THE SHIFT STUDY: A COST ANALYSIS OF HOUSING AND SERVICES FOR FAMILIES

SHIFT

Service and Housing Interventions for Families in Transition

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THE NATIONAL CENTER ON Family Homelessness
for every child, a chance

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INTRODUCTION

The number of homeless families has increased dramatically over the past decade. Reflecting the impact of the most recent recession and its sluggish recovery, the number of families reached an historic high in 2010—with a 13% increase from the previous school year. Forty-four states reported a 20% increase in homelessness among school-aged children in 2010-2011 (National Center for Homeless Education, 2012). Now, one in 45—or more than 1.6 million children—are homeless each year in the United States (The National Center on Family Homelessness, 2010).

Despite the growing numbers of homeless families with children, research exploring the impact and costs associated with various housing and service delivery strategies has been limited—especially when compared to the studies of adult individuals experiencing homelessness. The literature has shown that subsidized housing for families is essential for ensuring housing stability and that case management is helpful. However, the impact of combining housing with services for different subgroups of homeless families suggests improved outcomes, but more research is necessary to understand the impact of services and their relationship to costs (Bassuk & Geller, 2006). Furthermore, studies exploring cost issues are sparse (The National Center, 2009; Culhane, Metraux, Min Park, Schretzman & Valente, 2007).

To address some of these unanswered questions, the SHIFT study examined the costs associated with providing housing and services for families in Emergency Shelter (ES), Transitional Housing (TH), and Permanent Supportive Housing (PS). The SHIFT study was conducted over a five-year period from 2006-2011. When the study began, the family homelessness field was largely focused on a service delivery model called the Continuum of Care (COC). This approach was based on the assumption that people experiencing homelessness had to be "housing ready" before they were offered permanent housing. Initially targeted to the needs of chronically homeless people, many of whom had psychiatric and substance use issues, the COC model provided outreach, treatment, transitional housing and then permanent supportive housing. This model required that people address issues that may have contributed to their homelessness prior to receiving permanent housing. However, consumers were unwilling to participate in various required services; instead they viewed them as a "series of hurdles" (Tsemberis, Gulcur, & Nakae, 2004).

Over the course of the SHIFT study, policy has shifted away from the COC and housing readiness approach toward a Housing First model. Housing First (also referred to as Rapid Rehousing) was initially developed to meet the housing and treatment needs of the chronically homeless population (Tsembris et al, 2004; NAEH 2006), but has since been extended to serve homeless families. The model is based on the principle that housing is a basic right, and that consumer choice should be respected. Housing First provides housing as quickly as possible that is not time-limited. Once housed, services helping clients maintain their housing are offered, but they are based on client's needs and choices. Participating in treatment is no longer a prerequisite for receiving permanent housing. The Housing First model also assumes that services are more effective once clients are stably housed. The findings from the SHIFT Study

inform the design and service provision of ES, TH, and PS programs, but also have implications for Housing First strategies.

In addition to the research interviews conducted with mothers at baseline, 15 months and 30 months, interviews also were conducted with the participating programs to obtain information about the structure of their programs, services provided, staffing, and the costs associated with serving families. This allowed for an assessment of the costs of the three program models, as well as an evaluation of the characteristics of the families and programs serving them to better understand the cost issues. We gathered cost data about both housing and services from key program staff and families participating in the study. Below we present the findings from the cost analysis, integrate it with the other major findings about outcomes described previously in this report, and discuss the corresponding programmatic and policy implications within the changing context of Housing First.

BACKGROUND

Previous cost studies of homelessness have primarily focused on chronically homeless individuals with mental illness who were homeless for long periods. This focus was driven in part by a study that found that approximately 10% of the homeless population comprised this costly subgroup and that it might be possible to reduce their numbers (Kuhn & Culhane, 1998). A cost analysis conducted in New York City, examined multi-system costs of homelessness among nearly 10,000 individuals with serious mental illness and found the annual cost was on average $40,500 per person (Culhane, Metraux, & Hadley, 2002). As a discrete group with complex needs, efforts were focused on addressing the circumstances of chronic homelessness and identifying effective strategies with the goal of reducing the numbers of chronically homeless people and the high costs of services.

As a result of this research, a federal initiative was launched to "end chronic homelessness" among adult individuals in 2002. This initiative triggered cost studies of this small subgroup of the homeless population. In response, more than 40 cost studies were conducted over the next decade as communities developed ten-year plans to end chronic homelessness (Culhane et al, 2008). This policy focus resulted in other homeless populations, such as families, being relatively neglected (Culhane, 2008).

Individual homelessness is different than family homelessness in terms of its causes, impact, population characteristics, and solutions. For example, individuals often become homeless, because of few employment opportunities and co-occurring disorders. Families, on the other hand, often become homeless due to domestic violence, an unforeseen financial crisis or another emergency (e.g., medical problem). Therefore, cost study findings related to individuals, cannot be generalized to families experiencing homelessness. More recently, as the rate of family homelessness has increased there has been increased interest in cost studies of family homelessness, but the research remains limited. Culhane et al (2007) examined the costs of homeless service use among families experiencing first-time homelessness. Using

administrative data in New York City, Philadelphia, Columbus OH, and Massachusetts, they analyzed costs of three subgroups of homeless families based on their pattern of homelessness. This included: temporary (short stays), episodic (cycle in and out of programs), and long-stays (long periods in ES and/or TH). Homeless families who were temporarily homeless cost the system the least, with average costs ranging from $3,828 to $13,900, while families who were episodically homelessness on average cost from $17,168 to $38,500. The families with long stays at homeless programs were the most expensive for homeless systems, with costs that ranged from $21,692 to $55,200.

Another cost study, the Minnesota Supportive Housing and Managed Care Pilot, evaluated the effectiveness of permanent supportive housing for individuals and families with complex needs (The National Center on Family Homelessness, 2009). The sample consisted of 343 adults and 175 children; multiple administrative data sets were used to determine costs. All the participants had complicated histories including chronic homelessness, medical problems, serious mental illness, and substance abuse. Prior to enrolling in the Pilot, many participants were using mainstream services. For families, the average annual cost per household was $11,203 ($4,582 and $3,691 for each parent and each child, respectively). In comparison, the annual cost of services for single adults was $13,954. Among families, the services accessed were primarily related to income supports and medical care, while the costs associated with the single adults involved medical, mental health and substance abuse services as well as jail and incarceration. The Pilot was successful not only in achieving housing stability for the participants, but also in helping them improve their overall functioning. To stabilize this hard-to-serve population, the cost of services ranged from $11,000 to $14,000 per household.

