

**Ben Rosenfield**
Controller**Monique Zmuda**
Deputy Controller

MEMORANDUM

TO: Supervisor Ross Mirkarimi

FROM: Peg Stevenson, Director, City Services Auditor
Leah Rothstein, Analyst, City Services Auditor

DATE: October 11, 2011

SUBJECT: Board Inquiry #20110104-006:
Supportive Housing Costs and Benefits Review

In response to your inquiry and to public inquiries regarding the efficacy of supportive housing programs, the Controller's Office reviewed recent major studies that quantify the costs and benefits of providing permanent supportive housing for chronically homeless individuals. In summary, the literature broadly agrees that supportive housing reduces the public costs associated with chronic homelessness and generates net public savings. However, the costs of providing supportive housing programs, especially the over 60 such programs in San Francisco, vary dramatically and the impact on tenant outcomes of these cost variations has not been thoroughly examined.

Our findings are summarized below, followed by a brief discussion of the types and costs of the supportive housing programs offered in San Francisco and the challenges to making meaningful comparisons among these programs and between San Francisco's and other jurisdictions' supportive housing costs. A list of the studies we reviewed is at the end.

Supportive Housing Defined

Supportive housing programs offer long-term, stable affordable housing combined with "wrap around" services to chronically homeless individuals who also have serious conditions such as mental illness, substance abuse disorders, HIV/AIDS and other severe disabilities. These individuals are more likely to be reliant on public services such as emergency rooms, psychiatric hospitals, jails, substance abuse treatment programs and emergency shelters.

Chronically Homeless Individuals Accrue High Public Costs

Chronically homeless individuals with mental illness and/or substance abuse disorders have more frequent use of emergency departments and mental health services, and more frequent interactions with the criminal justice system than the homeless population in general. The public costs associated with these individuals' use of emergency services are very high, significantly higher than the average cost of services among the homeless population in general.

Researchers found that residents of two supportive housing programs in San Francisco generated an average annual cost for mental health services alone of \$8,000 per person prior to placement in supportive housing.¹ The Lewin Group estimated the average cost in 2004 of providing one day of service to a homeless individual in San Francisco in six different settings: \$2,031 for inpatient hospital; \$1,278 for inpatient mental health; \$94 for jail; \$85 for prison; \$42 for supportive housing; and \$28 for emergency shelter services.²

In a study of Philadelphia's chronically homeless, the individuals in the highest-cost 20 percent of the study group accounted for 60 percent of the group's total public costs. Eighty percent of those in this fifth had a serious mental illness.³ Similarly, in a Los Angeles study, those in the highest-cost ten percent of homeless individuals were more likely to have co-occurring mental health and substance abuse problems and incurred an average public cost that was over 450 percent higher than the average homeless person.⁴

Supportive Housing Programs Reduce Use and Costs of Emergency Services

The literature strongly supports a finding that supportive housing reduces residents' use of emergency department, mental health, substance abuse, emergency shelter, criminal justice and inpatient hospital systems. The only cost increase observed in the studies reviewed is in outpatient medical care, which reflects the high initial cost of stabilizing the health of chronically homeless individuals.⁵

Studies found supportive housing leads to a reduction in tenants' emergency department visits of 56 to 58 percent in San Francisco⁶ and 34 percent in Denver,⁷ as well as to an 89 percent savings in emergency department costs in Los Angeles.⁸ Inpatient hospital stays were also found to decline after supportive housing placement: in San Francisco, inpatient hospital days declined by 57 percent in the first year post-placement and by another 20 percent the following year, use of residential mental health care dropped from 2.5 days per year to zero⁹ and the likelihood of being hospitalized dropped by 42 percent;¹⁰ in Los Angeles, inpatient hospital costs dropped by 91 percent; in Denver, inpatient visits decreased by 40 percent, inpatient nights by 81 percent and inpatient costs by 66 percent;¹¹ in California, days of psychiatric hospitalization decreased more than 65 percent;¹² and in New York, the number of state psychiatric hospital admissions dropped 57 percent, the number of days spent in municipal hospitals decreased by 80 percent and the number of days in VA hospitals decreased by 59 percent after two years in supportive housing.¹³

Supportive housing also results in decreased incarcerations and criminal justice system costs incurred by residents: in San Francisco, residents spent 44 percent fewer days incarcerated but 88 percent more days on

¹ Tony Proscio, *Supportive Housing and its Impact on the Public Health Crisis of Homelessness*, Corporation for Supportive Housing: 2000.

² The Lewin Group, *Costs of Serving Homeless Individuals in Nine Cities: Chart Book*, The Partnership to End Long-Term Homelessness: November 2004.

