King County Department of Community and Human Services *June 2013*

Impact of Supported Housing on Acute Care and Jail Utilization

Introduction

The King County Department of Community and Human Services (DCHS) funds and oversees a range of permanent supported housing programs (PSH). For each of these programs, housing is considered a permanent residence, in which clients have the rights and responsibilities associated with tenancy. Supportive services associated with these programs range in service intensity, from limited housing case management to highly intensive supports provided by multidisciplinary treatment teams. The populations served also vary, from individuals who are formerly homeless and medically complex, to individuals with co-occurring serious mental illnesses and substance abuse disorders and involvement in the criminal justice system.

Research elsewhere (e.g., Culhane, Metraux, & Hadley, 2002; Martinez & Burt, 2006) has shown that individuals who participate in supported housing programs generally reduce their use of certain services frequently used by individuals who are homeless, such as Emergency Department and sobering services. Use of jail and hospital care is also often reduced. In addition, individuals who are housed are, by definition, not using shelter resources.

This report summarizes the acute care and jail utilization impacts of King County-sponsored permanent supported housing. Our PSH programs have served approximately 3,000 people since 2005. Cross-program information summarized in this report is drawn from existing reports and analyses conducted specifically for this report to arrive at conclusions about the success of supportive housing in reducing acute care and jail use. Program-specific summaries, including their services, target populations and outcomes are provided in the Appendix.

Impacts of the following programs (and the acronyms used in this report) are summarized as follows.

BAH-P	Begin at Home-Plymouth on Stewart: Individuals too medically compromised to be safely released to the street
BAH-S	Begin at Home-Simons Senior Apartments: Older adults with long histories of homelessness and acute care and jail utilization
CCC	Client Care Coordination: Individuals selected for PSH programs on the basis of high acute care or jail utilization or high vulnerability and risk to self if left homeless
CSD	Community Services Division: A set of ten PSH programs with support from the DCHS Community Services Division not otherwise examined by this report
FACT	Forensic Assertive Community Treatment: Individuals with serious mental illnesses selected on the basis of having the highest frequency of jail utilization in the county
FISH	Forensic Intensive Supportive Housing: Individuals with serious mental illnesses with

	frequent jail bookings and not legally competent to stand trial
HH	Humphrey House: Originally for frequent jail utilizers; criteria has since changed
HV	Housing Voucher: Housing case management for individuals with mental illness and/or substance use disorders with frequent jail use within King County
MIDD3a	Mental Illness and Drug Dependency - Strategy 3a (Supported Housing)
PACT	Program for Assertive Community Treatment: Individuals selected on the basis of very high prior psychiatric hospitalization frequency
SKC	South King County Housing First: Scattered site housing for homeless adults with serious mental illnesses in South King County
SSH	Standard Supported Housing: Individuals with serious mental illnesses who need more frequent support than can feasibly be provided with routine outpatient services
ISH	Intensive Supported Housing: Individuals with serious mental illnesses who need a higher level of supports than SSH

Analysis Methods

The 13 PSH programs listed above were examined for each service area in this report. Programs varied in the degree to which their participants used the particular service analyzed (e.g., psychiatric hospital, sobering, etc.). Data presented below under each service area are limited to those programs that had sufficient use of that service.

All analyses are based on service use one-year prior to program admission compared to the year following program admission. Analyses were conducted on all individuals who entered the program, regardless of length of stay in the program. As such, the program impacts may be underestimated.

We were not able to completely unduplicate participants across programs for this analysis. Notably, more than half of the MIDD 3a clients go through the CCC process. Further, Emergency Department analysis for some programs (PACT, HV, ISH, SSH, and CSD) should be viewed with caution, as Emergency Department data was available for fewer than half of the program participants.

Psychiatric Hospital Utilization

Community psychiatric hospitalization was examined for this report. State psychiatric hospital stays were gathered for FACT, FISH and PACT and are reported in the program-specific summaries (see Appendix).

Participants in nine supported housing programs had sufficient psychiatric hospitalizations to analyze.

- **Eight of the nine supported housing programs analyzed showed reduced community psychiatric hospitalizations,** with reductions in admissions ranging from of 25 percent to 82 percent and in days ranging from 32 percent to 84 percent.
- PACT showed the highest average number of hospital days saved at an average of 14.6 days per person (the next highest program saved an average of 10.8 days and others were below an average of 6 days). PACT targets individuals with very frequent prior psychiatric hospitalizations

and its program is specifically tailored to stabilize individuals to prevent subsequent hospitalization.

