Tri-County Supported Housing and Supportive Services Needs Assessment

Conducted by Central City Concern
on behalf of Care Oregon
April 2012

Executive Summary

In December 2011, a three-person team from Central City Concern was charged by CareOregon with conducting a community needs assessment of the Multnomah, Washington, and Clackamas tri-county area. The key goal of the assessment was to support the current health-care transformation efforts in the tri-county region by identifying the services needed to decrease hospital utilization by low-income and homeless individuals. As the Medicaid population expands, reducing usage of high-cost hospital and emergency department visits among that population through best practice interventions will be a key strategy. This assessment was intended to provide an estimate of current capacity and a projection of future capacity needed across the region.

At this time, ten percent of individuals being served by CareOregon account for 83 percent of medical costs, with 16,100 individuals making 43,460 visits to the emergency department each year (CareOregon data). The providers with whom the assessment team spoke represent the majority of agencies serving these individuals; their understanding of the problem is deep, though quantitative data to support a projection of need is frequently inconsistent or limited.

Nonetheless, **key findings** based upon 38 interviews with community partners as well as analysis of both city and county data include:

- Approximately 20,000 individuals are receiving community specialty mental health services in the tri-county area. Of that population, approximately 2,000 are receiving high-acuity services: 1,500 are receiving intensive outpatient services such as Assertive Community Treatment (ACT) or Intensive Case Management (ICM); while an additional 500 are in residential treatment facilities. There is evidence to suggest that more acute services, particularly in the form of intensive outpatient services, are needed to reduce psychiatric hospitalization, emergency department visits, and utilization of crisis services such as Project Respond and the Crisis Assessment and Treatment Center (CATC).

- Approximately 16,000 individuals are receiving substance abuse treatment from community providers. Of that population, approximately half are engaged in higher-acuity services such as intensive outpatient treatment or residential treatment.

- Approximately 53,000 individuals are enrolled in integrated medical services that include primary care, behavioral health care if needed, and a range of specialty and alternative health care that varies significantly by provider.

- Approximately 7,200 units of very low income housing are available to the lowest income, most vulnerable individuals in the tri-county area, through a mix of subsidies, rent assistance, and low-income housing stock. Services are attached to these units and funds, with varying levels of support that are not tracked consistently. Models offered include permanent supported housing (PSH), transitional supported housing, and low-incoming housing, all intended to support housing stability. Levels of service vary, from highly coordinated and intensive to insufficient.

- The need for more affordable housing, especially for the lowest income households (≤30% area median income), expressed by participating agencies corroborates low-income housing shortages reported in recent Consolidated Plans by each county, which estimate a total need of 28,000 units in the tri-county region for ≤30% AMI households. Waitlists for Section 8 and public housing include an estimated 21,000 households, indicating large-scale needs for very low income housing.

- While this assessment focused on individuals of highest vulnerability, including those experiencing chronic homelessness and severe clinical conditions, greater need for integrated services and affordable housing exists in our community. Estimates of homelessness in the tri-county area range considerably, from 8,000 "literally homeless" or in shelters during one-night counts to broader estimates of 27,000, which include those doubling up in housing or who would be at risk of homelessness without the supportive services they receive.

The majority of health care data that was available specifically pertained to insured individuals. While FQHCs were able to provide some data about uninsured individuals, there was limited specific data available. As a rule, this assessment assumed that the uninsured, lowest-income population mirrored the Medicaid population in terms of health care needs.

Finally, it is important to note that the issue of equity in access and culturally specific services must be taken into consideration when planning any expansions in community services. While the three culturally specific health services providers we interviewed spoke at length about barriers to equity among communities of color, other health care providers did not tend to focus on this issue. These is extensive research suggesting that factors such as income, poverty, and physical environment among communities of color are significantly related to disparities in health outcomes (Morello-Frosch and Lopez, 2006; Bell and Standish, 2005).

Recommendations:

Over the course of this assessment, we identified significant needs for services to the highest-utilizing, most vulnerable population. Typically, these service needs were multidisciplinary, encompassing coordination among medical and behavioral health professionals, as well as requiring structured housing with supports on-site, either in the form of recovery housing or low-barrier housing.

The total need for services in the tri-county area is likely larger than can be funded in the current environment. The need in the tri-county area is vast, but the opportunities for cost savings in the long run are significant: the literature demonstrates, again and again, that investing in the correct combination of housing and services results in reduced costs across the social service system over time.

What is presented below is a conservative projection of service needs, linked with housing, for the highest-utilizing, most vulnerable population in the tri-county area. These projects focus on individuals with significant behavioral health needs (severe and persistent mental illness, severe substance use disorders, or co-morbidity) that result in overutilization of crisis services, emergency departments, and hospital admissions.

Additional recommendations continue on the following page. These recommendations address service needs for populations that may be high utilizers for reasons other than significant behavioral health issues, or other systemic issues that acted as a barrier to effective assessment of community need.

Population	Recommended service	Recommended capacity	Estimated cost*	Estimated cost savings*	Estimated housing need
Severely and persistently mentally ill individuals who are high utilizers of the mental health crisis system	Assertive Community Treatment (ACT)	**Multnomah:** 2 teams (200 individuals) **Clackamas:** 1 team (100 individuals) **Washington:** 1 team** (100 individuals)	$12,000 per individual served **Multnomah:** $2.4M **Clackamas:** $1.2M **Washington:** $1.2M**	$11 - 24,000 per individual per year **Multnomah:** $2.2 - 4.8M **Clackamas:** $1.1 - 2.4M **Washington:** $1.1 - 2.4M**	400 units of permanent supported housing (cost estimate below)
Severely and persistently mentally ill individuals with significant substance use disorders	Integrated Dual Diagnosis Treatment (IDDT) (Example: Central City Concern's CEP program)	**Multnomah:** 2 team (120 individuals) **Clackamas:** 1 team (60 individuals) **Washington:** 1 team (60 individuals)	$7,000 per individual served **Multnomah:** $840,000 **Clackamas:** $420,000 **Washington:** $420,000	$11 - 24,000 per individual per year **Multnomah:** $1.3 - 2.9M **Clackamas:** $660K - 1.4M **Washington:** $660K - 1.4M	180 units of permanent supported housing (cost estimate below)
Individuals identified above. + Homeless individuals with significant substance use disorders	Recovery housing (50% low-barrier housing and 50% alcohol– and drug-free housing)	**1360units** permanent supported housing **1400 units** transitional supported housing **1000 units** permanent supported housing with some supports	$600 per household per month $7,200 per household per year **PSH:** $9.8M **TSH:** $10M **Other units:** $6M	35-40% reduction in ED visits 30-35% reduction in hospital admissions Total reduction of 24-28% in medical costs	*

* Please see Appendix 2, Explanation of Calculations, for details about how costs and savings were calculated.
** There is not consensus that additional acute-level mental health services are required in Washington County. Some providers expressed a need for more services; however, the county mental health authority did not concur.