The most thorough cost analysis of family homelessness to date was conducted by the U.S. Department of Housing and Urban Development (HUD) (2010). HUD conducted a longitudinal study of both individual and first-time homeless families to examine the costs associated with utilizing ES, TH or PS as well as mainstream services over 18 months. The methodology included conducting phone interviews and site visits to learn about the homeless systems in each participating community, and then utilizing Homeless Management Information System (HMIS) data to identify homeless individuals and families. Their service use was then analyzed over 18 months. Four different geographic areas were included in the assessments of homeless families: Houston, Texas; Kalamazoo, Michigan; Upstate South Carolina; and Washington, D.C.

The HUD study found that the average costs per household required to provide homeless services ranged from $3,184 to $20,031. Emergency shelters were equally or more expensive than both transitional housing and permanent supportive housing. The daily costs per family of each type of housing program were as follows: $46 to $297 for ES; $27 to $149 for TH; and $22 to $42 for PS. Furthermore, the costs associated with providing housing for homeless families generally exceeded the cost of providing rental assistance at Fair Market Rents. The average costs per month for each type of housing program were as follows: $1391 to $3698 for ES; $813 to $4,482 for TH; and $661 to $1251 for PS. In comparison, the Fair Market Rent for a two-

bedroom apartment ranged from $599 - $1225, although this did not include any supportive services.

These studies have provided important information about the costs of programs serving homeless families, but the research remains scarce and existing studies have various limitations. Culhane et al (2007) only included first-time homeless families in the emergency shelters and transitional housing programs, but did not include permanent supportive housing. The Minnesota Supportive Housing and Managed Care Pilot, on the other hand, examined families in permanent supportive housing but not other housing program models. The HUD study did examine ES, TH, and PS, but only for 18 months. The SHIFT cost analysis bridges the gaps in knowledge by examining the three types of housing programs simultaneously for 30 months. It provides groundbreaking information about the costs associated with different housing program models, including the use of various services.

METHODOLOGY

Programs and Sample Recruitment

As reported previously, the original sample for the SHIFT study consisted of 292 families: 129 families living in ES (45%), 120 in TH (41%), and 43 in PS (14%). Attrition occurred at each follow-up. For the 15-month follow-up interviews, the sample was comprised of 200 families and at 30-month follow-up, the sample was 184. In order to track costs over the course of the entire study accurately, the sample for this cost analysis consisted only of the 184 participants who completed the 30-month follow up interview.

Program Characteristics and Costs

Emergency shelters, transitional housing, and permanent supportive housing are distinct housing models with the common goal of stabilizing homeless families (Table 1). Interviews were conducted with participating programs in July and August 2012 to obtain additional information about the characteristics of each program, particularly focused on costs. A scripted questionnaire was utilized (Appendix 1) with questions regarding program costs, staffing structure, and services provided. All information about program costs was obtained from these interviews.

Of the 48 programs that participated in the study, interviews were completed with 32 (8 ES, 14 TH, and 10 PS). Information about the number of days participants resided in housing programs was obtained during the two follow up participant interviews.

EMERGENCY SHELTER (ES)	• **Primarily provides temporary shelter for homeless families and are intended to be a short-term housing solution (e.g., one night to three months).** • **Case management is provided and focuses on addressing the family's most immediate and pressing needs (e.g., housing, food)**
TRANSITIONAL HOUSING (TH)	• **Provides housing and support services, especially living skills, to facilitate movement to independent living within 6 to 24 months** • **Case management is required, and is targeted at developing individual service plans to help the family establish residential and economic stability and prepare for independent living at program departure** • **Generally, does not guarantee permanent housing**
PERMANENT SUPPORTIVE HOUSING (PS)	• **Provides long-term, community-based housing combined with supportive services for families with intense needs (e.g., mental health or physical disabilities, substance use issues).** • **Supportive services may be provided directly or provided by other public or private service agencies**

Table 1. Housing Program Definitions

Cost Variables

Housing

The interviews of housing programs asked about per diem costs. The cost information the programs provided incorporated both the costs of housing and services they provided. We calculated the average housing program cost for ES, TH, and PS by determining the average number of days participants stayed in their baseline program, and then multiplying the number of days in the program by the daily cost.

Mainstream Services

For mainstream services, costs were calculated for dental visits, hospitalizations, and doctor or clinic visits using the Medicaid fee schedule for New York State. Each dental visit was $55.90, each day of hospitalization was $887.70, and each outpatient visit to a doctor or clinic was $35.50. We also examined the utilization of mental health services by the mothers and services for children. Rates for utilization of mental health services by the mothers were surprisingly low (Appendix 2); mental health treatment was extremely rare for the children. Therefore, mental health services for mothers or children were not meaningful contributors to cost calculations and were not included.

Information about participants' receipt of public benefits, a major element of mainstream services, was obtained during the three participant interviews. Mothers were asked if they were

receiving benefits, and if so, they were asked about the monetary equivalent they were given each month. For example, if a mother indicated she was receiving food stamps, she was then asked how much money she received each month. While mothers could reliably state whether or not they received a specific benefit, many were not able to provide accurate information about the amount of money the benefit provided each month. At best, participants estimated the amount, and many could not provide any information at all. Therefore, public benefits were not included into the cost calculations.

Housing Program and Medical/Dental Services

Other variables were used to calculate the combined costs of mainstream services and residence in a housing program. These included the following:

- Average number of dental visits in the previous three months and associated cost at baseline, 15-month and 30 month follow ups
- Average number of hospitalizations and number of days hospitalized in the previous three months and the associated cost at baseline, 15-month and 30 month follow ups
- Average number of doctor or clinic visits in the previous three months and the associated cost at baseline, 15 month, and 30 month follow ups
- The sum of dental and medical services at baseline, 15 months and 30 month follow ups
- Daily housing program costs
- Number of days in baseline program
- Number of days in baseline program in the previous three months
- Housing program costs for previous three months
- Total cost of mainstream services over the course of the study
- Total cost of mainstream services and housing programs for the previous three months

Looking beyond housing program costs, logistical regressions were conducted to examine the differences in cost across programs holding constant potential confounders that stem from the differential characteristics of the populations enrolled in each program. The following variables were entered into the model:

- Type of housing program
- Age
- Ethnicity (Latina/African American)
- City where they resided
- Being married
- Graduating from high school
- Receiving disability payments
- Number of children
- Obtaining residential stability at the 15 month follow up

These characteristics were used in the multivariate analyses to control for factors that may confound the cost findings.