- Programs ranged from an average per person savings of .97 days (HV) to 14.6 days (PACT). Using $900/day as a cost estimate, for the eight programs that reduced hospital use, **average psychiatric hospital cost savings were $873 to $13,140 per person[1].**

Emergency Department Utilization

Participants in 11 supported housing programs had sufficient Emergency Department (ED) utilization to analyze.

- **Ten of the 11 programs showed reduced ED utilization, with most programs showing reductions of 57 percent to 69 percent.**
- The full range of programs showed reductions between nine percent and 74 percent. The program with the greatest decline (74%) was BAH-P, which specializes in providing on-site integrated behavioral and primary healthcare for medically complex individuals selected on the basis of having very high prior hospital and ED utilization.
- With the exception of one program in which participants increased ED use, programs ranged from an average per person savings of .2 episodes (PACT) to 6.0 episodes (BAH-P).
- Using $1,750/episode as a cost estimate, for the nine programs that reduced ED use, **average ED cost savings were $350 to $10,500 per person[2].**

Sobering Services Utilization

The Dutch Shisler Services Center (often referred to as the Sobering Center) is a sleep-off center with supportive services for individuals who are found inebriated on the street and transported to the center. Once people become stably housed, utilization of Sobering should drop dramatically and this indeed occurs.

Participants in nine supported housing programs had sufficient utilization of the Sobering Center to analyze.

- **All nine programs showed reduced Sobering Center utilization, with most programs showing reductions of 92 percent to 98 percent.**
- The full range of programs showed reductions between 16 percent and 98 percent.
- Three programs had participants with modest use of Sobering and subsequently showed reductions of only .55 to .97 average Sobering episodes (FACT, HV and CSD). The other six PSH programs analyzed showed reductions between 12.1 and 31.4 episodes per person.
- Using $48/episode as a cost estimate, **average Sobering Center cost savings were $26 to $1,507 per person[3].**

[1] A psychiatric hospital daily cost estimate of $900 per day is calculated based on the average of the 2009 daily set rate of the six King County community psychiatric facilities -- $900/day.

[2] An ED cost estimate of $1,750 per episodes is calculated based on the average charge for persons with Medicaid or uninsured from "Emergency Room Use." October 2010, published by the Washington State Hospital Association.

Jail Utilization

Participants in nine of the supported housing programs had sufficient jail utilization to analyze.

- **Eight of the nine programs showed reduced jail utilization, with reductions in bookings ranging from 27 percent to 56 percent and jail days from 23 percent to 63 percent.**
- FISH, FACT and HH showed considerably greater reductions in jail bookings than other programs (average reductions of 2.3, 2.1 and 1.8 bookings per person respectively). All three programs are specifically designed for individuals who are frequent users of the jail, coupled with severe mental illnesses.
- MIDD 3a showed a 51 percent reduction in bookings and a 53 percent reduction in jail days; it is the MIDD strategy with the greatest first year reduction in jail bookings of all MIDD strategies.
- With the exception of one program in which participants increased jail use, programs ranged from an average reduction of .19 to 2.3 bookings per person and an average of 1.6 to 69 days per person[4].
- Using $289/booking and $106/jail day as cost estimates for the eight programs that showed reduced jail utilization, **average jail booking cost savings were $55 to $664 per person and average jail days cost savings were $170 to $8,056 per person for a combined average of $225 to $7,978 per person[5]**.

Summary

Substantial reductions in acute care services and jail use were found for permanent supportive housing programs, regardless of target population or service type or intensity.

This suggests that all forms of PSH that provide housing plus voluntary, flexible supports matched to the person's needs will very likely lead to reductions in acute care and jail utilization.

Permanent supportive housing programs are showing substantial reductions in acute care and jail use.

Programs varied in terms of where the greatest service utilization reductions were shown. Programs typically showed the greatest reduction in the service areas they targeted. For example, the greatest reduction in psychiatric hospitalization was shown for PACT, which selects individuals based on prior use of psychiatric hospitalization and provides a service constellation tailored to preventing hospitalization. Similarly, the greatest reduction in ED utilization was shown for BAH-P, which selects individuals based on prior high medical care and ED utilization and integrates a primary care provider into the treatment team specifically to treat healthcare issues that led to acute medical care utilization.

[3] A Sobering Center cost estimate of $48 per episodes is based on the 2008 contract total divided by the number of contacts during the contract period.

[4] It is common for jail days to increase in the first program year, and decline in the second year for many programs that target jail use.

[5] Jail cost estimates used were $289 per booking and $106 per jail day and are based on the King County Correctional Facility estimated costs for jail admissions and daily rate methodology employed starting June 2010 and does not include medical, work release, 1:1 guarding, psychiatric and acute psychiatric services.

