The finding of a net cost benefit 
Emergency room costs declined
Self-reported shelter housing costs
Study group members reported
The Heading Home program
One year post-Heading Home
The goal of this research is to study the cost benefit of the Albuquerque, New Mexico Heading Home Initiative. The research is designed to study the costs before and after the provision of housing for chronically homeless persons in Albuquerque, N.M.

The primary purpose of the City of Albuquerque Heading Home Initiative is to expand treatment and supportive services capacity to house a minimum of Albuquerque’s 75 most vulnerable, chronically homeless people who are struggling with substance use and co-occurring disorders.

This report includes a brief literature review, a short methodology section, a brief description of the study sample, and an analysis of study interview and cost data.

The goal of this research was to study the cost benefit of the Albuquerque, N.M. Heading Home Initiative. This study was designed to measure the use and cost of services for a one year period before admission and after admission into the program.

The full report titled City of Albuquerque Heading Home Cost Study Final Report can be found at: http://cara.unm.edu/cara-reports.html

Main Findings
- One year post-Heading Home study group member costs were $615,920.49 or 31.6% less than the one year pre-Heading Home study group member costs. This amounted to an average savings of $12,831.68 per study group member.

- The Heading Home program serves particularly vulnerable formerly homeless individuals.

- Study group members reported being homeless an average of 8.59 years in their lifetime.

- Self-reported shelter housing costs amounted to $117,948.92 prior to being housed.

- Study group members emergency room visits decreased by 36.2% after being housed.

- Emergency room costs declined from $208,439.74 to $181,272.62, a decrease of $27,167.12.

- The finding of a net cost benefit parallels the findings of the Albuquerque Housing First Cost Study and other studies that show this type of program results in a relative decrease in costs.

Report in Brief:
City of Albuquerque Heading Home Cost Study

The goal of this research is to study the cost benefit of the Albuquerque, New Mexico Heading Home Initiative. The research is designed to study the costs before and after the provision of housing for chronically homeless persons in Albuquerque, N.M.

The primary purpose of the City of Albuquerque Heading Home Initiative is to expand treatment and supportive services capacity to house a minimum of Albuquerque’s 75 most vulnerable, chronically homeless people who are struggling with substance use and co-occurring disorders.

This report includes a brief literature review, a short methodology section, a brief description of the study sample, and an analysis of study interview and cost data.

Literature Review
Based on some of the most recent national data on homelessness, on a single night in January 2012, approximately 633,782 people were experiencing homelessness in the United States. It is estimated that of these individuals, 200,000 are chronically homeless, and tend to have disabling health conditions. These factors contribute not only to a person’s risk for becoming homeless but also to the difficulty he or she experiences in overcoming it. (HUD, 2012 and SAMHSA, 2003). Consequently, the most vulnerable individuals experiencing chronic homelessness tend to be the highest users of community services, such as emergency room visits, inpatient treatment services and outpatient treatment services. While these individuals use these services more frequently, they also require more acute care. In many cases, hospitals must provide acute services for preventable conditions which are exacerbated by the circumstances of homelessness.

Within communities, criminal justice systems are also impacted by homelessness. Findings suggest that the relationship between homelessness and jail is bi-directional, meaning “people who are homeless are much more likely to be arrested and in jail than those who are housed, and without adequate discharge planning and supports, people in prison are more likely to become homeless upon release” (Gaetz, 2012). Moreover, it is not uncommon for homeless individuals to spend time in jail for minor violations of the law, such as sleeping in public, hampering the law force’s ability to focus on high-risk criminals (Gaetz, 2012).

Ultimately, research has shown that the heavy use of these services places a substantial financial burden on the community, and can amount to upwards of millions of dollars per year. In fact, Albuquerque spends 20 million dollars annually to provide homeless services to individuals and families. (NMCEH, 2013; Perlman & Parvensky, 2006; Mondello et al., 2007; MHSA, 2010).

There is a large body of research which has shown that supportive housing for the chronically homeless is beneficial in several ways. Furthermore, research has shown that permanent supportive housing, such as Housing First programs, produce positive and cost-effective outcomes for both the individual who experienced homelessness, and the community.
Findings indicate that supportive housing is cost-effective, or at least cost-neutral, with specific populations. Dionne Miazdyck-Shield suggests that “the studies on cost reduction apply specifically to chronically homeless people with a mental illness who are the heaviest users of services”. In other words, quantitative outcomes, such as cost savings, are seen most often within the most vulnerable populations using the Housing First supportive housing model.

Clearly, this is a complex issue, and further examination is necessary. To have a comprehensive body of literature, more needs to be understood about the various costs and benefits of supportive housing, for both the individual experiencing homelessness and the community (Culhane et al, 2011; Culhane et al., 2007; Flaming et al., 2009; Perlman & Parvensky, 2006; Spellman et al., 2010).

