day for you since you moved here?
    - How does this differ from before you moved here?

2. What are some things that you do now that you didn't do before you moved here?
    - And you are able to do these things now because_____

3. In what other ways has your life changed since you moved here?

4. What medical/mental health services have you used since you moved here?
    a. Emergency room_____ (describe) how often_____?
    b. Medical/mental health appointments (describe) how often_____?
    c. In-patient medical/mental health hospitalizations (describe)
    d. How does this differ from before you lived here?
    e. What do you think has contributed to change in your use of medical/mental health services?

5. How would you describe your attendance at medical /mental health appointments since you moved here?
    - How does this differ from before you moved here?
    - What has made the difference in your attendance of these appointments?

6. Describe your relationship with family members since moving here.

7. Describe your relationship since you moved here with:

a) non-family members:

b) Other residents:

c) neighbors:

8. Describe the physical conditions of your neighborhoods?

   - How does it differ from before you moved here?

9. Describe the level of safety you feel to your neighborhood since you moved here. How does this different from before you moved here?

10. Describe your level of involvement in your neighborhood since moving here.

    - Are you a member of a community group or organization?

11. a) Describe your employment and income situation since you moved here?

    b) How does this differ from before you moved here?

12. Describe typical meals that your family has during the week.

    - In what ways is this same/different from before you stayed in shelter?

    - If different, what do you feel has made a difference in the foods your family now eats?

13. (If there are children in the household)
    a) Describe the school attendance and performance of your children since you moved here.

       - How does their attendance and performance differ than before you moved here?

    b) Describe your involvement in your child's (children's) education?

       - How does this differ than before you moved here?

14. What types of homeless services were you using before moving here?

- How often were you using each of these services?

15. Are there things that you do differently since moving here?

- What things remain the same?

16. Describe your interaction with law enforcement since you moved here (imprisonment, police contacts)?

- How does this differ from before you moved here?

16. What are some additional thoughts, information would you like to share regarding your life since you moved here?

Appendix B

Semi-structured interview questions for face-to-face interviews with case managers.
Note: Spaces have been removed for formatting purposes.

Each case manager will be asked the following questions. Follow-up questions will be tailored to specific responses provided by the residents and respective case managers.

1. What medical/mental health services has resident used since moving here?
   a. Emergency room_____ (describe) how often_____?

   b. Medical\ mental health appointments (describe) how often_____?

   c. In-patient medical/mental health hospitalizations (describe)

   d. How does this differ from before resident lived here?

   e. How does this differ from when resident first moved in?

   f. What do you think has contributed to change in resident's use of medical and or mental health services?

2. How would you describe resident's attendance at medical /mental health appointments since moving here?

   - How does this differ from before they moved here?

   - What has made the difference in resident's attendance of these appointments?

3. Describe their relationship with family members since moving here.

4. Describe their relationship with non-family members since they moved here, (for example other residents, individuals they associated with in the past, etc.)

5. (If there are children in the household), describe the school attendance of resident's children since they moved here.

6. Has resident been accessing any services more than when they first moved in?

7. What are some additional thoughts, information you would you like to share regarding resident's life since moving here?

Appendix C

Indiana Permanent Supportive Housing Initiative – Case Files Variables Input Form
Program:

* This form will be used to collect variables information directly from the case files. Data will then be coded and entered into an SPSS database for future analysis.

VARIABLE	CHART INFORMATION	
1. Duration of residence:	Under 90 days	1
	90-180 days	2
	180 days to 1 year	3
	over 1 year	4
HISTORY OF HOMLESSNESS/ BACKGROUND	**Applicant Interview Notes**	
2. Where are you currently staying?		
3. a) What circumstances led to your current homeless situation?	b) Where were you living before?	
4. Have you been homeless before?	YES	NO

VARIABLE	CHART INFORMATION		
	1	2	
How many times?			
For how long?			
FAMILY STATUS	**Applicant Interview Notes**		
5. Marital Status	Single (Never Married) Married Widowed Divorced Separated Civil Union	1 2 3 4 5 6 7	
6. Name and ages of all children	1. 2. 3. 4. 5. 6.		Age
	YES	NO	
7. Is their father(s) present in their lives?	1	2	How often?
8. Does he pay child support?	1	2	