It could be that people who are very frequent users of acute care and jail utilization at the time of program selection might naturally reduce utilization even without intervention (a phenomena known as 'regression to the mean'). However, two programs (FACT and BAH-P) conducted evaluations that employed matched comparison groups of individuals with similarly high pre-program utilization but who did not get the supported housing program. Both demonstrated that program participants showed greater service utilization reductions than the comparison groups (see program-specific analyses in the Appendix).

Substantial cost offsets , savings from $1,474 to as much as $33,125 per person are possible in just the first year in a permanent supported housing program.

Permanent supportive housing programs resulted in substantial cost offsets. Taking the cost estimates together, the data suggest that people involved in PSH programs would likely save, on average, approximately $1,474 to $33,125 per person on acute care and jail utilization during their first year in a PSH program.

Cost savings would be predicted to be maximized for specific aspects of service utilization for programs that specialize in reducing such use (e.g., PACT specializes in reducing psychiatric hospitalization).

Participants of PSH programs would also save costs associated with police and courts (associated with reduced jail stays) and shelter costs that are not accounted for in this report. Participants may also reduce utilization of state hospitals and prisons, which are not reported in this summary but discussed in some program-specific summaries (e.g., PACT, FISH, FACT).

Cost reductions based on reduced acute care and jail use can be viewed in the context of PSH costs. PSH operating costs in King County are $10,000-$15,000 per year (Thiele, 2012) and as such, the costs reduced from decreased acute care and jail utilization would likely offset program costs in addition to providing participants with a better quality of life. It should be noted that the capital costs for building specialized PSH units that are sometimes needed are not incorporated into the analyses and would clearly alter the cost-offset balance.

References

Culhane, D.,Metraux, S.,& Hadley, T., (2002). Public Service Reductions Associated with Placing Homeless Persons with Severe Mental Illness in Supportive Housing. *Housing Policy Debates, 13* (1), 107-163.

Martinez, T & Burt, M. (2006). Impact of Permanent Supportive Housing on the Use of Acute Care Health Services by Homeless Adults. *Psychiatric Services, 57*, (7), 992-9.

Thiele, D. (2012). King County Committee to End Homelessness - Program and Cost Modeling Site-based Supportive Housing for Single Adults. Corporation for Supported Housing.

APPENDIX – Program-Specific Analyses

Begin at Home – Plymouth on Stewart

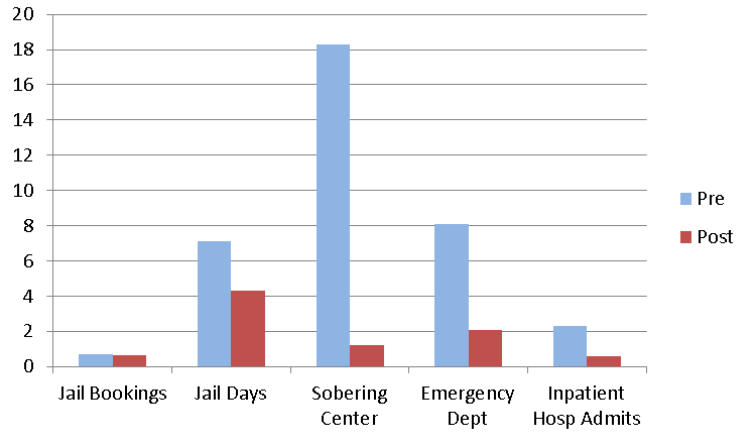
Description: BAH-P provides on-site integrated medical, psychiatric, and chemical dependency services that are voluntary, intensive, and easily accessible. Help with applying for and obtaining income and food assistance benefits and development of self-sufficiency capabilities are also provided. The BAH team includes housing case managers, chemical dependency specialists, and a registered nurse (eight hours per week) with a 1:21 housing case manager to participant ratio.

Target Population: Adults who meet the federal definition of chronic homelessness, with 12 consecutive months of homelessness or four homeless episodes in the prior three years with significant physical or psychiatric disabling conditions. Referrals come from either (1) Public Health-Seattle & King County's REACH homeless outreach team working with persons with 60 or more sobering center visits within the prior year OR (2) medical respite with incurred inpatient paid claims of at least $10,000 within the prior year. Twenty beds were available and data from the first 29 participants was examined. A comparison group with similarly high prior service utilization who did not have access to BAH-P was also examined.

Results: The following service use changes were shown for BAH-P participants (N=29) when comparing the year prior to and year following program admission.