FINDINGS

The following is a description of the findings related to the several domains: program characteristics, family characteristics, housing program costs, cost of mainstream services, and the combined costs of housing and mainstream services.

Program Characteristics

Emergency shelter (ES) programs tended to be smaller than transitional housing (TH) and permanent supportive (PS) housing in terms of the number of families they served. ES programs had the capacity to house between 2 to 18 families, as compared to the TH capacity of 5 to 38 families and the PS capacity of 8 to 40 families.

The different housing groups provided an array of services for their families. Figure 1 illustrates some of the most common services for each program. All of the programs, with the exception of one transitional housing program, provided basic case management. Overall, more ES programs had services, primarily addressing housing and basic or crisis needs, compared to TH or PS programs. Some of these services include 24 hour staffing and related costs (e.g., providing meals and food), while others seem to reflect the crisis nature of being in shelter (e.g., housing assistance, transportation). Services related to mental health were not common in any of the programs, while substance abuse counseling was provided in 30% of the PS programs, but only in 7% of TH and none of the ES programs (Figure 2). A comprehensive list of all the services provided in the different housing programs is presented in Table 2.

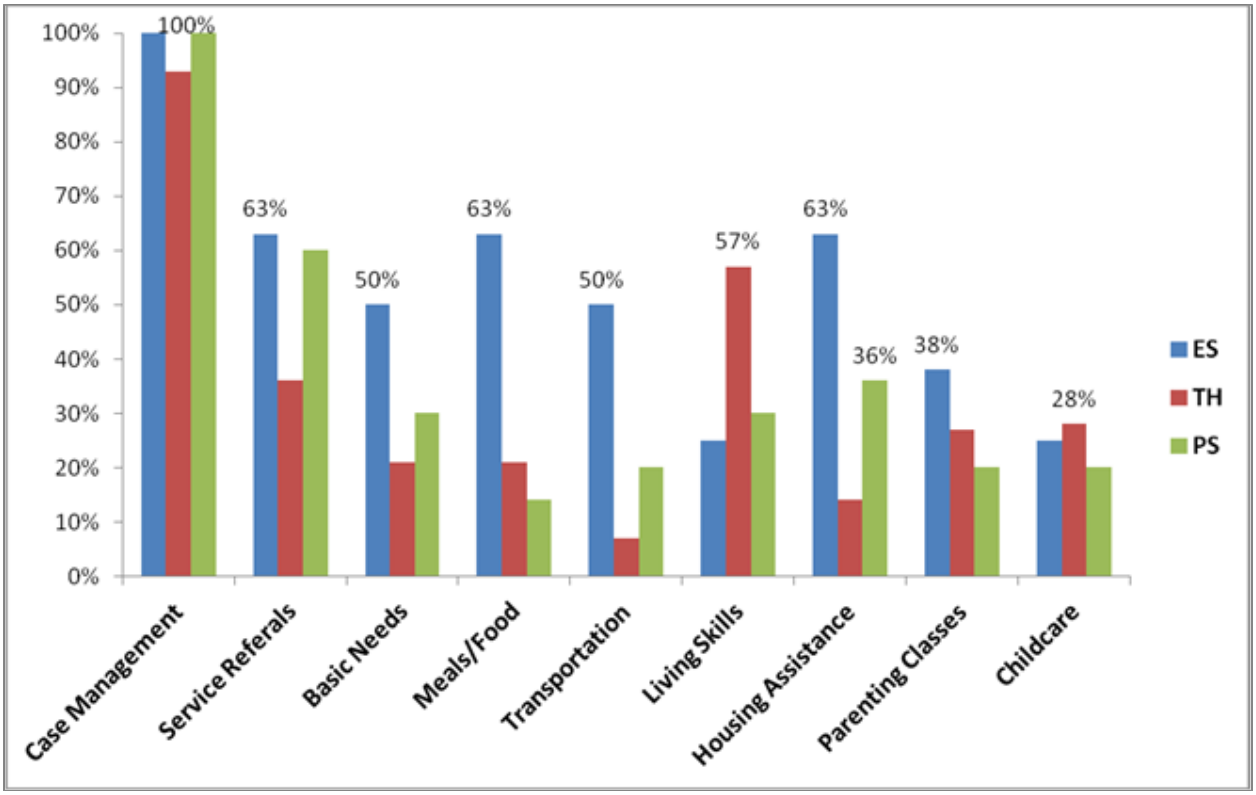

Figure 1. Services Provided by Housing Programs

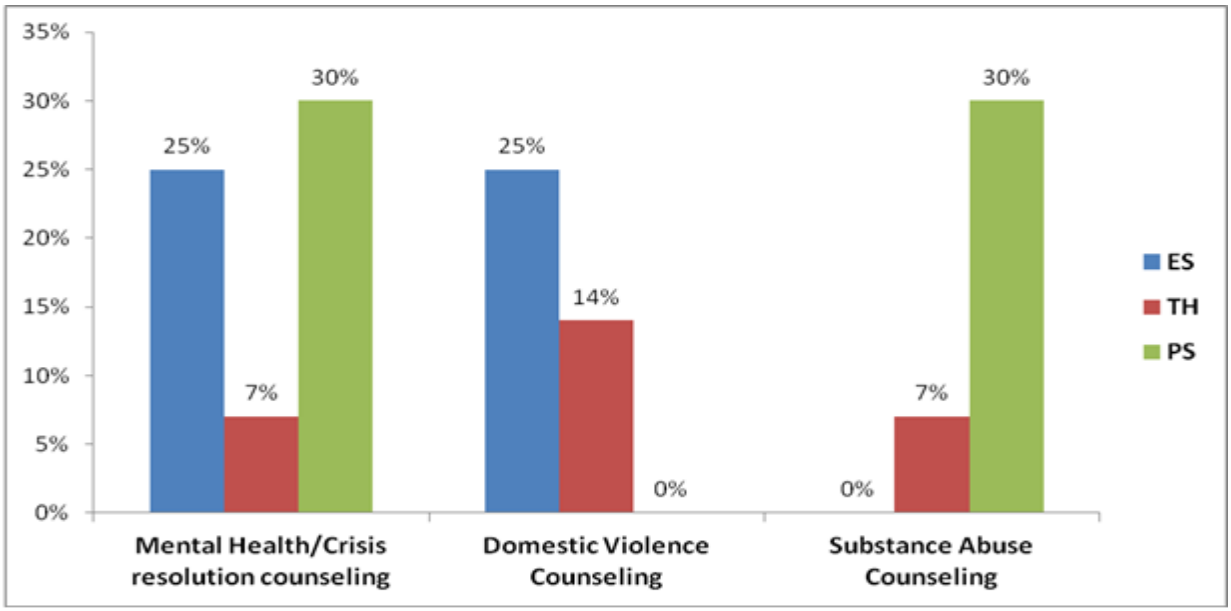

Figure 2. Mental Health, Domestic Violence, and Substance Abuse Services at Housing Programs