VARIABLE	CHART INFORMATION			
9. If no, what actions have been taken to obtain child support?	1	2		
10. Are there any physical /mental/ behavioral disabilities with you or your children that require special treatment of accommodations?	1	2		
11. Have you recently applied for or have a disability claim pending?	1	2		
12. Who are your support systems? Who do you turn to when you need help?	Family Friends Church Counselor Other	1 2 3 4 5	Explain other	
	YES	NO		
13. Head of household	1	2		
14. Number of adults in household	#			
15. INCOME	Have you applied for any of the following benefits?			
15. What benefits are you currently receiving?	TANF Medicaid WIC Childcare voucher Medicaid SSI	1 2 3	_____ amount _____ amount _____ amount	

VARIABLE	CHART INFORMATION		
	SSD Food Stamps Unemployment Veterans Benefits Other Assistance Employment Earning Child Support HIP	4 5 6 7 8 9 10 11 12 13 14 15 16	_____ amount _____ amount _____ amount _____ amount _____ amount _____ amount _____ amount _____ amount _____ amount _____ amount _____ amount _____ amount _____ amount ***List other sources of support:_____**

VARIABLE	CHART INFORMATION		
EDUCATION/ EMPLOYMENT	**APPLICANT INTERVIEW NOTES**		
16. What is the highest level of education attained?			
	Yes	No	
Grade of school	____		
High School Diploma	1	2	
GED	1	2	If no GED, are you currently working on a GED? Yes or No
Some College	1	2	
Bachelor's Degree	1	2	
	Yes	No	
17. Are you a Veteran?	1	2	
18. Are you employed?	1	2	If yes, where and for how long?

VARIABLE	CHART INFORMATION		
			If no, How long has it been since you have been employed? What types of jobs have you held in the past?
JOB TRAINING			
19. What type of job training did you receive?			
20. Before (1)or after admission (2)?			
CRIMINAL HISTORY			
21. Do you have any in Indiana or other state	YES	No	If yes, describe offense
felonies misdemeanors sex crime assault drug battery			

VARIABLE	CHART INFORMATION		
Health, Illness and Mental Health			
22. Physical illness & duration – head of household			
23. Physical disability and duration of each – head of household			
24. Developmental disability – head of household			
25. Mental health issues & duration – head of household			
26. Psychiatric hospitalizations (duration of each by HH member)			
27. Physical hospitalizations (duration of each by HH member)			
28. a) History of Drug/Alcohol abuse: b) History of Drug/ Alcohol treatment	Yes No 1 2 1 2		

VARIABLE	CHART INFORMATION
If yes, type of treatment & dates	
29. Type & last use	
30. Does anyone in HH have special needs?	Yes No 1 2
If yes, describe and state when need(s) began	
31. History of Domestic violence:	Yes No 1 2
Prior to IPSHI	
After IPSHI	

Appendix D

Table 1. Demographics of IPSHI-Evansville Tenants obtained from case files

	Frequency (%)
Marital status	
Single (Never married)	43 (62.3)
Widowed	1 (1.4)
Divorced	2 (2.9)
Separated	22 (31.9)
Missing	1 (1.4)
Highest level of education achieved	
Less than high school	3 (4.3)
Did not finish high school	14 (20.3)
High school diploma or GED	27 (39.1)
Some college	13 (18.8)
Associates degree or vocational training	8 (11.6)
Bachelor	0 (0)
Missing	4 (5.8)
Average number of adults in the household (mean (standard deviation))	1.3 (0.69)
Average number of children under age 21 in the household (mean (standard deviation))	1.23 (1.18)
Households with adult children living in the household	16 (23.2)
Veteran status (yes)	26 (37.7)
Employed (no)	55 (79.7)
Type of Employment (n=10 employed)	
Part-time	6 (60.0)
Temporary	1 (10.0)
Time since employed	
Over 5 years	3 (4.3)
1-5 years	1 (1.4)
Less than 1 year	1 (1.4)
Missing	64 (92.8)