³ Stephen Poulin, et al., "Service Use and Costs for Persons Experiencing Chronic Homelessness in Philadelphia: A Population-Based Study," *Psychiatric Services* 61 (November 2010): 1093 – 1098.

⁴ Economic Roundtable, *Where We Sleep: Costs When Homeless and Housed in Los Angeles* (Los Angeles: 2009).

⁵ Lisa Foster and Patricia Snowdon, *Addressing Long-Term Homelessness: Permanent Supportive Housing*, California Research Bureau: August 2003 and Jennifer Perlman and John Parvensky, *Denver Housing First Collaborative: Cost Benefit Analysis and Program Outcomes Report*, Colorado Coalition for the Homeless: December, 2006.

⁶ Tia Martinez and Martha Burt, "Impact of Permanent Supportive Housing on the Use of Acute Care Health Services by Homeless Adults," *Psychiatric Services* 57(July 2006): 992 – 999 and Proscio, 2000

⁷ Economic Roundtable, 2009.

⁸ Economic Roundtable, 2009.

⁹ Proscio, 2000.

¹⁰ Martinez, 2006.

¹¹ Perlman, 2006.

¹² California Department of Mental Health, *Effectiveness of Integrated Services for Homeless Adults with Serious Mental Illness* (Sacramento, 2002).

¹³ Dennis Culhane, Stephen Metraux and Trevor Hadley, "Public Service Reductions Associated with Placement of Homeless Persons with Severe Mental Illness in Supportive Housing," *Housing Policy Debate* 13 (January 2002).

probation;¹⁴ in New York, the number of days spent in prison decreased 74 percent and the number of days spent in jail decreased 40 percent;¹⁵ in California, days of incarceration decreased 80 percent;¹⁶ in Los Angeles, Sheriff general jail costs were 95 percent lower for those in supportive housing compared to their homeless counterparts.¹⁷

Cost Savings of Supportive Housing Can Exceed the Cost of the Programs

When compared with the cost of providing supportive housing, many studies find that the reduced use of public services generate net savings, while some find a minimal net cost. The studies reviewed, however, conservatively under-estimate cost savings related to reduced emergency service use due to data limitations and the time periods studied. Therefore, the actual net savings achieved by supportive housing are likely higher than observed in these studies. For example, services provided within the first six months in supportive housing are the most costly, as previously neglected medical and mental health issues are addressed during this time. Cost savings therefore increase the longer the individual remains housed. However, these long-term cost savings are not quantified in the literature, which predominantly examines outcomes within a time frame extending up to two years post-placement into supportive housing.

It is important to note that, while supportive housing significantly reduces public costs associated with chronic homelessness and can result in net public savings, these savings are often not in the form of funds that can be transferred between public service systems in order to underwrite supportive housing. For example, the reduction a supportive housing program achieves in tenants' hospital visits does not reduce the local hospital's overall costs nor do the savings translate into funds that can be used to pay for the supportive housing program. Instead, because the public health care system is already over-subscribed, any reduction in use by one group increases the number of hospital beds available for others in need. This means that cities funding supportive housing programs have net added costs in order to better serve clients, improve their outcomes and increase the overall number of people served.

Those studies estimating supportive housing costs and benefits are summarized in Table 1.

Table 1:
Studies Estimating Annual Per Person Costs and Savings Associated with Supportive Housing

| City Studied | Year | Annual Cost of Services Pre-Placement | Savings in Service Cost Post-Placement | Annual Supportive Housing Cost | Net Savings / (Cost) |
|--|-------------|--|---|---------------------------------------|-----------------------------|
| Seattle, WA ^{18 a} | 2009 | (\$48,792) | \$37,296 | (\$13,440) | \$23,856 |
| Portland, OR ^{19 b} | 2006 | (\$42,075) | \$24,867 | (\$9,870) | \$15,006 |
| Los Angeles, CA ^{20 c} | 2009 | (\$34,764) | \$27,504 | (\$13,224) | \$14,280 |
| Denver, CO ^{21 d} | 2006 | (\$43,239) | \$31,545 | (\$26,800) | \$4,745 |
| San Francisco ^{22 e} | 2006 | NA | \$1,300 | NA | NA |
| New York, NY ^{23 f} | 2002 | (\$40,449) | \$16,282 | (\$17,277) | (\$995) |

¹⁴ Harder+Company Community Research, *The Benefits of Supportive Housing: Changes in Residents' Use of Public Services: DRAFT*, Corporation for Supportive Housing: February 2004.

¹⁵ Culhane, 2002.

¹⁶ California Department of Mental Health, 2002.

¹⁷ Economic Roundtable, 2009.

¹⁸ Mary Larimer, et al. "Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons with Severe Alcohol Problems," *JAMA* 301 (April 1, 2009): 1349 – 1357.