- Reduced jail bookings by 10 percent
- Reduced jail days by 39 percent
- Reduced Sobering Center contacts by 93 percent
- Reduced Harborview Emergency Department (ED) contacts by 74 percent, and Harborview inpatient (medical and psychiatric) admissions by 74 percent (days by 72 percent)
- ED and Sobering reductions were significantly greater for participants than for the comparison group. Differences at the trend level were shown for hospital admissions and jail bookings.

Figure 1: Average Per Person Change in Acute Care and Jail Utilization



Total reduction in estimated costs for the 29 participants was $1,812,630 or $62,504 per person during the first year of participation. Comparison group members reduced costs by $25,925 per person. The difference of $36,579 far outweighs the program operating cost of $18,600 per person per year.

The full evaluation report can be found at http://www.kingcounty.gov/healthservices/MHSA/Reports.aspx

Begin at Home – Simons Senior Apartments

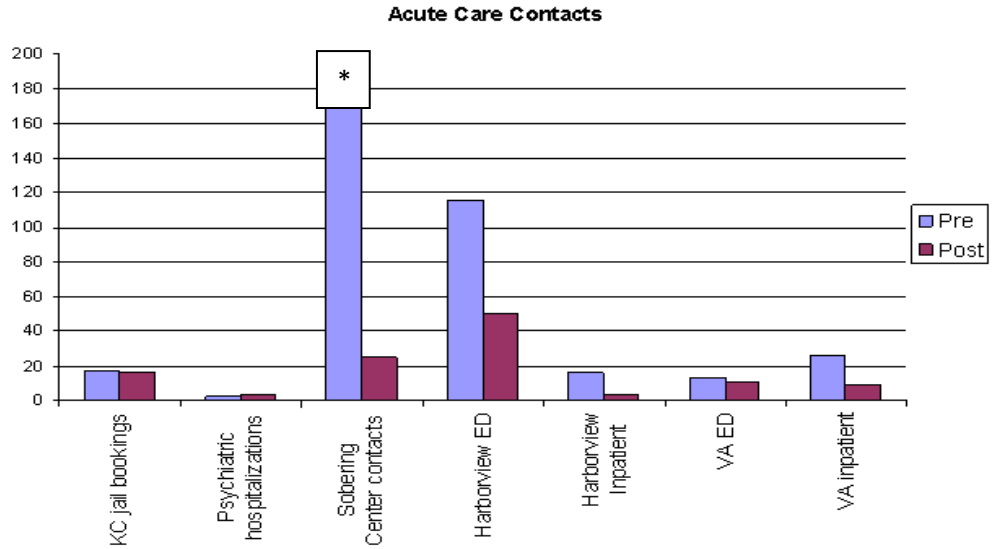
Description: Services integrate mental health, chemical dependency and primary health care into a single, comprehensive on-site team. Help with applying for and obtaining income and food assistance benefits and development of self-sufficiency are also provided.

Target Population: BAH-S provides 45 units for older adults in the downtown Seattle area, targeted to those who frequently used acute care or criminal justice services in the past year: 60+ Dutch Shisler Sobering Center visits, 2+ detoxification visits, 2+ arrests, 5+ hospital or emergency department visits, or 5+ shelter stays. Veterans are prioritized. Participants must meet the federal definition of chronic homelessness, including having a disabling medical or psychiatric condition.

Results: The following service use changes were shown for BAH-S participants (N=45) when comparing the year prior to and year following program admission. The graph below shows acute care and jail episode changes for BAH-S participants.

- Reduced Sobering Center contacts by 98 percent
- Reduced Harborview ED contacts by 57 percent
- Reduced Harborview admissions and days by 75 percent
- Reduced Veteran's Affairs inpatient stays by 65 percent (days by 84 percent)
- A slight increase in inpatient psychiatric hospital stays (38 days) and no change in jail utilization.

Figure 2: Acute Care Changes



*Data point is beyond top of chart – "pre" Sobering Center contacts =1,440

Cost reductions based on service use reductions for the 45 participants are estimated at $714,379 (average of $15,875 per person), which offset the $480,580 per year program costs.

The full evaluation report can be found at
http://www.kingcounty.gov/healthservices/MHSA/Reports.aspx

Client Care Coordination

Description: Under Client Care Coordination (CCC), permanent supportive housing (PSH) providers select potential tenants from client candidate lists.