Table 2. Homelessness Demographics of IPSHI-Evansville Tenants obtained from case files

	Frequency (%)
Duration of residency in PSH	
Under 90 days	5 (7.2)
90 to 180 days	2 (2.9)
180 to 1 year	5 (7.2)
Over 1 year	56 (81.2)
Missing	1 (1.4)
Reason for most recent homelessness	
Domestic violence	10 (14.5)
Loss of income	8 (11.6)
Addiction	4 (5.8)
Health	3 (4.3)
Mental Health	3 (4.3)
Other	5 (7.2)
Missing	36 (52.2)
Have you been homeless before (Yes)	53 (76.8)
Number of times homeless (mean (standard deviation))	2.49 (1.60)
Duration of homelessness	
More than 1 year	20 (29.0)
Less than 1 year	15 (21.7)
Missing	34 (49.3)

Appendix E

DETAILED DISCUSSION ON NATIONAL CRIMINAL HISTORY CHARACTERISTICS AS SHOWN IN PUBLISHED RESEARCH AND COMPARISON TO IPSHI-EVANSVILLE TENANTS. INCLUDES CALCUATIONS TO DETERMINE ESTIMATES OF CRIMINAL JUSTICE SYSTEM USAGE.

To calculate the baseline for criminal justice usage for IPSHI tenants prior to entry into the program, past criminal history was analyzed from the tenant's case files. The actual criminal history was then matched to the criminal histories of chronically homeless involved in previous academic studies on criminal justice usage. The baseline was then adjusted for variation. The adjustment calculation is described below.

Of the useable data, 48.6% and 63.2% of the IPSHI tenants in our study had past felony and misdemeanor encounters respectively prior to entry. Tsai and Rosenheck (2012) categorized 751 chronically homeless who are currently in supportive housing programs and found that 35% had been incarcerated for more than one year (a proxy for felonies as felony charges require at least one year sentence) prior to entry and 71% had a history of any incarceration (a proxy for felonies and/or misdemeanors). Malone (2009) found that 28% of homeless had a history of felonies and 45% had misdemeanors. In a national survey of 76 metropolitan and nonmetropolitan areas, Burt et al. (1999) found that 54% of the homeless population had some experience with incarceration and that 49% had spent at least five or more days in a city or county jail and 18% had spent time in state or federal prison. Kushel et. al. (2005) in a study of 1,426 of homeless and marginally-housed adults, report that 21.3% had a history of state or federal prison.

In a summary of 26 previous studies, Schlay and Rossi (1992) found the mean of incarnation history to be 41%. With regards to the types and severity of crimes, Greenberg and Rosenheck (2008) found that homeless inmates were more likely to be incarcerated for a property crime such as burglary and theft which represented 42.9% of our population's felonies.

Given that our population had similar criminal histories as previous studies, the next step is to connect criminal history to recent criminal justice usage. Brekke et. al. (2001) tracked homeless individuals with mental illness over three years and found that 48% had contact with police and 22% had charges filed. Clark, Ricketts, and McHugo (1999) tracked homeless individuals for three years with mental illness and substance abuse and found that 83% had contact with the legal system and 44% had been arrested at least once. Greenberg and Rosenheck (2005) found that 51% of the homeless had a history of incarceration and that 11% had been incarcerated within the past year. O'Toole (2004) found that arrest rates ranged from 10% or 0.10 per person per year for those without substance abuse to 20% or 0.20 per person per year for those with substance abuse. These results are similar to Metraux and Culhane (2006) who found that 23.1% of homeless in New Your City had been incarcerated in the two-year period prior to the study. Wright (2007) tracked criminal justice use of 96 chronically homeless and "intensive users" of public services for three and a half years and found that the average arrest rate to be 0.84 per

person per year with a 1.25 arrest multiplier (meaning multiple arrests per person) with the total number of arrest encounters (arrests plus days in jail) to be 18.43 per person per year or 17.72 encounters per arrest. This is similar to Clark, Ricketts, and McHugo (1999) whose average arrest rate was 0.44 per person per year with a 2.3 arrest multiplier. The latter study also tracked non-arrest encounters and found that each arrest was associated with 3.96 non-arrests encounters.