Recommendations, continued:

- Data limitations are a significant barrier to making data-driven decisions. Community providers, led by a CCO, should develop demographic and utilization indicators with clearly defined numerators and denominators. These indicators may be used to establish targets and measure current capacity and estimated need, and should include:

  - Race and ethnicity
  - Gender
  - Age
  - Primary diagnosis
  - Presence of co- and tri-morbidity
  - Housing status
  - Number of individuals served annually, subcategorized by major types of service:
    - Housing: permanent supportive housing; transitional supportive housing; and housing with other support services.
    - Medical: primary care; specialty care; and medical hospitalization.
    - Mental health: outpatient mental health; intensive outpatient mental health (ICM/ACT-level services); residential mental health; and psychiatric hospitalization
    - Chemical dependency: outpatient chemical dependency; residential chemical dependency; medically assisted treatment;and detoxification.
  - Number turned away annually

  If it is not possible for healthcare and housing providers to define certain indicators in the same way, due to oversight requirements by HUD and HRSA, these indicators should be cross-walked to the greatest extent possible (for example, cross-walking federal poverty levels with area median income measures).

- Medical providers and hospitals identified a need for increased numbers of community health workers, though it was not possible to estimate cost savings or housing needs associated with this service. Multnomah County providers estimated a need for approximately 5,000 individuals to receive community health worker services; Washington County providers estimated a need without providing specific volumes.

- Beyond the need for permanent and transitional supported housing connected to programming, health care providers indicated the need for rent assistance for eviction prevention and rapid re-housing programming to assist households in maintaining housing during destabilizing events or to assist in moving from permanent and transitional supported housing to low-income housing, upon stabilization and income acquisition. Funds include incentives for private landlords to rent to those with histories of evictions, criminal justice involvement, and poor or no credit histories. The recommended funding based on 1,250 households benefiting from these funds annually would be $2,500,000.

Acknowledgements

This report would not have been possible without the support of CareOregon, including the kind assistance of David Ford and Debra Read. Additionally, we would like to thank the following individuals for giving generously of both time and information:

We would like to thank the following individuals for participating in the informational interviews upon which this assessment and report were based:

Amy Baker
Amy Markovitz
Angie Harbin
Ann McFall
Ann Turner
Carolyn Kozic
Charmaine Kinney
Christi Hildebran
Cindy Scherba
Claudia Wilson
Dan Potter
David Edwards
David Hidalgo
David Pump
Debbie Lowder
Erika Armsbury
Erika Silver
Gary Calvert
Genevieve Ellis
Gil Munoz
Heather Knapp
Heidi Scofield
Honora Englander
Jackie Mercer
James Wilson
Jay Auslander
Jill Archer
Jill Clark
John Duke
Jon Marquardt
Judy Werner
Katharina Wiest
Kathleen Roy
Kay Hutchinson
Kay Toran
Kevin McChesney
Kim Burgess
Kristin Burke
Kristin Kane
Laura Byerly
Laurie Huffman
Lexie Kruse
Lindsay Downen
Liora Berry
Martha McLennan
Martin Soloway
Mary Monnat
Mary White
Maxine Fitzpatrick
Melanie Eaton
Murlene Sanford
Nick Sauvie
Nicole Maher
Pam Kelly
Patrick Cosgrove
Rachel Duke
Rachel Solotaroff
Rhonda White
Rodica Pirv
Sam Chase
Sarah Goforth
Sarah Power
Sean Hubert
Shannon Wilson
Sharon Fitzgerald
Sheila Greenlaw-Fink
Sheila North
Steve Rudman
Susan Washington
Teri Beemer
Tim Hartnett
Toni Kempner
Trell Anderson
Vanetta Abdellatif
Victor Merced

We are also deeply indebted to the following individuals for the insight, logistical support and/or supplemental data they provided, without which neither the interviews nor this report would have been possible:

Anne Clark
Annette Evans
Araceli Gaytan
Beverly Jones
Carole Romm
Celia Strauss
Cindy Becker
Cindy Ross
Daniel Garcia
Dee Walsh
Douglas Peterson
Ed Blackburn
Eowyn West
EV Armitage
Greg Mulkey
Jamie Meyers
Jean Demaster
Jeanie Snow
Jennifer Wilcox
John Anhaack
Juanita Leibbrandt
Karen Erwin
Kas Causeya
Katy Beveridge
Kippi Coffey
Krista Collins
LeAnn Kritz
Leisa Vandehey
Liberty Martinez-Ross
Linda Drebin
Linda Hudson
Lisa Wills
Lynn Smith-Stott
Maggie Bennington-Davis
Maria Russo-Trimm
Megan Chaloupka
Michael Kaplan
Mona Knapp
Nic Granum
Renee Ulrich
Robin Weisshaar
Sally Erickson
Sara Hallvik
Sara Webb
Sarah Porter
Sheri Emery
Sik Yin Chan
Susan Emmons
Tammy Hooper
Tanya Stagray
Terry Forrest
Thom Disco

Introduction

As our community looks to implement reforms to the health care system, the need to reduce the use of high-cost services is widely recognized as an essential element in developing a more economically sustainable model of service delivery. Service providers of all types and specializations also understand that better management of clinical needs in community-based settings yields improved outcomes for clients and patients, especially when clinical services are closely coupled with housing and the support services necessary to provide clients with stability, security and the opportunity to recuperate, recover and achieve self-sufficiency. Numerous studies, some of which are cited throughout this assessment, have demonstrated the long-term cost savings of investing in a package of community-based services and supported hosuing.

There is a national movement toward such a comprehensive, holistic approach to addressing individuals' needs, which is underscored locally by an understanding that better communication and coordination across the range of service providers is necessary to create a continuum of care that is capable of yielding better outcomes while reducing overall system costs. Lack of housing and housing instability among the very low income population is associated with increased utilization of hospitals and emergency departments, furthering the necessity of including housing as a vital contributor to reducing vulnerability and unnecessary utilization of crisis services.