Table 2. Program Services

	Emergency Shelter	Transitional Housing	Permanent Supportive Housing
Basic Needs	50%	21%	30%
Meals/Food	63%	21%	30%
Housing Assistance	63%	14%	30%
Transportation	50%	7%	20%
Service Referrals	63%	36%	60%
Case Management	100%	93%	100%
Goal Setting	0	27%	10%
Counseling, Crisis/Conflict Resolution	25%	7%	30%
Domestic Violence counseling	25%	14%	0
Substance Abuse Counseling	0	7%	30%
Medical Services	25%	7%	30%
Health Education	0	7%	10%
Parenting Class	38%	27%	20%
Living Skills	25%	57%	30%
Education Support	50%	0	20%
Parent	25%	0	10%
Child	25%	0	10%
Education Training	0	29%	40%
Advocacy/Legal Services	38%	7%	10%
Financial Counseling	13%	14%	20%
Recreational Activities	25%	7%	0
Psychoeducational Group: Teen Issues	0	14%	0
Childcare	25%	28%	20%
Reintegration	0	7%	0
Racial Justice	0	7%	0

Family Characteristics

Table 3 presents the demographic characteristics of mothers that were included in the analyses. The average age of women at baseline was 29 years. Women in ES or TH programs were significantly younger compared to women in PS ($p < .01$). The majority of women in the sample (62%,) were African-American, while 14% were either Latina. Only 12% of the sample was married, while 63% were never married, 13% were separated or divorced, 4% were living with a partner and 4% were widowed or other. There were no significant differences between the housing group's marital status. The number of children ranged from 0 (pregnant) to 11, with an average of 2.4 children. Women in ES averaged 2.4 children, women in TH averaged 2.1, and those in PS averaged 3; none of these differences were statistically significant. At baseline, a plurality of the women did not have a high school degree. Only 56% of ES mothers, 69% of TH mothers, and 63% of PS mothers had a high school degree or higher.

Table 3. Family Characteristics by Housing Group

	Emergency Shelter	**Transitional Housing**	**Permanent Supportive**
Age	m = 28	m = 27	m = 35
Married	8%	10%	15%
Ethnicity: Latina	16%	15%	0%
Ethnicity: African American	60%	60%	63%
High School Degree or Higher	56%	69%	63%
Number of Children = 1	27%	41%	26%
Number of Children = 2	23 %	36 %	19 %
Number of Children = 3	17 %	6 %	7 %
Number of Children = 4	6 %	7 %	22 %
Number of Children = 5	8 %	4 %	19 %
Number of Children = 6+	8 %	5 %	7 %

As noted previously, in the 18-months prior to entering their baseline housing programs, all of the families had been residentially unstable, and 87% had moved multiple times. After 15 months, a majority of families in the study (62%) were unable to maintain stable housing and about half (49%) remained unstable at the end of the study.

Housing Program Costs

Programs provided information about their per diem costs, which was then averaged for each type of housing program. The range of costs was $33-$420 per day for ES, $11 - $125 per day for TH, and $24 - $114 per day for PS. The average daily costs for ES, TH and PS were $170, $48, and $111, respectively (Figure 3).

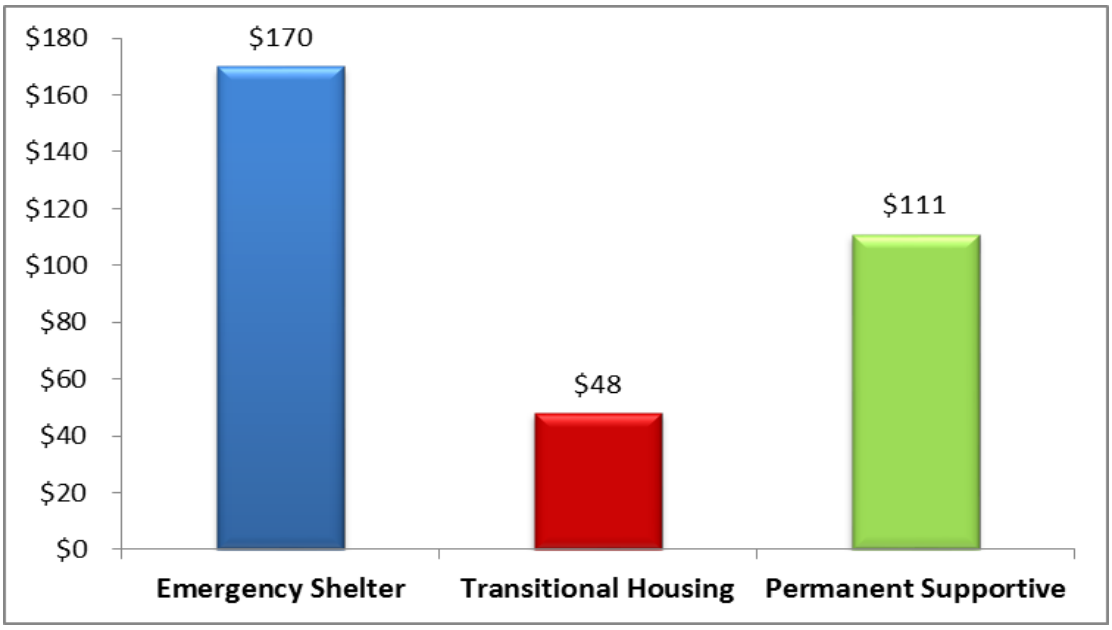

Figure 3. Average Daily Cost of Housing Programs

Cost of Mainstream Services

At baseline the cost of mainstream services among those in PS was far higher than in those families in ES and TH (Table 4). This is understandable given the high needs of clients in PS. The utilization of dental and medical services dropped significantly for all housing groups at 15- and 30- month follow-ups. Differential patterns of change over time reveal an uptick in average mainstream health services costs for ES relative to TH and PS (Figure 4).