### Study Sample Description

Since the program began on January 31, 2011, 212 clients had been enrolled through early-June 2013. Through June 2013, 46 clients have left the program; 9 have died while in the program, 14 clients successfully discharged (i.e. moved to other permanent housing, left Albuquerque, no longer needed services, or self-discharged) and 23 clients were unsuccessfully discharged (i.e. evicted, jailed for more than 90 days, lost to contact [abandoned apartment/no contact for more than 90 days]).

Approximately 95 clients met the criteria of being in the program for 365 days or more for inclusion in the study. At the time of recruitment approximately 103 active clients had been in the program less than 365 days and so were not eligible. At the conclusion of our approximately 8 week recruitment period we recruited 54 out of 95 eligible study group members. We had hoped to recruit more study group members.

During the course of interviewing study group members we discovered 5 study group members self-reported different AHH housing dates that were later than what we were provided. This means these 5 study group members had not been housed one year or longer and for this reason these study group members are excluded from the information reported below. In addition, 1 study group member who had been housed less than one year was incorrectly included in our sample. Cost information is presented below for 48 study group members. Future analyses will include the six other study group members.

Almost 60% of our study group members were male, 35.2% of the study group members were Hispanic, 35.2% were White, 13% were American-Indian, and 7.4% were African-American.

### Methodology

This study focused on a cost analysis that compared the cost of a wide variety of different services for a year before study group members entered the Heading Home Initiative program to the cost after study group members entered the program for a similar time period.

This study used two methods to study and measure the cost of the Heading Home Initiative, an interview and record review. The Heading Home Initiative also provided us access to information collected from their Vulnerability Index (VI) Survey. The VI is used in homeless enumeration counts in numerous locations in the United States. It is designed to identify and prioritize the homeless population for housing based on their health. This survey provided information on vulnerability, length of time lived on the street, homelessness in the past three years, health status, substance abuse history mental health, insurance, veteran status, gender, race/ethnicity, citizenship, and education.

### Interview

Interview data included questions about military service (to determine if study group members were veterans), study group member’s medical status, employment/support status, legal status, drug/alcohol use, family/social relationships, psychiatric status, length of time lived in Albuquerque, date of birth, and race/ethnicity. We also collected information on shelter utilization.

### Service and Cost Data

This method relied on the collection of service and cost data collected and maintained by various agencies. This included emergency room, inpatient medical, inpatient behavioral health, outpatient medical, outpatient behavioral health, ambulance services, fire department response services, Assertive Community Treatment (ACT) services, jail bookings, social services, and shelter utilization. We also collected local arrest histories to document the number of arrests pre- and post-housing.

### Adjusting Costs

In order to compare the cost of care provided to study group members in previous years to the current year it was necessary to normalize the costs. We inflated previous years’ costs to current year levels by using the U.S. currency inflation rate rather than try to determine a medical cost inflation rate. Using U.S. currency inflation rates which are lower than the inflation rates of medical costs also allowed the study’s results to remain conservative and not over estimate costs incurred by clients in past years (BLS CPI, 2011; WSJ, 2009).
Five clients self-reported they had served in the military. It does not appear that any of the study group members were military veterans.

Slightly more than 80% of the study group members reported living in shelters (46.3%) or on the streets (35.2%). Two study group members reported living in a motor vehicle and 8 study group members reported an ‘other’ living arrangement (camp, couch surfing, garage, hospital, motels, and multiple living arrangements).

Almost 90% of study group members self-reported ever being in jail and 24% reported ever being in prison. A large percent of study group members reported ever receiving treatment for mental health issues (87%) and ever being treated for drug or alcohol use (87%), however only 9.3% reported daily alcohol use in the last month.

Slightly more than 20% of study group members reported 3 or more ER and inpatient hospitalizations in the past year, 18.5% of the study group members reported 4 or more visits with one study group member reporting 15 visits to the ER.

Prior to being housed, study group members reported having several sources of income, of the 54 study group members, only 4 reported no income. Almost two-thirds of the study group members reported receiving food stamps, followed by SSDI/SSI (18.5%), working off the books (14.8%), recycling (14.8%), public assistance (13.0%), and panhandling (13%). Smaller numbers of study group members reported earning income through “working on the books” (3.7%), working in the sex trade (1.9%), drug trade/dealing (5.6%) and other (hustle, child support, and unemployment) (3.7%).

Cost Analysis

This section reports on the cost analysis which was the focus of the study. As noted earlier we attempted to collect service and cost information on a wide range of services study group members may have received during the study period. With a few exceptions we were able to collect this information. In time to be included in this preliminary study we were able to collect the majority of service and cost information from the majority of agencies we targeted for this study.