As service providers in the tri-county area prepare to form a local Coordinated Care Organization (CCO), many of the issues inherent to the current system of service delivery that prevent well-integrated, comprehensive care will be addressed, especially as the network focuses on patient-centered, coordinated service provision based on shared health data, streamlined administrative requirements and blended funding streams. In order for this tri-county CCO to succeed in providing higher quality care that reduces costs, it must include an array of service providers that are capable of delivering comprehensive services at a capacity commensurate with the needs of the community, especially the most vulnerable individuals with the highest needs that tend to incur the highest costs. This transitional period is a significant opportunity to invest in solutions that will reduce costs to the system as a whole.

To effectively organize this network of providers and optimally direct supplementary resources, it is important to know the current utilization of services and determine what additional need for what kind of services exists in the community that cannot be met due to limitations in funding or capacity. Unless otherwise specified, all capacity estimates in this assessment are for total numbers of individuals served over the course of a year.

This report presents the findings of a Community Needs Assessment conducted with thirty-eight community partners providing behavioral health, medical and housing services in the Clackamas, Multnomah and Washington tri-county area. Through semi-structured interviews, the assessment team at Central City Concern was able to gather information regarding current capacity in this catchment area to provide comprehensive services to the most vulnerable populations-- those who are homeless, with the lowest income and the highest clinical needs who are consequently more likely to be high utilizers of emergency departments and other crisis services--as well as the additional capacity required to effectively address the needs of those not currently able to access essential services. These findings may inform the organization of the tri-county CCO around lines of services deemed most essential in achieving and maintaining clinical and housing stability among the most vulnerable population and in turn preventing unnecessary use of high-cost emergency services.

In this report:

Capacity Analysis:

Medical & Behavioral Health Care

Behavioral health services, including mental health and addictions treatment, are provided through both non-profit and for-profit organizations throughout the tri-county area, including at Federally Qualified Health Centers (FQHCs) that offer integrated medical and behavioral health care. In order to assess current capacity to provide behavioral health and integrated medical services to the most vulnerable population, interviews were conducted with the majority of community providers in the tri-county area. A list of interviewed providers is included in Appendix 3.

While the interviewed agencies represent a majority of behavioral health and integrated medical service providers in the tri-county area, it is by no means exhaustive. Given limitations in time and resources, this assessment focused on the largest providers in the catchment area, as well as agencies frequently cited during interviews as partnering organizations. Limited time, an inability to contact agency representatives, or unintentional oversight caused the following organizations not to be included in this assessment:

- Portland Veteran's Affairs Medical Center (primary care, pharmacy, emergency, acute inpatient, mental health, rehabilitation & long-term care; tri-county)
- Bienestar (affordable housing & support services, targeting farm workers; Washington)
- Community Action (family services, education, housing, rent & energy assistance; Washington)
- Washington County Department of Health & Human Services (emergency medical, family services, addictions, disability, aging, veterans, communicable disease control, environmental, public health)

These omissions result in an underrepresentation of services available in Washington County and clinical services available to veterans in the tri-county area. Given the correlation between veteran's status and homelessness (veterans comprised 8-12% of the one-night homeless counts conducted in each county in 2011), this may also have resulted in an underestimation of unmet need in the most vulnerable population.

An interview was also conducted with representatives of the Coalition of Community Health Clinics (CCHC), which serves 50,000 patients in the metro-Portland area each year. Nine thousand of those patients are served by NARA's Indian Health Clinic, Outside In's Medical Clinic and Central City Concern's Old Town Clinic, organizations that were each interviewed separately for this assessment. However, information about high utilization of emergency and high-cost services for Coalition patients is not collected in the aggregate and could not be gathered by individual clinic due to time limitations. Therefore data from the CCHC was not included in calculations of total capacity, which consequently under-represents current capacity to provide medical care to low-income, vulnerable individuals.

Current capacity

The following is a summary of identified current capacity in the tri-county area. When it was not possible to control for duplication, it is noted in the chart header.

Outpatient/residential mental health capacity			
Total clients served	Outpatient-General	Intensive Outpatient (ICM/ACT)	Residential
20200	18300	1417	421 beds/ 500 clients

Other MH capacity (potential duplication)		
Crisis/urgent care	Step-down/respite	Program housing
9229	44 beds/470 clients	1215

Crisis services, urgent care, respite care and housing services are often accessed by mental health clients who become or are concurrently enrolled in services in an outpatient or residential setting, so these numbers were separated from total capacity calculations to avoid excessive duplication. Several agencies noted that clients in residential care may also receive outpatient services in a clinic setting in addition to in-home treatment, so the total capacity calculation above may also include some internal duplication (see Appendix 2: Explanation of Calculations).

Outpatient/residential A&D capacity				
Total clients	Outpatient	Intensive Outpatient	Residential	Medically assisted treatment
16015	8942	4216	2042	815

Other A&D capacity (potential duplication)	
Detox	Program housing
2169	523

Similarly, detoxification and housing services are often accessed by addictions clients who become or are concurrently enrolled in services in an outpatient or residential setting, so these numbers were separated from capacity calculations to avoid excessive duplication.

Clients enrolled in integrated medical services includes: all clients served by NARA, Outside In and Virginia Garcia; clients served at Clackamas County's Integrated Primary Health Care clinics; clients served at Central City Concern's Old Town Clinic; and clients served at Multnomah County's Westside Clinic and HIV Clinic.

Clients enrolled in integrated medical services
53452

Utilization of emergency hospital services (potential duplication)
239794

Capacity in emergency hospital services includes: total discharges from the ED of all five participating hospitals; total discharges from the acute medical inpatient departments at Adventist, Legacy (Emanuel and Good Samaritan only) and OHSU; and total discharges from the psychiatric inpatient departments at Adventist and OHSU.

Understanding "capacity"

It was the intent of this assessment to determine the total capacity in the tri-county area to specifically serve the most vulnerable population that is likely to highly utilize hospitals and EDs. Identification of this subset of clientele was more difficult than anticipated and was achieved to varying degrees with individual organizations by looking at a combination of total clients served, who among them qualify as "most vulnerable" and who are identified or presumed to be high utilizers of emergency services.