	ES	TH	PS
	Mean	**Mean**	**Mean**
BASELINE			
cost for dental services past 3 mos	12.34	20.01	28.99
cost for hospitalization past 3 mos	334.33	186.31	624.68
cost for doctor or clinic visit	11.53	11.4	23.67
sum of dental and medical services	358.2	217.72	677.33
15-month Follow Up			
cost for dental services	11.62	11.04	18.63
cost for hospitalization	0	32.88	0
cost for doctor or clinic visit	11.53	18.85	13.15
sum of dental and medical services	23.14	62.77	31.78
30-month Follow Up			
cost for dental services	15.25	11.04	14.49
cost for hospitalization	80.7	21.92	0
cost for doctor or clinic visit	22.59	10.08	22.35
sum of dental and medical services	118.54	43.04	36.84

Table 4. Dental and Medical Care Costs

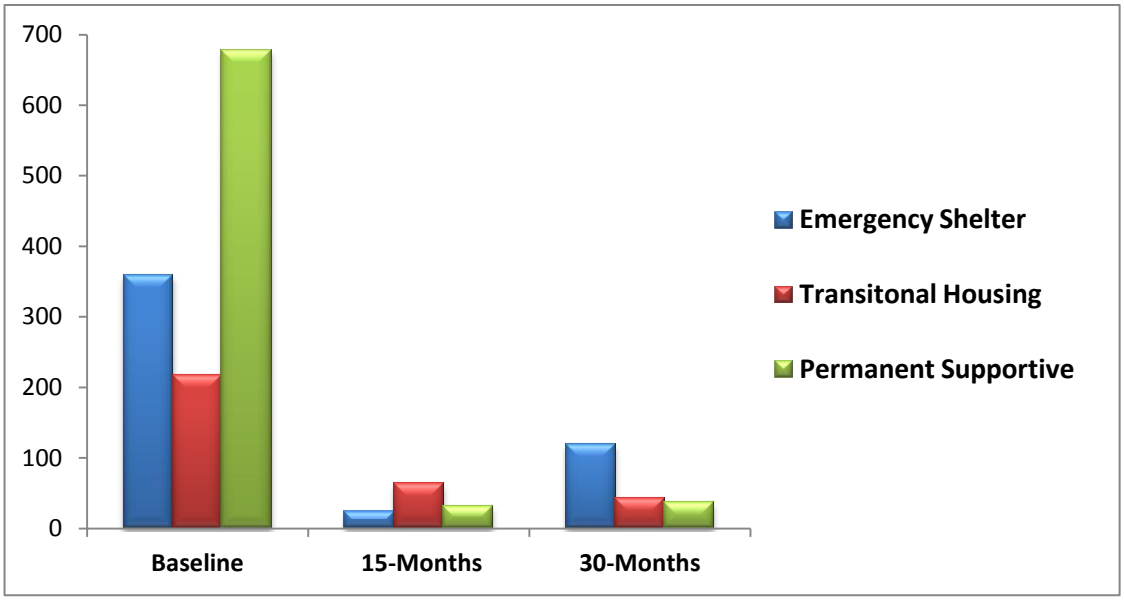

Figure 4. Average Total Costs of Mainstream Dental and Medical Care

Combined Costs: Housing Program and Medical/Dental Care

Appendix 3 presents a summary of the variables used to calculate the costs for families in ES, TH, and PS over a three-month period. These included the following:

- Daily housing program cost
- Number of days in baseline program
- Number of dental visits
- Number of days hospitalized
- Number of doctor/clinic visits
- Costs for dental and medical care

The total cost for housing program and mainstream dental and medical services combined for ES and PS families were higher than for TH. For a three month period, the average cost was approximately $8,000 for ES, $8,600 for PS, but only $3,200 for TH (Figure 5).

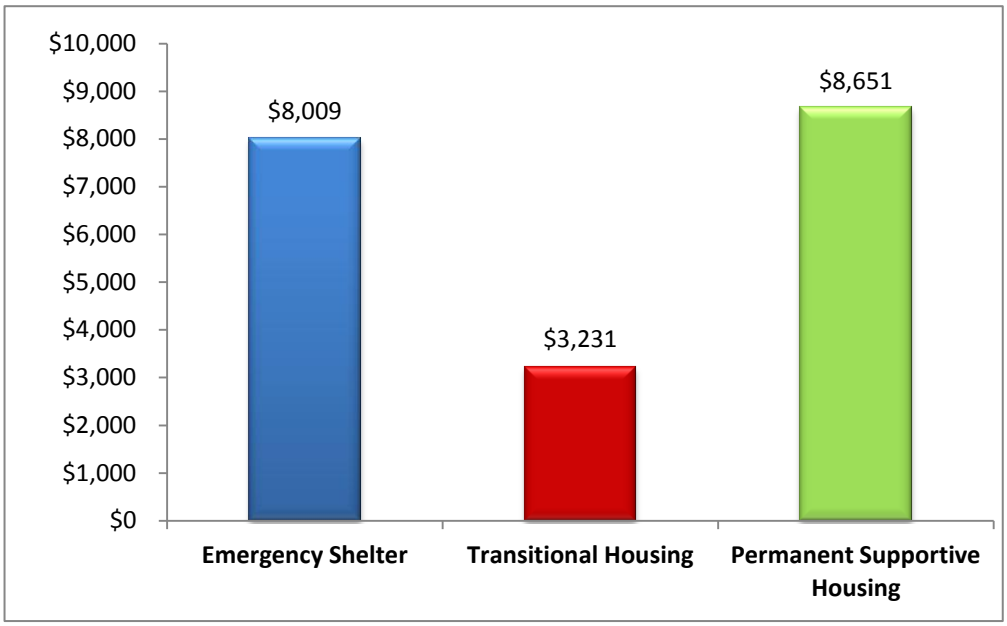

Figure 5. Average Total Cost of Both Housing and Services for 3 Months

We also developed regression models that examined how costs changed from baseline to the second follow-up. TH participants had significantly ($p<0.05$) higher reductions in costs over time than the shelter population, holding constant demographic characteristics of participants and location of the programs. The results indicate that that difference was roughly $4600. The model showed that there was a difference between the TH and PS of about $2400 but that was not statistically significant. The Syracuse region was estimated to incur lower costs across all the program types; no other factors were significantly related to changes in costs. The regression models confirm the earlier descriptive results that the TH group incurs lower costs due to the fact that they face lower per diem costs and families do not remain in the program for as long as those in PS.

DISCUSSION

The Services and Housing Interventions for Families in Transitions (SHIFT) study examined the effectiveness of different housing and service models over a 30-month period (The National Center, 2012). The study also analyzed the costs—reported here—that are associated with housing programs and mainstream services (i.e., medical and dental) for homeless families residing in 48 emergency shelters, transitional housing, and permanent supportive housing programs in upstate New York. Consistent with previous studies of housing models for homeless families, we found that emergency shelters were the most costly. However, this

expenditure did not coincide with improved outcomes for families and children. Permanent supportive housing was the second most expensive model, while transitional housing was the least expensive.