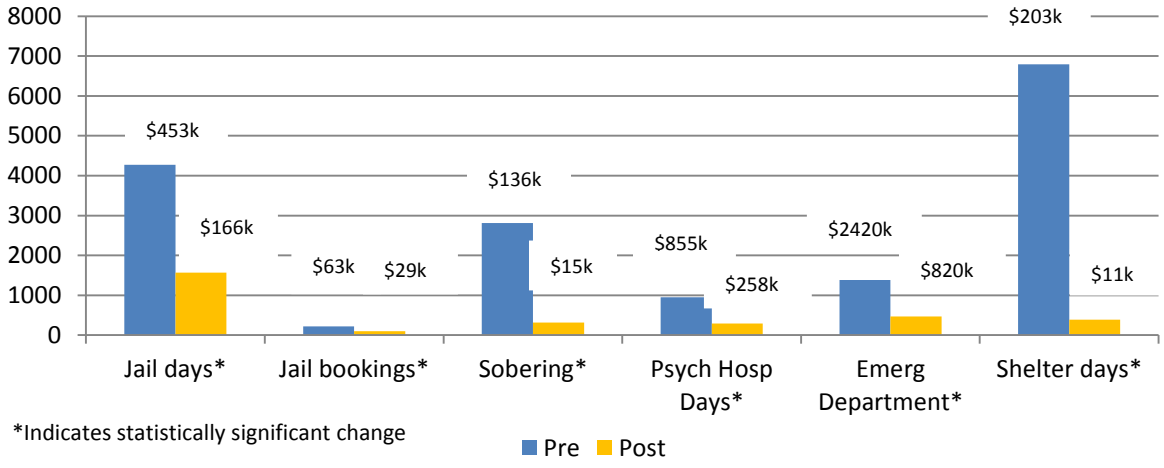
Target population: Client candidate lists are derived from scores indicating high acute care and jail utilization and/or high vulnerability. In 2011, 180 clients were placed using this method into the following PSH programs: Sophia's Way, Humphrey House, Scargo, Compass-Renton, Valley Cities Landing, Rose of Lima, Canaday House, Avalon Place and Gossett Place.

Results: An analysis of service utilization for the year prior to and following housing placement for the group of 180 CCC participants showed significant utilization reductions.

- Jail days declined by 63.4 percent, from a total of 4,272 to 1,564 days and bookings declined by 54.1 percent, from a total of 220 to 101. The changes in average jail days and bookings were statistically significant.
- Sobering Center admissions declined by 88.8 percent, from a total of 2,812 to 314 admissions. The change in average Sobering admissions was statistically significant.
- Community psychiatric hospital days declined by 69.8 percent, from a total of 950 to 287 days; and admissions declined by 61.5 percent, from a total of 52 to 20 episodes. The changes in average psychiatric hospital days and admissions were statistically significant.
- Psychiatric Emergency Department episodes declined by 66.1 percent, from a total of 1,383 to 469 days. The change in average ED episodes was statistically significant.
- Shelter days declined by 94.4 percent, from a total of 6,791 to 373 days. The change in average shelter days was statistically significant.

Total cost-offsets based on service use reductions are estimated to be approximately $2.8 million[1].

Figure 3: Cost-offsets of service utilization reductions



*Indicates statistically significant change

[1]Cost estimates are based on figures described in the summary section with the addition of emergency shelters estimated, which uses the average cost per day of shelters in 2009.

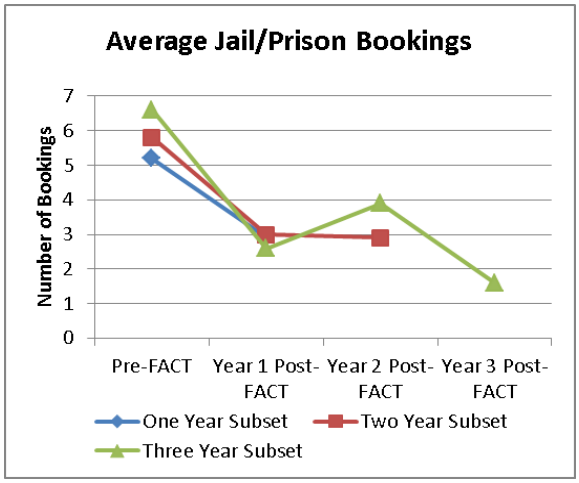
Forensic Assertive Community Treatment

Description: Forensic Assertive Community Treatment (FACT) is a modified version of the evidenced-based practice, Assertive Community Treatment (ACT) program for a forensic (i.e. high criminal justice system involved) population. All services are provided by the multidisciplinary FACT team who provide integrated mental health and substance abuse and supportive services where (non-office based) and when (24/7) needed. In addition to housing, services include medication management, case management, chemical dependency treatment, mental health treatment, 24-hour crisis services, and vocational training.