¹⁹ Thomas Moore, "Estimated Cost Savings Following Enrollment in the Community Engagement Program: Findings From a Pilot Study of Homeless Dually Diagnosed Adults," *Central City Concern* (June 2006).

²⁰ Economic Roundtable, 2009.

²¹ Perlman, 2006.

²² Martinez, 2006.

²³ Culhane, 2002.

^a Study includes incarceration costs and emergency, hospital, shelter and detox services costs.

^b Study includes health care and incarceration costs.

^c Study includes mental health, emergency, criminal justice, public assistance, Food Stamp and hospital system costs.

^d Study includes emergency medical, shelter, incarceration and detox service costs.

^e Study includes emergency department and inpatient hospitalization costs.

^f Study includes medical, Medicaid, VA and Department of Corrections service costs.

Other studies find a moderate net cost of providing supportive housing. In New York the average per unit annual cost, net of savings in medical, Medicaid, VA and Department of Corrections services, was estimated to be \$995 (in 1999 dollars), accounting for just five percent of the total annual cost of providing the unit. In other words, 95 percent of the annual costs of providing supportive housing were offset by reductions in service costs attributed to the supportive housing program. The researchers note that these cost savings figures represent conservative estimates, in that only savings within the first two years post-placement are accounted for, not all direct and indirect service cost savings are included and some benefits resulting from the placement, such as increased employment among residents, are not taken into account.²⁴

A San Francisco study focusing only on supportive housing residents' use of emergency and acute care health services found an annual average cost savings of \$1,300 per person, representing at least 10 percent of the estimated annual cost of supportive housing. This limited study, however, only quantified savings in one public service system regularly accessed by the chronically homeless. Researchers suggest that cost savings estimates would be significantly higher if other systems were also included in the analysis.²⁵

A majority of the cost savings achieved through supportive housing is accomplished through reductions in health care costs. In Los Angeles, 69 percent of the cost savings observed were through reductions in use of emergency rooms, clinics, mental health and public health services.²⁶ In the Denver study, 57 percent of the cost savings achieved were through reduced use of emergency rooms and hospital services.²⁷ In New York, 72 percent of the cost savings achieved were associated with reductions in health services.²⁸ In Seattle, 59 percent of the per person per month cost reductions achieved through supportive housing were through savings in billed medical services.²⁹

Supportive Housing Programs in San Francisco

San Francisco provides supportive housing through both the Department of Public Health's (DPH) Direct Access to Housing (DAH) program and the Human Services Agency's (HSA) Housing First program.

DPH – Direct Access to Housing³⁰

DPH provides supportive housing to 1,200 tenants across 27 sites ranging in size from 33 to 106 units. By 2013, the Department projects to add 650 additional supportive housing tenants at seven new sites. The sites include a licensed care facility, units set aside in nonprofit-managed affordable housing developments and master-leased single room occupancy (SRO) hotels. Under the master lease model, DPH master-leases SRO hotels for use as supportive housing and then contracts with service providers to locate in these sites. DPH estimates the current per resident monthly operating and service cost of DAH to be \$1,500. The average tenant rent is \$350, for an average monthly subsidy cost of the program of \$1,150 per resident. In 2004, DPH reported a 58 percent reduction in emergency room utilization and a 57 percent reduction in inpatient services among DAH residents from the two years prior to the two years after entering the program.

²⁴ Ibid.

²⁵ Martinez, 2006.

²⁶ Economic Roundtable, 2009.

²⁷ Perlman, 2006.

²⁸ Culhane, 2002.

²⁹ Larimer, 2009.

³⁰ San Francisco Department of Public Health, <http://www.sfdph.org/dph/comupg/oprograms/DAH/default.asp>

HSA – Housing First Program³¹

HSA's Housing First provides supportive housing through the following program models:

- 1) Master Lease Program - HSA leases the buildings and contracts with nonprofit agencies to manage the property and provide supportive services.
- 2) Supportive Services Only – HSA provides funding for supportive services but does not fund the lease and property management costs.
- 3) Local Operating Subsidy Program – Sites are new developments owned by nonprofits and financed through the Mayor's Office of Housing and the Redevelopment Agency. HSA refers tenants to the sites and provides operating subsidies and supportive services funding.

The costs of these programs and the subsidy levels they require of HSA vary widely. In 2009, the operating costs across all sites, including rental subsidies, utilities, security and building management but excluding lease payments, debt service and capital costs, ranged from \$447 to \$1,100 per unit per month with a median cost of \$680. The HSA subsidy for services at all sites ranged from \$32 to \$525 per unit per month, with an average HSA investment in services of \$159. Because HSA funding is used to fill the funding gap left by other sources of revenue, the variation in subsidy cost that the programs require of HSA is a reflection not only of program model variations but also of variations in the levels of funding the programs have secured from other sources. It is therefore difficult to set a standard rate for HSA's investment across all sites, given the variations in their ability to secure funding from other sources, the resulting differences in their funding gaps and their reliance on HSA to fill those gaps in order to operate.