To determine the relative costs of the various housing models, we first calculated the per diem costs for each housing program. Incorporated into the housing programs costs were both the expenses of the housing and the services provided directly by the program. Emergency shelter had the most expensive per diem cost ($170), followed by PS ($111); TH was by far the least expensive per day ($48). Second, we combined housing program costs, which included direct services, with the cost of medical and dental services provided in the mainstream to calculate the average costs for each family in the different programs over a period of three months. Families in PS on average were the most costly ($8600), with families in ES costing slightly less ($8000), and those in TH costing far less ($3200). The PS cost per family was higher because it is designed for high-need families, including those with medical disabilities. As compared to TH, PS had more intensive case management and more direct services, as well as families staying longer, contributing to the higher cost. Emergency shelters had higher costs because the program structure necessitates provision of meals and 24 hour staffing, which was not necessary in most of the TH and PS programs. Transitional housing was the least expensive because it provided the least services.

Costs of the Program Models: The Role of Transitional Housing?

The high per diem cost of ES, especially when compared to TH, has been documented in prior cost studies (Culhane et al, 2007; The National Center, 2009; HUD, 2010). Families tend to enter emergency shelter during times of crisis and their need for services and supports may not have previously been addressed. Many families have urgent and immediate needs in addition to housing, some of which are very costly. Furthermore, the 24-hour structure of ES requires a greater expenditure for staffing as well as basic services (e.g., housing assistance, food, transportation) and case management (see Table 1). However, these increased costs are not reflected in improved outcomes, as ES families fared worse than TH families.

In this report, we discuss the costs of ES, TH, and PH programs and attempt to understand our findings by using descriptive and outcome data from the overall study. As reported in the SHIFT Final Report describing characteristics, needs, and outcomes of the study participants (The National Center, 2012), ES families had some of the worst outcomes. Their residential instability continued at higher rates than those in TH or PS, and their children's emotional and developmental functioning did not improve or worsened. At the study conclusion, children residing in ES had the highest rates of total difficulties, emotional symptoms, and peer problems as measured by the Strengths and Difficulties questionnaire. This is discouraging since the ES programs are expensive and provide various services for the parents (but few services targeted for the children).

While the lower cost of transitional housing appears to make it the most attractive program choice, the structure of the program and the families it serves needs to be considered. As a critical part of the COC, many TH programs were designed to increase housing readiness by emphasizing the attainment of self-sufficiency skills (e.g., housing, life skills, employment) before obtaining permanent housing. General life skills programs are offered, but most case managers do not have clinical skills. Some TH programs serve subsets of homeless families with special needs such as domestic violence histories or substance use issues. Overall, TH offers a limited range of services as illustrated in Table 1. The majority of TH programs provide case management and living skills.

Homeless families are often referred from emergency shelters to TH and then are carefully screened by case managers to determine their appropriateness for admission. TH tends to have specific eligibility criteria, many regulations, and lengths of stay from six months to two years (varies across communities). Generally, mothers are required to agree to participate in various programs; participation is not voluntary. Then families who "graduate" from these programs are offered 'permanent' housing units. However, many TH programs do not provide for transition into permanent housing unless certain conditions are met. Data from 14 COC's in seven states found that only 55% of families in TH exited to permanent housing (McDivitt, 2012); this is consistent with the outcomes for TH families in the SHIFT Study. For all these reasons, many families experiencing homelessness are resistant to participating in TH programs.

Despite the lower costs of TH, many program staff and policymakers have raised the question of the role of transitional housing within the evolving context of rapid re-housing and permanent supportive housing approaches. It has been argued that rapid re-housing programs solve the issue of residential instability and offer similar services to TH, and those families with greater needs can be admitted to permanent supportive housing programs. However, program staff serving homeless families have raised concerns about families with substance use issues and domestic violence. They are concerned about the possibility of increased rates of child maltreatment if families are immediately housed in scattered site or leased apartments without these issues being addressed. Housing First programs were originally developed for adult individuals with mental health and/or substance use issues and long histories of homelessness (i.e., chronically homeless people) and have not been fully adapted for homeless families.

Although less expensive, TH does not necessarily provide the solution to the costly ES model. As noted previously, TH programs have prerequisites limiting enrollment; then ongoing regulations and mandatory programs can either dissuade families from staying or cause them to be evicted. Also, the rates of residential stability among TH families in the SHIFT study did not exceed 50%, and enrollment in TH extended the length of homelessness for many families since they were not guaranteed housing at the end of their program stay. Various policymakers have called for the "retooling of transitional housing" into rapid rehousing programs and permanent supportive housing (McDivitt, 2012).

In contrast, permanent supportive housing programs are specifically designed for families with more intensive needs. Therefore, it is not surprising that the per diem cost of PS programs as well as the average cost per family is greater than TH. Typically, PH programs have a lower client-staff ratio, more intensive case management, and more direct services available than TH. Some of these programs directly address medical and mental health issues as well as some of the problems presented by the children (see Table 1). Furthermore, the provision of permanent housing rather than a temporary arrangement results in families staying longer. PS programs had the highest rate of residential stability at 60%, but these are specialized programs intended for high-need families. Its expense reflects the resources necessary to help families who need more intensive services and supports. This model is not an appropriate solution for all families, and should be reserved for those with a family member that has a disability.

Obtaining Mainstream Services: The Example of Mental Health

In 2000, the Department of Housing and Urban Development (HUD) shifted its strategy of funding services through its Supportive Housing Program to relying on mainstream programs to "pick up the slack" (HUD, 2010). Thus, a primary strategy for ending homelessness is connecting families to mainstream services (ICH, Opening Doors). Mainstream services are "publicly funded programs that provide services, housing, and income supports to poor persons whether they are homeless or not. These include programs providing welfare, health care, mental health care, substance abuse treatment programs and veterans assistance" (Gale, 2003). Barriers to accessing mainstream services are considerable and include: lack of transportation to services sites, inadequate information about programs, fragmentation of mainstream services, limited eligibility and resources (e.g., funding), and lack of incentive to serve homeless clients (Gale, 2003; HUD, 2010).