Because agencies collect and maintain service and cost information in a variety of formats it was necessary to collect and receive information in a number of different formats and then to standardize these various service and cost formats for analysis and reporting. Costs are reported as real costs and not actual costs. In order to compare the costs of services received by study group members in previous years to the current year (2013) costs it was necessary to normalize costs. To normalize costs we decided to inflate previous years’ costs to 2013 calendar years costs by using a U.S. currency inflation calculator.

Considering the different cost types, the one year post-Heading Home Initiative program costs were $615,920.49 or 31.6% less than the one year pre-Heading Home Initiative program costs. This amounted to an average savings of $12,831.68 per study group member (Table 1).

Utilization of hospital inpatient, emergency room care, medical outpatient, mental health outpatient, emergency shelters, jail based treatment, and jails were reduced by participation in the program. Mental health inpatient and social service costs experienced increases from the one year pre-time period to the one year post-time period. Because Heading Home housing costs and client service costs did not exist in the one year pre-time period these costs also increased (Figure 1).

Conclusion

The primary purpose of this study was to report on the cost effectiveness of the Heading Home Initiative program using two methods that have been used in previous studies. First, we interviewed study group that included questions about study group member’s income status and employment, quality of life, length of time lived in Albuquerque, date of birth, race/ethnicity, lifetime homelessness, and shelter utilization.

The second, and more important method, relied on the collection of service and cost data maintained by various Albuquerque agencies. This included emergency room, inpatient medical, inpatient mental health, outpatient medical, outpatient behavioral health, ambulance services, jail bookings, shelter, and meal site utilization. We also collected local arrest histories to document the number of arrests pre- and post-housing. At the completion of recruiting for this phase one study, we were able to recruit 54 or 56.8% of 95 eligible Heading Home Initiative program clients.

Considering all the cost types the one year post-Heading Home costs were 31.6% less than the one year pre-Heading Home program costs. This amounted to an average savings of $12,831.68 per study group member.

<table>
<thead>
<tr>
<th>Table 1 Heading Home Initiative One Year Cost Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Year Pre-Heading Home Costs</td>
</tr>
<tr>
<td>1 Year Post-Housing First Program Cost</td>
</tr>
<tr>
<td>Cost Difference</td>
</tr>
<tr>
<td>Percent Difference</td>
</tr>
<tr>
<td>Total Cost with Heading Home Costs</td>
</tr>
</tbody>
</table>
Utilization of emergency room care, medical outpatient, hospital inpatient, emergency shelters, behavioral health outpatient, and jails were reduced by participation in the program. Mental health outpatient, jail based treatment, and social service costs increased from the one year pre-time period to the one year post-time period.

Similar to other studies and the previously completed Housing First Cost Study (2011) this study found a net cost benefit. The estimated benefit is fairly large and is conservative. With more complete information (i.e. emergency medical services and ambulance transports) we believe this benefit would have been greater.

Future research includes a longer cost study time period, more complete service and cost data, a larger study group, and client follow-ups to collect additional self-report data including measures of satisfaction and indicators of life improvement.

References


Dunthorn, Michael. et al. (2012). Comparative Costs and Benefits of Permanent Supportive Housing in Knoxville, Tennessee. The Mayors’ Office of the Ten Year Plan to End Chronic Homelessness, the Knox County Health Department Epidemiology Program, and the University of Tennessee College of Social Work -KnoxHIMS


Waegemakers Schiff, Jeannette; Rook, John (2012). Housing first -Where is the Evidence? (Toronto: Homeless Hub).


About The Institute for Social Research

The Institute for Social Research is a research unit at the University of New Mexico. ISR conducts high quality research on local, state, national, and international subjects. Critical issues with which the Institute works includes substance abuse treatment, health care, education, traffic safety, DWI, crime, homeland security, and terrorism.

This and other ISR reports can be found and downloaded from the Institute for Social Research, Center for Applied Research and Analysis web site: (http://isr.unm.edu/centers/cara/reports/)

### Heading Home Initiative Program 1 Year Pre and 1 Year Post Program Costs

<table>
<thead>
<tr>
<th>Heading Home Initiative Program 1 Year Pre and 1 Year Post Program Costs</th>
<th>$0</th>
<th>$500,000</th>
<th>$1,000,000</th>
<th>$1,500,000</th>
<th>$2,000,000</th>
<th>$2,500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heading Home Initiative Client Services Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heading Home Initiative Housing Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jail Based Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambulance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Health Outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health Inpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Inpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost with Heading Home Initiative Program Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Year Post-Heading Home Initiative Cost

1 Year Pre-Heading Home Initiative Cost