Target population: Adults with serious mental illnesses and at least one misdemeanor (non-DUI) booking in the prior 12 months plus either (1) Rapid Cycling - at least five misdemeanor (non-DUI) bookings in any rolling 12 month period and at least 12 releases overall OR (2) Long Stay/Rapid Cycling - at least five misdemeanor (non-DUI) bookings in any 12 month period and at least one misdemeanor booking with a length of stay over 30 days. As the number of potential enrollees was much greater than the capacity of FACT, half of the target population was randomly assigned to a comparison group who would receive services 'as usual'.

Results: The following service use reductions were shown for first-year FACT participants (N=51) when comparing the year prior to and year following FACT enrollment. In all cases reductions were greater than those of the comparison group (*indicates a statistically significant decline).

Figure 4: Jail/Prison Bookings



- 45 percent reduction in jail and prison bookings (average per person decline from 5.2 to 2.9)* and 38 percent reduction in incarceration days (average per person decline from 117 to 72)*. A total of 2288 incarceration days were saved.
- 25 percent reduction in inpatient psychiatric admissions (average per person decline from .6 to .5) and 44 percent reduction in days (average per person decline from 24.5 to 13.7. A total of 558 inpatient psychiatric days were saved.
- 52 percent reduction in psychiatric crisis contacts (average per person decline from 2.8 to 1.4)*
- 16 percent reduction in Sobering Center episodes (average per person decline from 3.7 to 3.1)
- 63 percent reduction in Harborview Emergency Department episodes (average per person episodes decline from 3.5 to 1.3)*. A total of 114 visits were saved.

The complete FACT evaluation report can be found at:
http://www.kingcounty.gov/healthservices/MHSA/CriminalJustice/CJI%20Reports.aspx

Forensic Intensive Supported Housing

Description: Forensic Intensive Supportive Housing (FISH) is an integrated mental health and substance abuse treatment via evidence-based Integrated Dual Disorder Treatment. The following service components are provided: housing with support services, assertive engagement to recovery-based treatment, intensive case management, Integrated Dual Disorder Treatment (IDDT), medication management, 24-hour crisis services, forensic peer support, education and employment assistance.

Target Populations: A combination of 60 homeless adults from the following two groups: (1) those who are unable to participate in Mental Health Court because they have been found to be not legally competent to stand trial and their charges have been dropped; OR (2) U.S. military veterans with a mental health disorder in a King County or municipal jail eligible for the King County Veterans Program.

Results: The following service use changes were shown for FISH participants (N=60) when comparing the year prior to and year following FISH enrollment.

- **56 percent reduction** in jail bookings (average per person decline from 4.4 to 1.9)
- 59 percent reduction in jail days (average per person decline from 82.9 to 34.2) for a total of 2,922 jail days saved
- Small increase (12%) in inpatient psychiatric days and admissions
- **95 percent reduction** in Sobering Center episodes (average per person decline from 17.0 to .9)

The complete FISH evaluation can be found at:
http://www.kingcounty.gov/healthservices/MHSA/CriminalJustice/CJI%20Reports.aspx

Humphrey House

Description: Humphrey House (HH) provides housing and support for adults with long-term homelessness, complicated by mental illness and/or substance use, incarcerations, and high service needs. Services integrate mental health, chemical dependency, and primary health care into a single on-site team, and are voluntary, intensive, and easily accessible on site with 24/7 coverage and 27:1 client-to-staff ratio.

Target population: Initially, the forty HH units were set aside for adults with the following characteristics:

- two or more jail bookings in the past year or six or more in the past four years and
- homelessness for the past 365 consecutive days and
- a high level of assessed service need or meet CCC high service use criteria
- persistent mental health and/or chemical dependency treatment needs and are eligible for publicly-funded mental health or substance abuse services

Results: The following service use changes were shown for HH participants who consented to records review (N=36) when comparing the year prior to and year following program admission.

Table 1: Humphrey House Change in Acute Care and Jail Events

Total Acute Care Events	1-year Prior to Humphrey Admission	1-year Following Humphrey Admission	Change
Jail bookings*	166	101	-39%
Jail days*	4545	2056	-55%
Jail Health Service episodes*	135	87	-36%
Jail Health Service contacts*	5491	3148	-43%
Psych hospital admits	5	4	-20%
Psych hospital days	49	41	-16%
Sobering contacts*	863	63	-93%
Harborview inpatient admission	14	8	-43%
Harborview inpatient days	38	38	no change
Harborview ED*	23	60	160%

*Change is statistically significant ($p<.05$) using Wilcoxon-sign test for non-parametric data

Housing Vouchers

Description: Housing vouchers (HV) provide up to six months of housing services that include case management, rent and utilities subsidies and security deposits. Clients are linked to an array of housing options, including respite, clean and sober, abstinence-encouraged, and "client choice." Case management includes housing search, advocacy, assistance in obtaining publicly funded benefits and coordination with referring court.