Based on the findings about cost from the SHIFT study, the barriers to accessing some mainstream services, such as mental health, are considerable. As we originally reported, 93% of mothers in the SHIFT study had experienced at least one trauma; 81% had experienced multiple traumas; and more than 50% were traumatized as children. More than two-thirds had been physically assaulted in adulthood, and half had been sexually abused as children. At baseline, mothers in ES had the highest PTSD symptom severity scores and most women in all three housing conditions reported depressive symptoms. Weinreb, et al., (2006), reported that lifetime rates of major depressive disorder in homeless mothers may exceed 85%, at least four times that of the overall female population and approximately twice that of low income women. The SHIFT study also documented that a key predictor of residential instability and multiple moves was the severity of the mother's trauma symptoms. Despite the severe trauma histories, associated mental health problems, and high rates of residential instability in these families, utilization of mental health services by the mothers was so infrequent that their cost could not be factored into the analyses.

Study Limitations

A limitation of this cost study is that psychiatric care and use of mental health services by mothers in the study was not examined. Utilization of mental health services by the mothers was so low it did not contribute to cost calculations (Appendix 2). Additionally, there was no inclusion of mental health services for children in the calculations, again because the rates were too low to meaningfully contribute to costs.

Although we obtained data about utilization of public benefits, the information about these costs was unreliable and therefore was not included in the cost calculations. However, over the course of the study the enrollment in different benefit programs was similar across all housing groups; it is therefore unlikely that differential costs would have been identified and impacted the findings.

Another limitation was the lack of details about costs from housing programs. While the programs were able to provide the daily costs associated with their provision of housing and services, they could not provide specifics about the costs associated with each service provided (e.g., case management as compared to domestic violence counseling). Therefore, it was not possible to examine the differential contribution of each service to the overall cost.

RECOMMENDATIONS

The United States Interagency Council on Homelessness seeks to end child and family homelessness in ten years. The SHIFT cost analysis will contribute to this goal by providing data about the comparative costs of ES, TH and PH for homeless families and children. The SHIFT cost study also provides important insights into the nature of services and supports required to help families. Practice and policy recommendations include the following:

- Emergency Shelter, as currently designed, is not a cost effective strategy to prevent and end family homelessness. Although ES immediately provides safe havens for families, they are an expensive approach with questionable outcomes for families. Many families remained residentially unstable and children's needs were not effectively addressed. Whenever possible, families should be provided with permanent housing. In the future, programs might work towards adopting a Housing First model to quickly stabilize families in housing and then connect them to the services and supports they need to become self-sufficient.

- Transitional Housing was designed as a critical step in the COC and as a strategy to help families attain life skills that would support them in becoming self-sufficient. Although less expensive than the other two program models, these programs have strict eligibility criteria, mandatory program participation, long lengths of stay, limited services, and do

not guarantee permanent housing. Furthermore, many families are reluctant to enroll in them. The role of transitional housing in the context of Housing First approaches continues to be debated and additional research must be conducted to determine its place in the continuum of housing options.

- Connection to mainstream services is essential for ending homelessness. Programs must address access and eligibility issues as well as the limited availability of resources within the context of homelessness. It is difficult for low-income families to access these services, if they are available, and the condition of homelessness compounds these barriers (e.g., transportation, documentation, childcare). The 2010 HUD report describes strategies that various communities have adopted to overcome some of these barriers.

- In addition to connecting families to mainstream services, housing programs should review the services they directly offer. They should consider strategies for comprehensively assessing family members and developing service plans for referral. In addition, they should ensure that their services are trauma informed and that parenting supports are available. These supports should include attention to the immediate developmental needs of the children.

- Homeless mothers in emergency shelter have high rates of mental health issues that are currently not being addressed and that likely contribute to ongoing residential instability. In addition to the lack of permanent housing, programs should directly address the multiple factors that have contributed to a mother's homelessness, including mental health issues—especially depression and post traumatic stress disorder (PTSD). Not only should mothers be assessed for the presence of mental health problems, but individual service plans should be developed—especially since PTSD has been shown to predict residential instability. Mental health services are often limited and difficult to access in the community. It is recommended that programs assess family members for mental health problems and develop strong, collaborative community partnerships with mental health services for all family members. In addition, issues related to access and utilization should also be addressed.

- Programs must assess and respond to the needs of homeless and at risk children. Most programs do not routinely address the needs of children--leaving them vulnerable to developmental delays and untreated emotional, behavioral, and learning difficulties. The majority of children with mental health difficulties remain untreated. In addition to identifying children in need and ensuring appropriate care, programs must form partnerships with community-based agencies that are willing and able to serve these children.

- As communities develop additional housing programs, they should consider developing rapid rehousing and Housing First approaches. Housing First models often depend on the availability of affordable housing and adequate services and resources. Housing families quickly in housing units or programs that are not time-limited, and then providing case management and appropriate services results in the highest rates of housing stability.

CONCLUSION

This cost analysis is part of the larger SHIFT research. The findings support prior literature that documents the high cost of emergency shelter as compared to transitional housing and permanent supportive housing for homeless families (HUD, 2010). It also highlights the continuing residential instability of many families in the study, the lack of access to mental health services, and the limited attention to the needs of children. The cost findings combined with the outcomes we have documented reflect the limitations of these housing models and suggest that current strategies aimed at rapidly rehousing (i.e., Housing First) homeless families—rather than maintaining a housing readiness approach—are preferable. The study raises questions about the high cost of emergency shelter and the need for additional research to define the role of transitional programs.

The cost study highlights the need to further investigate how housing models can be linked to services and supports in a cost effective manner. Additional research is necessary to better understand the most cost effective ways of providing housing and services to homeless families and children both through the mainstream and directly by housing programs.

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Appendix 1.

SHIFT Study: Program Information Questions
[Please type your responses in the form below]

Residence/ Housing

1. How would you categorize your program:

☐Emergency Shelter

☐Transitional Housing

☐Permanent Supportive Housing

☐Other, please specify _____

2. How are residents referred to your program?

3. What is the typical length of stay in your program (in weeks)?

4. How many families can you serve?

    a. Do families sleep in the same room (or are there multiple rooms for each family)?

b. What is the maximum occupancy?

c. What is the maximum number of children you serve?

5. What is the cost to house a family in your residence per day/week/month?

_____/ day _____/week _____/month

a. Does this amount vary by family size or housing situation? If yes, please explain.

b. What does this cost estimate include?

Services

6. What are the service components of your program?

a. What services do you provide? Please list below and when applicable, indicate if the services are for the parents and/or children.

b. Is there variation in the services residents receive?

c. How do you determine which families receive which services?

Case Management

7. Do all residents receive basic case management? Please describe the nature of the case management.

    a. If yes, please estimate the number of hours of direct contact families receive.

    b. If yes, how many hours of indirect support do families receive (e.g., brokering services)?