Many of the interviewed providers, simply by nature of their organization, cater to the most vulnerable population and several FQHCs, community MH providers and addictions treatment facilities posited that most or all of their clientele would qualify as "highly vulnerable." For the purposes of this assessment, "most vulnerable" clients were defined as those meeting at least two of the following criteria:

- Lowest income (≤30% area median income (AMI) or ≤100% federal poverty level (FPL))
- Currently and/or chronically homeless
- Severe and/or multiple morbidities that have been identified as predictors of high use of emergency hospital services that incur high costs (focusing on severe mental illness, severe addictions and chronic physical conditions)

Data around these definitions of vulnerability was not consistently available across all organizations included in this assessment. Organizations that had reliable information about clients' income, housing and health status frequently cited difficulties in retrieving that discrete information comprehensively to determine the cohort of clients who meet at least two of the criteria above. Many agencies were able to provide an estimate of the number of most vulnerable clients they serve annually, largely based on a combination of discrete data and "best-guess" estimates around income, insurance status, morbidity prevalence, and homelessness. Numerous agencies looked to the estimated rate of tri-morbidity as a guideline to identify the most vulnerable population with the highest clinical needs, which ranged from 10 to 60% of total clients served. Other interviewees were able to identify certain programs within their organization that by definition serve the most vulnerable clients given the admission criteria and intensity of service provided. ACT or ICM teams, the AMHI program, respite or step-down programs and programs providing integrated services specifically to the homeless and to clients concurrently involved in the criminal justice system were frequently cited as serving the "most vulnerable" population.

The total capacity calculated above is therefore a reflection of total clients served at the majority of agencies and only the most vulnerable clients served by some organizations. It is, as a result, an underestimation of total service capacity and an overestimation of services targeting only the most vulnerable population (see Appendix 2).

Vulnerability versus high utilization

All of these client vulnerability factors serve as indicators, pointing to the potential for clients to be high utilizers of emergency and crisis services. With their given experience working with clientele, some interviewees equated these two populations, knowing that low-income and high clinical needs, especially in combination with lack of insurance or housing, was likely to render these clients high utilizers of emergency services. Several other agencies noted that many clients who fit the description of high vulnerability are not necessarily high utilizers and that some clients with lower acuity levels, higher income, more secure housing and reliable insurance coverage had been identified internally as high utilizers of EDs and hospitals.

Through a combination of hospitalization data and estimates of emergency service use, four organizations interviewed were able to differentiate between the "most vulnerable" population they serve and the subset of clients who are the likeliest high utilizers.

The definition of "high utilization" varied considerably among participating organizations. The most frequently cited definition included a certain number or combination of hospital inpatient and ED visits within a given timeframe, ranging from two to ten total visits per year. Several hospitals and medical care facilities identified cohorts of the highest utilizers or frequent cyclers, often for pilot

Vulnerability, continued

programs aiming to reduce emergency service use among these client groups through intensive case management and coordinated efforts with other community providers. In the absence of reliable data on hospital stays and contacts with emergency services, many agencies were reluctant to guess at the number or percent of high utilizers they serve.

Other agencies identified frequent use of outpatient services as an indicator of frequent use of emergency services, with clients having 2 or more weekly contacts in mental health services or more than 10 yearly visits to primary care providers considered "high utilizers." Some organizations estimated from the vulnerability indicators listed above what portion of their clientele was likely to be high utilizing and others equated enrollment in certain intensive services with high utilization (e.g. ACT teams), based on eligibility or admissions criteria that specifically target services to this population.

The documented or estimated rate of high utilization among populations served by individual agencies ranged considerably, from less than 1% to 100% of clients served.

The agencies providing lower figures of high utilization were typically relying on actual hospitalization data, either from insurance agencies or internal pilot projects targeting high utilizers within their range of service provision. Figures of high utilization above 50% were generally a result of equating vulnerability to high utilization (hence there are more high utilizers identified than vulnerable clients identified in the table below) or, during the course of the assessment, focusing solely on those programs within an agency likely to serve high utilizers (e.g. 100% of the ACT clients at Telecare were identified as high utilizers before enrollment).

The table below summarizes the data gathered from agencies able to provide figures for vulnerable clients and high utilizers served.

Prevalence of high utilizers	Number of agencies	Total clients served	Clients identified as vulnerable	Clients identified as high utilizers
Low (<10% of clients)	6	51350	5100 (20-100%)	1250
Medium (11-25%)	2	16800	-	3200
High (26-50%)	4	14700	3900 (40-75%)	6100
Extremely high (51-100%)	3	7400	4600 (80%)	5900

Unmet need

Even with most agencies operating at full capacity, there are many individuals in the tri-county area who must wait for access to services or must be turned away due to a lack of resources:

Several FQHCs cited lack of capacity or lack of insurance as reasons for turning away individuals seeking integrated medical care.

Many behavioral health agencies cited various admissions criteria that prevent some individuals from readily accessing services within the scope and mission of the organization. For example, some agencies providing behavioral health services are not properly equipped to address the needs of clients with complex physical conditions and facilities serving acutely mentally ill clients in crisis require sobriety at admission.

Several organizations providing outpatient behavioral health services noted that they are not permitted to turn away individuals seeking service (due to contractual obligations) and that it is difficult to maintain contact with waitlisted clients who are severely mentally ill, severely addicted and/or homeless. Waitlists were noted for some FQHC clinics, children's intensive mental health services (seasonally), residential addictions treatment and supported housing programs connected to integrated service providers.

Several hospitals cited long waitlists at detox facilities, residential addictions treatment (especially for women), geriatric –psychiatric facilities and residential treatment facilities capable of managing mental health clients (including assisted living, foster care and nursing homes) as barriers to timely and appropriate discharge from emergency and inpatient departments.

The number of clients turned away or on waitlists, and the reasons for turnaways, are indicators of additional need for services that cannot be met by current service capacity. The ability to track this information was inconsistent across the interviewed agencies, with some having no tracking mechanism, some having an estimate, and others having exact figures. The following page contains a table

Unmet need, continued

that is a summary of unmet need indicators from the organizations able to provide them. Given the incompleteness of this data, it is difficult to determine exact "unmet need" for various services in the tri-county area from turn-away counts and waitlists alone, but there is clearly a documented need for more capacity in residential addictions treatment, supported housing and primary medical care.