Target population: Adult King County jail inmates or participants of the Community Center for Alternative Programs (CCAP) and recently released persons who were homeless and who had chemical dependency problems or co-occurring mental health and chemical dependency problems. Individuals must also be referred from King County Drug Diversion Court, King County District Mental Health Court, Seattle Municipal Mental Health Court ("specialty courts") or CCAP.

Results: The following service use changes were shown for HV participants when comparing the year prior to and year following program admission.

Table 2: Specialty court-referred housing voucher program change in average jail bookings and days

Jail outcome indicator	First year cohort (N=189)		Second year cohort (N=159)		Third year cohort (N=147)		Fourth year cohort (N=136)	
	Pre[1]	Post	Pre	Post	Pre	Post	Pre	Post
Jail bookings (average)	2.7	2.2*	2.8	1.7*	2.8	1.9*	2.4	1.5*
Jail days (average)	50.9	44.6	39.3	36.3*	51.2	47.7	45.0	46.8
Change in jail days	-1191 (-12%)		-470 (-8%)		-501 (-7%)		+251 (4%)	

Table 3: CCAP-referred housing voucher program change in average jail bookings and days

Jail outcome indicator	First 3 years cohort (N=46)		Fourth Year cohort (N=41)	
	Pre[1]	Post	Pre	Post
Jail bookings (average)	1.93	.96*	2.6	1.6*
Jail days (average)	16.8	34.7	27.1	40.5
Change in jail days	+822 (+106%)		+549 (+49%)	

*Statistically significant at p<.05 based on Wilcoxon Signed ranks test (non-parametric)

[1]"Pre" program bookings are bookings that occurred during the 365 days prior to an index booking. For individuals without index bookings, "pre" bookings are bookings within 365 days prior to program start.

Although the primary outcome for this program is jail utilization, the following program impacts were also shown:

- 39 percent reduction in inpatient psychiatric admissions (average per person decline from .18 to .11) and 50 percent reduction in inpatient psychiatric days (average per person decline from 1.94 to .97)
- 58 percent reduction in Sobering Center contacts (average per person decline from .95 to .40)
- 37 percent reduction in Harborview Emergency Department (ED) contacts (average per person decline from 2.2 to 1.4) (note: ED data was only available for 48% of participants)

The HV program is part of the Criminal Justice Initiatives. Complete evaluation reports can be found at http://www.kingcounty.gov/healthservices/MHSA/CriminalJustice/CJI%20Reports.aspx

Mental Illness and Drug Dependency – Strategy 3a (Supported Housing)

Description: Mental Illness and Drug Dependency (MIDD) strategy 3a supported housing services are customized to help people stay off the streets and live independently in stable housing despite mental illness and/or substance use disorders. Each year, Strategy 3a funding is pooled with other available funds and awarded to agencies through a competitive process in the form of five-year grants.

Table 4: Programs supported by MIDD 3a – Supportive Housing

Provider Agency	Project	# of Units (Total=530)
Transitional Resources	Avalon Place	16*
Downtown Emergency Services Center	Canaday House	83*
Sound Mental Health	Gossett Place	53*
Harborview	Housing First Vouchers	18
Plymouth Housing Group	Humphrey House	40*
Sound Mental Health	The Kasota	45
Sound Mental Health	Kenyon House	18
Downtown Emergency Services Center	Kerner Scott House	13*
Sound Mental Health	Pacific Court	48
Evergreen Treatment Services	REACH Vouchers	20
Catholic Community Services	Rose of Lima House	40*
Plymouth Housing Group	The Scargo	20*
Valley Cities Counseling and Consultation	Valley Cities Landing	24*
Catholic Community Services	Wintonia	92*

* Units filled via CCC process

Target Population: Units provided with MIDD 3a funds are targeted for individuals with long histories of homelessness coupled with mental illnesses and/or substance abuse issues. At the point of the most recent MIDD analysis, a total of 510 people had entered housing at least one year prior to the analysis.

Results: The following service use changes were shown for MIDD 3a participants (N=510) when comparing the year prior to and year following MIDD 3a enrollment.