Please note for this analysis to ensure clarity, the IPSHI tenant is called the participant. Given the characteristics of the IPSHI population and the previous literature, the following formula was used to calculate the participant baseline (PB) for the number of encounters (arrests and non-arrests) prior to entry into IPSHI:

PB (Number of encounters (Arrests)) / Participant = 4.15

PB (Number of encounters (Arrests)) = ((Number of participants not reporting mental illness or substance abuse) x 0.10 + (Number of participants reporting mental illness and/or substance abuse) x 0.20) x 1.25 (arrest multiplier) x 17.72 (encounters per arrest).

PB (Number of encounters (Arrests)) = ((6 x 0.10) + (42 x 0.20)) x 1.25 x 17.72 =
9 x 1.25 x 17.72 = 199.35

PB (Number of encounters (Non-Arrests)) / Participant = 0.93

PB (Number of encounters (Non-Arrests)) = ((Number of participants not reporting mental illness or substance abuse) x 0.10 + (Number of participants reporting mental illness and/or substance abuse) x 0.20)) x 1.25 (arrest multiplier) x 3.96 (non-encounters per arrest).

PB (Number of encounters (Non-Arrests)) = ((6 x 0.10) + (42 x 0.20)) x 1.25 x 3.96 =
9 x 1.25 x 3.96 = 35.64

Appendix F

Table 1 refers the cost of services that involve one unit per use. It also records the average number of uses in the reference when appropriate. These included criminal justice, emergency services, shelter, outpatient mental health, and outpatient medical services. Table 2 refers to the costs of services in which there are multiple units per use. These include inpatient medical and inpatient mental health services in which the use involved multiple days (units). The average cost per unit and number of units as well as the average cost per use is displayed where a use is calculated as cost per unit multiplied by the number of units.

Table 1: Service Use Costs (Single Unit Use)

Service	Cost/Use	# of Uses	References
Criminal Justice	$76.00	n/a	Poulin et al. (2010)
	$89.20	n/a	Wright (2008)
	$87.38	n/a	NERC (2012)
Average (in 2014 Dollars)	*$93.45*		
Emergency Services	$475	n/a	Poulin et al. (2010)
	$456	n/a	CIR (2010)
	$492	n/a	Moore (2006)
	$342	n/a	Wright (2006)
Average (in 2014 Dollars)	*$488.02*		
Shelter Services	$12	-	Moore (2006)
	$22	-	Lewin Group (2004)
	$28	66	Poulin et al. (2010)
	$12	59	Patterson (2010)
	-	99	NERC (2012)
	-	137	Culhan (1999)
Average (in 2014 Dollars)	*$20.85*	*90.25*	
Outpatient Mental	$100	-	Moore (2006)
	$72	-	Poulin et al. (2010)
	$41	6.5	Patterson (2010)
	$106	2.2	Basu et al. (2011)
	-	2.8	Mares and Rosenhack (2011)
Average (in 2014 Dollars)	*$89.88*	*3.83*	
Outpatient Medical	$72	-	Poulin et al. (2010)
	$100	0.62	Moore (2006)
	$88	2	Basu et al. (2011)
	-	1.7	Mares and Rosenhack (2011)
Average (in 2014 Dollars)	*$94.46*	*1.44*	

Table 2: Service Use Costs (Multiple Unit Use)

Service	Cost/Unit	Units	References	Average Cost per Use (Use = Cost/Unit * Units)
Inpatient Medical Use	-	1.12	Patterson (2010)	
	$935.80	5	CIR (2010)	
	$549.44	7.9	Moore (2006)	
	$1,078.40	5	NERC (2012)	
Average (in 2014 Dollars)	*$940.85*	*4.74*		*$4,463.68*
Inpatient Mental Use	$468.00	2.50	Poulin et al. (2010)	
	$912.00	2	Patterson (2010)	
	$394.37	2.03	Moore (2006)	
Average (in 2014 Dollars)	*$656.52*	*2.17*		*$1,424.64*

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