Service type	Individuals turned away or waitlisted
Outpatient and residential A&D services	Varied waitlists for each outpatient addictions program, usually comprised of unfunded clients Varied waitlists for residential addictions programs, with agencies estimating themselves at 33-200% of capacity. Estimated 12,800 turned away each year from all addictions programs
A&D services with integrated housing	225 applications (84%) denied yearly due to admissions criteria and lack of funding for housing & services
MH services with integrated housing	Full waitlists for homeless services, AMHI and PSRB
Integrated MH & A&D services	60 adults on waitlist for residential treatment (75% of capacity)
Integrated medical and behavioral health	Approximately 6500 clients turned away due to lack of capacity (160% of capacity)

Need for evidence-based practices

Interviewees provided indications of needed additional capacity in various types of services, either internally or across the network of community providers. Agencies identified additional capacity needed in services implementing certain evidence-based practices, as well as need for increased capacity in general lines of service. The following table shows the current capacity and additional need for a range of evidence-based practices:

Evidence-based practice	Current capacity	Needed additional capacity	Suggested applications/ improvements
Assertive Community Treatment (ACT)	7 fidelity-model teams, serving 386 clients in Multnomah, 60 clients in Washington, 29 clients in Clackamas	Noted need for at least 3 teams (ACT/ ICM) in Multnomah; general need in Clackamas	ACT plus addictions and housing; ACT plus CHWs providing medical care in the community
Intensive Case Management (ICM)	4 fidelity-model teams in Multnomah; 2 using strengths-based model, serving 283 clients; 2 using IDDT model (see below)	Noted need for 3 teams (ACT/ICM) in Multnomah (see above)	
Integrated Dual Diagnosis Treatment (IDDT)	2 fidelity-model teams & 1 community-based program in Multnomah, serving 388 clients; additional 911 clients identified as receiving integrated dual diagnosis services by dually credentialed staff in non-fidelity model programs	General need in Multnomah for expanded dual diagnosis services (within or outside of fidelity model)	Need genuine dual diagnosis treatment in residential setting
Expedited benefits acquisition (SOAR model)	2 teams in Multnomah serving 170 FQHC clients; informal assistance provided through case managers or trained staff at BH providers, social workers & financial counselors at hospitals	Noted need for at least 2 teams in Multnomah; general need in Clackamas	Nearly all agencies noted need for better insurance coverage & income streams for low-income & homeless clients; hospitals & MH providers noted need for transitional facility for clients waiting for Medicaid benefit

Need for evidence-based practices, continued

Evidence-based practice	Current capacity	Needed additional capacity	Suggested applications/ improvements
Community Health Workers (CHWs)	28 staff noted at tri-county FQHCs; identified 7500 clients receiving community-provided services in Washington & Multnomah; provision of in-home or school-based services in Washington & Multnomah; hospital outpatient care managers; transition care nurses through C-TRAIN program	Noted need to provide range of services to 5000 clients in Multnomah; noted need for at least 78 staff in Multnomah; general need in Multnomah & Washington	General need to provide medical services, especially to mental health clients, ideally embedded within community-based mental health teams; need to liaison between hospital and community resources; can help overcome transportation & clinical setting barrier
Culturally-specific programming	Unspecified number of clients receive services specific to the following cultures: youth, elderly, women, men, LGBTQ, transgender, Hispanic, Latino day laborers, Russian, Asian, Chinese, Vietnamese, Filipino, Samoan, Eastern European, Native American, African American, minorities overrepresented in corrections, addictions recovery, homelessness	General need for more bilingual-bicultural Hispanic staff in Multnomah	Better recognition of culturally-specific practices in Multnomah; more equitable access to services that reflects relative need, especially for minority groups
Peer Case Management	At least 25 peers identified in Multnomah, serving 3691 clients in MH & addictions programs, with varying intensity of service; 37 additional peers in Multnomah & Washington; 20 housing units in Clackamas connected to peer-delivered services	Noted need for 5 additional staff in Multnomah for addictions & integrated services; general need to expand roles of peers or peer programs that have proven successful	Need to clearly define standards of peer support provision
Step-down or Respite care	27 medical beds serving 274 clients in Multnomah; 31 adult MH beds serving 337 clients & 16 children's MH beds (plus in-home respite) in Multnomah; 8 adult MH beds in Clackamas; ~200 patients are discharged from interviewed hospitals into medical respite	Noted need for MH respite beds in Multnomah & Washington, ranging from 1-30 beds; noted need from hospitals for funding to support medical respite for additional 50 patients	Should provide in-home MH respite for adults; MH respite facilities should be able to accommodate seniors and clients with co-occurring medical conditions; noted need for shorter-term, less intensive medical respite with supervision, food & social supports

Evidence-based practices, continued

A complete list of all evidence-based and recognized practices implemented by participating agencies is located in Appendix 4.

Other needs

In response to the open-ended interview question "what else does your agency need to more comprehensively serve the most vulnerable, lowest income and highest utilizers of hospitals and emergency departments?" interviewees offered a range of needs, improvements or changes to service delivery, systemic structure and policy that would allow for more comprehensive and effective service to this target population that could result in reduced use of hospitals and other high-cost emergency services.

- Expanded internal capacity (programming & staff)
- Medical care (especially for uninsured)
- Mental health & addictions services in the community
- Service coordination
- Services to address special needs of subpopulations
- Financial assistance & housing
- Policy limitations (funding, administration, structure)
- Addressing health disparities

Expanded internal capacity: Seven agencies noted a need to expand their particular combination of services in order to better fulfill unmet need among vulnerable populations. Three agencies operating in Multnomah County saw a need to expand their provision of integrated medical, mental health and addictions services to encompass an additional 10,800 clients (with likely duplication). In Clackamas County, capacity could expand to meet the integrated medical, mental health & addictions service need of an estimated 20-25,000 more individuals, among them 3-5,000 high needs clients. For medical services, a need for more primary care providers and multidisciplinary teams was noted, including more nurses.

Addictions treatment providers expressed a marked need for expanded capacity in detox, outpatient and residential services, including services connected to housing for women with children.

Across the system of mental health service provision, there was a clear need for more providers, including prescribers, counselors, nurse practitioners, psychiatrists, psychologists & social workers. Additional capacity is also needed in the children's mental health system in Multnomah County, where 10 more school-based teams could provide earlier assessment and referral for at-risk children. Increasing capacity in these lines of clinical service provision would require additional staff and interviewees expressed a great need for expansion in specific positions.

Medical care: The majority of interviewees expressed a significant need for more capacity in medical care, especially for uninsured individuals and mental health clients. While some recommended increasing the number and service capacity of county clinics contracted to serve low-income and uninsured patients, other suggested forms of medical care delivery ranged from mobile medical units to embedding medical staff at mental health providers, rendering the mental health home the medical home as well. One hospital also noted a need for more outpatient specialty care for low-income and/or uninsured patients with complex, co-occurring physical conditions. Providers across the system also indicated a need for dental services for low-income and uninsured patients, with a specific priority placed on wisdom teeth removal.