In 2009, HSA convened the Single Adult Supportive Housing (SASH) Working Group to gain a better understanding of the variations in service delivery models, costs and outcomes among the Housing First providers, as well as to begin to define a set of shared metrics for measuring the efficacy of these programs going forward. While the SASH analysis was limited in scope and by data availability and therefore unable to verify the underlying causes for the range in costs among Housing First providers, it provided several possible explanations for the variations, including differences in:

- Program type
- Tenant population
- Staffing and case management ratios
- Types of services provided
- Tenant eligibility/selection criteria
- Building size
- Building location

In addition, the SASH Working Group noted that cost variations may be impacted by economies of scale, as those providers running several programs have lower average per unit costs than those that only manage or provide services for one supportive housing site.

A thorough examination of supportive housing programs' outcomes relative to their costs requires defining outcome metrics and implementing uniform data collection across all supportive housing sites. Outcome data can be collected primarily on tenant outcomes or can be used to inform cost avoidance analyses in which the programs' reduction in public costs through tenants' reduced use of emergency services is quantified.

³¹ San Francisco Human Services Agency, *HSA Housing First Analysis*, June 2008 and *Final SASH Recommendations*, February 2, 2009.

As of the 2009 SASH Working Group process, the only outcome data collected across all sites was related to housing retention. Additional tenant outcome data or performance measures used in other analyses include: the proportion of tenants who remain in supportive housing for a given period of time; the proportion of tenants who have improved mental health or substance abuse; the proportion of tenants who have secured entitlement benefits; and ratings on HUD's Self Sufficiency Matrix, which measures tenants' self sufficiency in 18 areas including income and employment, education, food, mental health and general health care, life skills, child care, substance abuse and legal. In order to document the impact of the supportive housing programs, these data must be collected before and after placement in supportive housing.

Performing cost avoidance analyses requires collecting additional data on the numbers of incidents and days tenants spend in inpatient medical, mental health and criminal justice facilities, as well as their use of other emergency services such as ambulances and shelters, before and after enrollment in supportive housing.

Comparing Supportive Housing Costs in San Francisco to those in Other Jurisdictions

Meaningful cross-jurisdiction comparisons of supportive housing programs' costs and outcomes are rare. Jurisdictions differ in their program approaches, levels and mechanisms of funding, target populations served and services offered, therefore making like-to-like comparisons of programs difficult. In addition, the jurisdictions' characteristics and demographics vary, thereby making baseline comparability difficult to establish. For example, the proportion of jurisdictions' populations that are homeless varies significantly, as do the proportion of their homeless populations that are considered chronically homeless and the level of public services offered outside of the supportive housing setting. In 2009, San Francisco's homeless population per 100,000 residents was significantly higher than other major metropolitan areas, at 714 homeless persons per 100,000 residents, compared to 588 in New York City, 434 in Los Angeles County, 219 in Chicago and 390 in Oakland/Alameda County.³² This makes comparing San Francisco's homeless services programs to other metropolitan areas' difficult.

Another illustration of the difficulty in making comparisons is evident in a 2009 RFP for supportive housing providers issued by New York City that set a maximum annual operating cost of \$15,000 to \$25,000 per unit. This maximum cost is significantly higher than San Francisco's median cost of \$8,163. However there are many factors that would affect a cost comparison—two are: the overall cost of housing and the fact that San Francisco has a significantly more robust public health clinic network than New York which allows supportive housing residents in San Francisco to access health care outside of the housing program setting.³³

Conclusion

- Supportive housing programs serving the most at-risk, chronically homeless populations result in a reduction in participants' incarceration rates and utilization of emergency services, generating significant public cost savings.
- Many studies that compare the cost of supportive housing programs with the public cost savings they generate find net public cost savings associated with supportive housing programs.
- While supportive housing significantly reduces public costs associated with chronic homelessness and can result in net savings in serving that population, it is often not possible to transfer these cost savings between public service systems in order to underwrite supportive housing. Therefore, jurisdictions must spend more overall to provide supportive housing programs and to better serve this population.
- San Francisco's over 60 supportive housing programs have widely varying costs and public subsidy needs. A thorough examination of the reasons for the cost and subsidy variations and related outcomes has not been undertaken.

³² Point in time homeless counts, by Continuum of Care jurisdiction, as reported by HUD in *The 2009 Annual Homeless Assessment Report to Congress*, June 2010. Population statistics reported by the US Census *American Community Survey*, 2009.

³³ San Francisco Human Services Agency, *HSA Housing First Analysis*, June 2008

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