- 53 percent reduction in jail days (average per person decline from 60.6 to 28.3 days). MIDD 3a showed the greatest first year reductions in jail bookings and days of any MIDD strategy
- 37 percent reduction in inpatient psychiatric days (average per person decline from 5.1 to 2.9 days)
- 38 percent reduction in Harborview Emergency Department episodes (average per person decline from 2.4 to 1.5 episodes)
- 93 percent decline in Sobering Center episodes (average per person decline from 13.4 to .9 – using a somewhat larger pool of participants who entered through December, 2011 – N=601)

MIDD 3a is part of the larger MIDD plan for which full evaluation reports can be found at http://www.kingcounty.gov/healthservices/MHSA/MIDDPlan/MIDDCommittees/Reports.aspx

Program for Assertive Community Treatment

Description: The Program for Assertive Community Treatment (PACT) is a federally-recognized evidence-based practice that provides comprehensive, individualized assistance to people with severe and persistent mental illness. The PACT incorporates a team approach, a low staff to client ratio, and services provided 24 hours per day, seven days per week in the community in a time unlimited, flexible manner. King County operates two PACT Teams (downtown/north and south/east).

Target Population: PACT participants are adults with (1) a primary mental health diagnosis with priority given to people with schizophrenia, other psychotic disorders and bipolar disorder (often complicated by substance use), (2) functional impairment in daily living skills and/or maintaining a safe living situation and (3) continuous high-service needs indicated by severe symptoms and/or substance use associated with repeated psychiatric hospitalizations or incarcerations.

Results: The following service use changes were shown for PACT participants when comparing the year prior to and two years following program admission.

Table 5: Change in psychiatric hospitalizations

Psychiatric Hospitalizations	First Year Cohort (N=94)			Second Year Cohort (N=80)		
	Pre	Post 1st yr	Post 2nd yr	Pre	Post 1st yr	Post 2nd yr
Total hospital admissions	253	124	108	154	87	83
Total hospital days	17639	4088	5221	14271	2460	4275
Average hospital admissions	2.7 (2.8)[1]	1.3 (1.9)*	1.1 (2.1)*	1.9 (1.9)	1.1 (1.8)*	1.0 (1.8)*
Average hospital days	187.7 (140.4)	43.5 (74.9)*	55.5 (96.5)*	178.4 (141.9)	30.8 (56.8)*	53.4 (105.6)*

[1]standard deviation in ()

*statistically significant change from 'pre' - p<.05 based on t-tests and Wilcoxon rank sum

Table 6: Change in jail incarcerations

Jail Incarcerations	First Year cohort (N=94)			Second Year Cohort (N=80)		
	Pre	Post 1st yr	Post 2nd yr	Pre	Post 1st yr	Post 2nd yr
Total jail incarcerations	56	75	49	48	34	50
Total jail days	1781	1721	1283	1371	706	1782
Average jail incarcerations	.60 (1.1)[1]	.80 (1.8)	.52 (.98)	.60 (.98)	.43 (1.1)	.63 (1.5)
Average jail days	18.9 (49.9)	18.3 (50.4)	13.7 (37.5)	17.1 (46.6)	8.8 (29.1)	22.3 (62.8)

[1]standard deviation in ()

*statistically significant change from 'pre'- p<.05 based on t-tests and Wilcoxon rank sum

The full evaluation report can be found at:
http://www.kingcounty.gov/healthservices/MentalHealth/Reports.aspx

South King County Housing First

Description: Unique to the South King County (SKC) Housing First program was the use of scattered site private market-rate rental apartments and a "provider-based" subsidy developed by the King County Housing Authority (KCHA), in which the KCHA contracts with Sound Mental Health (SMH), rather than a landlord, so that SMH can directly lease the units from the landlord and manage the subsidy. Integrated on-site mental health, chemical dependency and primary health care services were provided from a multidisciplinary team with a 1:12 staff-to-client ratio and 24/7 staff coverage.

Target population: SKC Housing First provides units for 25 adults who meet the federal definition of chronic homelessness (i.e., homeless for 12+ consecutive months or four episodes in prior three years with a disabling physical and/or psychiatric condition that significantly impairs functioning). Eligibility criteria also required participants to have a mental illness and/or chemical dependency issue. Of note, participants were not selected on the basis of having high prior acute care or jail utilization.

Results: The following service use changes were shown for SKC participants (N=25) when comparing the year prior to and year following program admission.

- 76 percent reduction in jail bookings (average per person decline from .8 to .2)
- 22 percent reduction in jail days (average per person decline from 6.1 to 4.7)
- 69 reduction in Harborview inpatient or emergency department contacts (average per person decline from .76 to .24)
- 17 percent reduction in Valley Medical Center inpatient or emergency department contacts (average per person decline from .72 to .6)

The full evaluation report can be found at:
http://www.kingcounty.gov/healthservices/MHSA/Reports.aspx