In addition to medical care for the uninsured, there is a general need for more funding to provide a range of clinical services to those without coverage or waiting for claims to be processed. Community mental health providers expressed a need to bridge medications and hospitals suggested developing a transitional facility for more intensive treatment until Medicaid coverage is awarded in order to reduce unnecessary hospitalizations or occupation of inpatient beds.

Mental health & addictions services in the community: Many organizations not directly providing certain mental health or addictions services noted a need for greater capacity in the community as a whole in order to address the multifaceted needs of clients or to move them most effectively along a continuum of care.

Interviewees expressed a resounding need for more addictions treatment services in the tri-county area, especially detox and residential treatment. There was also an indicated need for more dual diagnosis services and a range of treatment options for uninsured or Medicare-covered clients. Interviewees articulated a need for increased capacity across the entire continuum of mental health care, from providing low-intensity, preventative counseling for housing residents to increasing staff skill level at residential treatment facilities to better manage severely persistently mentally ill (SPMI) clients.

A greater need for more mental health services includes more outpatient, sub-acute and residential treatment. Increased capacity in residential services would allow for more efficient turn-over of inpatient psychiatric beds at hospitals and developing a greater capability to house mental health clients in assisted living facilities, nursing homes or foster care would help keep this vulnerable population stably housed.

Other needs, continued

As alternatives to residential treatment, several agencies suggested creating more facilities that provide housing and day programs to clients, or more facilities like the Royal Palm that offer housing and case management. Agencies across the continuum of care discussed a need for diversion options in the community, specifically citing a need for a mental health sub-acute facility for assessment, sobering and short-term respite and an urgent care drop-in clinic for medical services as a diversion from hospital psychiatric inpatient departments and EDs.

Service coordination: Many agencies expressed frustration with the segmented system of service delivery that prevented easy integration of services to address the full range of a client's needs in a comprehensive, holistic manner. The desire to integrate medical and mental health services was most frequently mentioned, followed by truly integrated mental health and addictions services. Three mental health and addictions services providers also noted a need for housing to be coupled more strongly with addictions treatment in order to foster and maintain recovery.

Collaborative treatment planning across community providers was mentioned as a priority specifically for clients with mental health, addictions and medical needs. Hospitals and community service providers alike discussed a desire for better coordination between these levels of service, specifically citing discharge planning and sharing of client hospitalization data.

Given the difficulty in defining and identifying "high utilizers," several agencies noted a need for data identifiers of clients frequently accessing emergency services so these clients' needs could be better managed in the community.

A need for improved client data sharing systems almost always accompanied the discussion of service coordination, with standardized data collection and interagency access to service information being pivotal to every organization's ability to provide integrated and comprehensive care. Several agencies noted a need for more IT capacity to establish data collection and storage capability that specifically allowed for data-driven clinical decision making in order to improve client outcomes.

Special needs: Multiple interviewees noted that certain subgroups of the most vulnerable population deserved special attention in order to overcome additional barriers. Several agencies noted a need for more outreach to the homeless, to ensure access to needed services and help navigate the range of options available.

In addition to addressing the unique needs of veterans, elders and ex-offenders, many providers remarked on the special needs of women, especially pregnant women and those with children who require more affordable child care to be able to access treatment services.

Two hospitals mentioned a need for greater capacity in geriatric-psychiatric services, echoed by one community mental health provider's desire for better coordination between mental health, aging and disability services. NARA also expressed a need to build satellite clinics in order to better serve the dispersed Native American population, which has been displaced from a centralized area around the Indian Clinic in NE Portland and now faces transportation barriers to accessing services.

A need for transportation assistance was noted by other agencies in Multnomah and Clackamas Counties, specifically for clients with disabilities those living in rural areas, and clients living in more urban regions that are not well serviced by current public transportation systems.

Financial assistance & housing: Need for housing and rent assistance is discussed in detail in the Housing section of this report, but it is worth noting that many clinical service providers remarked on a need for financial and housing supports in order to achieve and maintain better client outcomes, specifically for mental health and addictions clients needing specialized housing to support their recovery.

Several hospitals also expressed a need for more flexible funds that could be used to cover medical costs for uninsured patients or assist in paying utility and other bills for patients who may be behind after a stay in the hospital.

Interviewees noted a need for a range of housing options for medical and behavioral health clients, from transitional options immediately following hospitalization or acute care to long-term solutions for creating stability, either in independent or assisted housing facilities. Specific need was mentioned for housing targeting families or clients with care givers, dual diagnosis clients, and individuals with criminal histories.

Policy limitations: Many organizations participating in this assessment expressed frustration with certain policies, regulations or aspects of the structure of the medical and behavioral health care system that prevent the provision of integrated and effective services to the most vulnerable population.

Funding was a frequent topic, with many agencies noting that services must be better reimbursed by payers in order to sustain the current model of service delivery. In medical care, better reimbursement rates would allow for

Other needs, continued

increased capacity at primary care clinics, the need for which was avidly expressed across the range of interviewed providers.

Two community providers of medically assisted treatment for addictions stated that better reimbursements would allow them to use more effective and less costly alternatives that yield better results. Funding also typically comes from multiple streams, which several agencies noted is complicated and prohibits unified policies from being developed, both within and across individual providers.

Multiple organizations spoke of the administrative burden that comes with accountability and compliance regulations, which diverts resources and clinicians' time away from clients without necessarily yielding valuable outcomes data that can in turn inform further treatment strategies.

Many agencies also commented in the inflexibility of the current system of service delivery, noting that lines of services are organized in discrete silos, without much room for ready or effective coordination or integration. The system is incongruent with the holistic, whole-person approach nearly all service providers indicated they needed to take in order to most effectively serve their clients, especially the most vulnerable. Many agencies called for the packaging of comprehensive services, including insurance coverage for all clinical needs, housing, food and income, specifically in programs serving the homeless.

Numerous barriers to well-coordinated care were identified, including difficulty in acquiring credentials for the provision of multiple services (namely to address needs of dual diagnosis clients), fragmented funding streams with differing priorities, and institutional or ideological differences among service providers.

Addressing health disparities: Several organizations who deliver culturally-specific services to ethnic and racial minority communities discussed the continued discrepancy between a disproportionate need for services among minority communities and the ability of these communities to access vital services. Inequalities in access lead to and perpetuate disparities in overall health and well-being between ethnic groups, and these barriers will need to be addressed in order for the tri-county population as a whole to experience better health outcomes and lower costs. Participating agencies called for greater outreach to minority communities, with education and service delivery. They also noted that mainstream service providers must gain a better understanding of the needs of these communities in order to deliver culturally-relevant programming in a manner that is respectful of and consistent with the culture, values and experiences of ethnic and racial groups. While other organizations identified programming that offered bilingual and culturally-specific delivery of services, often by peers, the discussion of addressing health disparities experienced by minority communities was largely limited to those agencies specifically targeting specific ethnic populations.