8. What do the basic case managers do?

    a. How many case managers do you employ?

    b. What are their credentials?

    c. What is the size of the case management caseloads?

9. How often do families meet with their case manager?

    a. How long are the meetings?

    b. Are the meetings face-to-face?

10. How much do you pay your case managers? [Please specify hourly, weekly, or annually].

11. Do the case managers also deal with children's issues? If yes, describe.

    a. What is their role in addressing children's needs? (e.g., interface with school and/or McKinney-Vento liaison, refer for services and/or medical evaluations).

    b. What is the percentage of time that case managers spend on children's issues each week?

12. Do the case managers receive any training? If so, please describe.

    a. Are there career ladders that include the potential for advancement?

13. How is your program staffed? [Please give us a list of jobs including full-time or part-time, the number of people in each job, and his/her pay scale. If possible, include a brief job description].

    a. Are they clinically trained?

    b. Describe any training they receive for their job.

    c. Do you have staff that provide…
        i. Mental health services? (please describe)

        ii. Substance abuse services? (please describe)

        iii. Children's services (please describe)

iv. Housing assistance (please describe)

v. Vocational rehab (please describe)

vi. Other—please specify

14. What services/programs do you refer your residents to? Do these differ for parents and children?

    i. Health care?
    ii. Mental health?
    iii. Substance abuse?
    iv. Legal Aid?
    v. Children's services?
    vi. Other—please specify

    a. Do these service referrals differ for parents and children? If yes, how so?

15. Do you have other professionals come to your residence to provide services (e.g., nurses or health care workers, job readiness trainers, GED classes, tutoring for children)? Please list each service.

    a. How much do these services cost?

    b. How frequently are they used?

Thank you so much for your time and assistance. All of the information you have provided will be extremely important in our analysis and will help guide our suggestions for how to improve services to homeless families.

Appendix 2. Maternal Mental Health Treatment

	ES		TH		PS	
	15 month % (n)	30 month % (n)	15 month % (n)	30 month % (n)	15 month % (n)	30 month % (n)
Inpatient Hospitalization	4 (2)	(2)	2 (2)	(3)	3(1)	(2)
MH Day Hospital	2(1)	(4)	4(3)	(5)	14 (4)	(1)
ICM	2 (1)	0	2 (1)	(2)	11 (3)	(3)
Crisis Services	6 (4)	(3)	2 (2)	(9)	11 (3)	(2)
Medication Evaluation	10 (6)	(20)	14 (10)	(17)	40 (11)	(3)
Outpatient Treatment	6 (4)	29 (23)	14 (10)	34 (27)	44 (12)	42 (12)

Appendix 4. Cost Variables

	Emergency Shelter					Transitional Housing					Permanent Supportive Housing				
	Mean	N	Min	Max	SD	Mean	N	Min	Max	SD	Mean	N	Min	Max	SD
BASELINE															
# dental visits in past 3 mos	0.94	18	0	6	1.55	1.12	26	0	7	1.73	1	14	0	3	1.24
cost for dental services	12.34	77	0	335	46.79	20.01	81	0	391	61.43	28.99	27	0	168	56.69
# days hospitalized in past 3 mos	2.07	14	0	11	3	1.55	11	0	12	3.59	2.38	8	0	14	4.84
cost for hospitalization	334.33	77	0	9765	1312.25	186.31	81	0	10652	1221.32	624.68	27	0	12428	2434.99
# doctor/clinic visits in past 3 mos	1.14	22	0	4	1.28	0.93	28	0	5	1.18	1.5	12	0	5	1.45
cost for doctor or clinic visit	11.53	77	0	142	30.17	11.4	81	0	178	29.07	23.67	27	0	178	42.92
sum of dental/hosp/op cost BL	358.2	77	0	9765	1311.45	217.72	81	0				27	0	12499	2440.53
15-month Follow Up															
# dental visits in past 3 mos	1.14	14	0	4	1.29	0.94	17	0	6	1.56	1.29	7	0	4	1.7
cost for dental services	11.62	77	0	224	38.83	11.04	81	0	335	44.56	18.63	27	0	224	55.9
# days hospitalized in past 3 mos	0	7	0	0	0	0.43	7	0	2	0.79	0	4	0	0	0
cost for hospitalization	0	77	0	0	0	32.88	81	0	1775	219.45	0	27	0	0	0
# doctor/clinic visits in past 3 mos	1.67	15	0	6	1.76	1.87	23	0	10	2.47	1.43	7	0	7	2.57
cost for doctor or clinic visit	11.53	77	0	213	35.71	18.85	81	0	355	55.02	13.15	27	0	249	49.38
sum of dental/hosp/op cost	23.14	77	0	295	54.6	62.77	81	0	2130	263.61	31.78	27	0	416	90.88
30-month Follow Up															
# dental visits in past 3 mos	1.31	16	0	12	3	0.8	20	0	3	0.95	1.17	6	0	5	1.94
cost for dental services	15.25	77	0	671	80.41	11.04	81	0	168	32.38	14.49	27	0	280	55.02
# days hospitalized in past 3 mos	1	7	0	5	1.83	0.5	4	0	2	1	0	2	0	0	0
cost for hospitalization	80.7	77	0	4439	522.83	21.92	81	0	1775	197.27	0	27	0	0	0
# doctor/clinic visits in past 3 mos	2.04	24	0	16	3.25	1.64	14	0	3	0.93	2.83	6	0	8	3.06
cost for doctor or clinic visit	22.59	77	0	568	71.91	10.08	81	0	107	25.87	22.35	27	0	284	63.92
sum of dental/hosp/op cost	118.54	77	0	4510	539.43	43.04	81	0	1958	219.27	36.84	27	0	284	80.25
Housing cost per day	170.14	77	33	420	98.61	47.7	81	4	507	64.42	110.99	27	24	700	157.72
# of days in Baseline Program	82.78	77	7	493	118.53	331.05	81	12	1254	273.15	589.22	27	16	1244	358.89
# of days in Baseline Program in past 3 months	47.81	77	7	91	26.68	81.62	81	12	91	21.74	85.04	27	16	91	17.99
Housing cost in past 3mos	8248.24	77	700	26010	6339.16	3405.92	81	323	46137	5336.77	9291.76	27	862	63700	13811.76
Total Cost: Services for 3 months	-239.66	77	-9765	4510	1445.37	-174.68	81	-10652	1735	1240.37	-640.49	27	-12463	284	2444.94
Total Cost: Housing & Services for 3mos	8008.58	77	-7365	26136	6643.82	3231.25	81	-9888	46269	5575.56	8651.27	27	-9733	63944	14340.67