Conclusion

It was the intention of this assessment to determine current capacity within the tri-county area to serve the most vulnerable population (lowest-income, homeless, highly morbid, and potentially high utilizing individuals) as well as identify the additional capacity required to address the unmet need among this vulnerable population in order to reduce the use of high-cost emergency services.

Through the process of interviewing a range of medical, mental health, addictions and emergency service providers, the difficulty in defining the "most vulnerable" population as well as those considered to be "high utilizers" became apparent. Without a standard definition of these subsets of the clientele served in this community, and without consistent and more widely available data about use of hospitals, EDs and other emergency services, determining the capacity for service for these individuals across all tri-county providers is nearly impossible.

What emerged from this assessment is a combination of some data-based figures and "best-guess" estimates of how many most vulnerable clients and high utilizers are currently being served. While the "most vulnerable" population being served in the catchment area is likely much larger, at least 16,000 identified or estimated high utilizers of hospitals and EDs were served at the participating agencies in 2011. The unmet need for services among the most vulnerable population was unable to be quantified, but agencies noted a range of evidence-based clinical practices, support services (including housing and employment support) and systemic policy changes that would greatly improve the ability of service providers to address the needs of the highest needs population and reduce hospitalization and use of emergency services.

Capacity Analysis:

Housing

Housing units and connections to varying levels of supportive services are available to tri-county residents through County Housing Authorities (HAs), Community Development Corporations (CDCs) and other housing agencies. In order to assess current housing capacity targeting the most vulnerable population, interviews were conducted with organizations at all three levels of housing provision (see Appendix 3 for a complete list of assessment participants).

While this list of agencies represents a majority of housing and community support services providers in the tri-county area it is by no means exhaustive. Given limitations in time and resources, this assessment focused on the largest providers of permanent housing and support services in the catchment area. Many organizations providing shelter, transitional housing, skills training and clinical support to special needs populations (clients in recovery, victims of domestic violence, and homeless families) were not included in this assessment, but comprehensive lists of available community housing resources can be found at each County Housing Authority's website.

Current capacity

It was the intent of this assessment to determine the capacity within the existing available housing stock to accommodate the most vulnerable residents (defined in Behavioral Health & Integrated Medical Services) who are identified as or assumed to be high utilizers of emergency services. As was the case for behavioral health and medical providers, data around high needs and hospitalization was not available for most residents being served.

In the absence of specific data to indicate high need or high utilization, many interviewees used their experience with residents, acceptance criteria into certain programs or projects (e.g. Bridges to Housing) or current resident demographics in specific buildings to determine what portion of their portfolio caters to the highest needs, most vulnerable population, or what portion of the residents served fit this assessment's description of vulnerability and/or high utilization.

Residents requiring the level of support services typically provided by contracted or agency-identified Permanent Supported Housing (PSH) units or Transitional Supported Housing (TSH) units were frequently defined as the most vulnerable and potentially high utilizing. Certain subsidies, such as the Shelter+Care vouchers or Ryan White funding, target residents with particularly high clinical needs and individuals receiving this assistance were often included in the count of vulnerable or high utilizing residents being served.

The following table presents the units and subsidies identified by County Housing Authorities as serving the most vulnerable population in the tri-county area:

Housing Authority	Total identified units/subsidies	PSH units	TSH units
Clackamas County	235	23	-
Home Forward (Multnomah)	705	705	-
Washington County	994	353	394
Total capacity for most vulnerable in tri-county area: 1934			

There is likely much duplication between these calculations and the units, subsidies or assistance packages that CDCs and other community housing providers operating in these counties determined were serving the most vulnerable and/or high utilizing residents. Community housing agencies also operate many units outside of the County HA calculations, and some services providers partner with housing agencies not included in this assessment, so it was necessary to combine these figures to estimate total capacity to house the most vulnerable residents. For the purposes of this calculation a duplication rate of 25% percent was assumed. Capacity was broken down by units serving families or individual adults (households without children) and type of housing provided (see Appendix 2).

Housing Capacity by Type & Household Served			
	Permanent Supported Housing	**Transitional Housing**	**Housing Unit/Subsidy with Unknown Services**
Family	329	15	2564
Adult (without children)	1229	1025	1422
Unknown	614	0	10
Total	**2172**	**1040**	**3996**

These combined estimates yield a total of 7200 units serving the most vulnerable and/or high utilizing residents in the tri-county area. The proportion of high utilizers being served at each agency ranged considerably, from 6% to 90%. Mid-sized community housing providers and CDCs operating primarily in the downtown Portland area were most likely to report higher estimated rates of vulnerability and emergency service utilization among their resi-

Current capacity, continued

dents. Lower rates of high utilization were provided by most County HAs and several CDCs with a strong focus on economic development and home ownership among their residents.

In addition to units for families and individual adults, participating organizations were also asked about their capacity to serve transition-aged youth (TAY). Many agencies served this population as adults and did not collect discrete information and the age range for TAY was inconsistently defined across agencies (ranging from 15 to 26, but most frequently 18 to 25). In conjunction with specific programming for this population, demographic information was used to determine that 2658 TAY were served in the tri-county area, and 244 housing units were available specifically to them at various providers.

Unmet need

Unmet need for housing and community support services was difficult to determine with precision. Wait lists commonly exist for specific buildings or programs, but there is likely much duplication across all tri-county waitlists and while some are kept open and yield waits of years or even decades, many are closed to keep the wait shorter and contact easier. Both forms of wait lists unreliable measures of exact unmet need but certainly indicate the magnitude of need for greater capacity in affordable housing and support services. Based on waitlist data and experience with the residents they serve, interviewees were able to estimate the additional housing capacity needed to address the unmet need for housing of various types in the tri-county area.

Agency Type	Permanent housing	PSH	Transitional housing (including supported)	Rent, eviction prevention, or other assistance	Special needs populations	Other needed housing
County Housing Authorities	6000	2200			2000 of permanent units to target elderly/ disabled; 200 of permanent units to target parolees; more housing for families, single moms & veterans	Shelter in Washington County to serve 1500 homeless youth & adults
CDCs	800			$30,000/ year for rent, utility & emergency assistance	More housing that is accessible for disabled	More rapid re-housing for homeless
Community housing providers	1500	1100	340	Rent assistance &/or eviction prevention for 3200 households; need flexible funding for placement assistance	Women with children addictions; 400 of PSH units for patients exiting medical respite; 400 of PSH for homeless families & elderly women; 35 of PSH units for residents with a history of mental illness, criminality or homelessness; 200 of transitional units for youth, gender-specific, domestic violence victims & trafficked women	More affordable housing within & outside downtown Portland; options for "ADFC lite" to encourage recovery; more housing for ≤30% AMI households; more Section 8 vouchers for B2H residents
Behavioral Health Providers	1000 (990 ADFC, 10 HR)	1245 (420 HR, 775 w/ voucher & support services)	350 (144 HR, 156 ADFC)	More funding for rent assistance & placement in ADFC housing		970 units for homeless MH & A&D clients
FQHCs	800 (ADFC)	113	1050 (400 HR, 650 (ADFC)	Rent assistance for 1100 households		

Unmet need, continued

One CDC in Multnomah County recommended using the County Point-in-Time Homeless Count as a guide for estimating additional housing capacity, concluding that actual need for housing is likely to be double the number of homeless individuals identified. While the one-night homeless count provides a snapshot of homelessness in each county, reports on homelessness concur that this method is likely to identify only 20-25% of all homeless individuals and underestimates the true level of homelessness in the community. Families and individuals may experience episodic homelessness that is more likely to be captured in a study of homelessness over time. Various definitions of homelessness also exist, ranging from only those who are "literally homeless" or unsheltered, to those in shelters or transitional housing specifically for the homeless, or even including individuals who are doubled up in housing upon changes in their economic situation or households that would be homeless or at risk of homelessness were it not for the supportive housing services or rental assistance they receive. County Point-in-Time Homeless Count and Consolidated Plan reports estimate a range of 7,000 "literally homeless" individuals to nearly 28,000 using the broadest definition of homelessness or using projections based on one-night counts. All three counties cited unemployment and rent burden as major contributing factors to homelessness, both of which have risen considerably in recent years as a result of the economic turndown.
This assessment focused not only on homelessness but also other factors that render certain individuals "most vulnerable." The challenges to identifying this subset of the population have been discussed, but it is worth noting the findings of a study conducted for the Portland Bureau of Housing and Community Development, whose 2008 study of vulnerability among the homeless in Portland found 47% to present with that least one high-risk factor identified by the Vulnerability Index tool. This high rate of physical and behavioral health conditions observed among the homeless suggest that a much greater need for stable housing and supportive services exists than that documented in this evaluation.

Other needs

In addition to increased housing capacity, interviewees provided a range of responses to the open-ended interview question regarding "other needs" related to housing and services which generally aligned with the following categories:

- Increased capacity within evidence-based practices
- Increased staff to provide improved resident services
- Coordination with service providers
- Resources for residents
- Equitable distribution of resources

Increased Capacity within Evidence-based practices: Participating housing providers noted that several evidence-based practices are critical in keeping vulnerable residents stably housed, especially Supported Employment (SE) and the range of services offered by CHWs. There was a documented need to provide SE programs to an additional 800 units of housing and residents in at least 800 identified units could benefit from both medical and mental health services provided in-home by CHWs. The success of peer-delivered services in providing adequate support to vulnerable populations was also touted by many agencies, who stated a need to expand capacity to reach residents in at least another 400 units. One housing provider also suggested the development of a modified version of the recognized Bridges to Housing program that would provide less intensive services to residents with lower acuity and needs, presumably at a lower cost.

Increased staff & improved resident services: Several organizations spoke of a need for more housing support staff, specifically resident service coordinators and case managers embedded within housing facilities. Increasing the staff capacity would decrease case load and allow staff to deliver higher quality and more effective services to residents. There was a noted need for 8 more resident service coordinators and at least 26 more case managers within existing housing capacity. Agencies also expressed a desire to expand the kind of services they are able to deliver to residents, including on-site addictions counseling and support groups, social activities, employment support, education and coordination with health care providers.

Coordination with service providers: Many housing agencies discussed the importance of their relationship service providers and the need to align systems of housing and service delivery to better meet the needs of residents. Several housing organizations noted that they could increase the number of highly vulnerable residents they serve if only there was more funding to support the services attached to their units, especially case management, MH and addictions services. Housing providers understand the need to connect housing to other support service in order to achieve and maintain housing stability among residents, most notably employment, mental health and medical services. Several agencies suggested that services be more coordinated into projects or packages that include housing units, vouchers or subsidies and on-site service provision, in order to most effectively address the needs of vulnerable residents.

Resources for residents: In addition to secure housing and support services, many housing agencies enumerated other ways in which their residents could use assistance. Transportation was cited as a barrier to accessing support services and other community resources in all three counties, which could be overcome by providing passes to

Other needs, continued

public transportation systems, co-locating housing and service provision or simply delivering service in-home. Interviewees also discussed a need for more benefits acquisition support to help residents gain access to needed income and services, especially health insurance.

Equitable distribution of resources: Multiple housing providers noted that some communities experience greater vulnerability and therefore have a greater need for services, but these communities do not share the same level of access to those services as other less vulnerable populations. Enrollment in housing programs and support services should more commensurately reflect need among the demographically diverse population being served These housing agencies expressed a need for a greater understanding of disparities between ethnic populations around health and housing that in turn prioritizes service delivery, access to housing and outreach to the communities with the greatest need. It was noted that discrimination and mainstream views of minority cultures often prevent vulnerable individuals of these cultures from seeking services, which they may distrust or find do not address their actual needs but rather the needs projected upon them.

Conclusion

This assessment yielded an estimate of 7200 units currently available across the tri-county area to provide housing and community support services to the most vulnerable and high utilizing residents. While this calculation includes much uncertainty and potential duplication, the participating housing agencies provided collectively agreed that:

- There are not currently enough community-based supportive services to meet the need of the most vulnerable individuals and families **currently** living within the very low income housing stock.

- There is a large gap between the existing very low-income, supported housing stock and the number of vulnerable individuals and families who are homeless or unstably housed. In 2009, there were 7,000 households on the waiting list for low income housing assistance in Multnomah County; 8,000 on the waiting list in Washington County; and 6,000 on the waiting list in Clackamas County.

- Community wide, there is little coordination of care between housing, behavioral health and primary care providers.

Additional Finding:
Data Availability

The single most significant challenge in conducting this evaluation was the availability of consistent, reliable data collected across different service providers. The lack of this data reduced the assessment team's ability to quantify current capacity and estimate potential need, particularly on a de-duplicated basis.

While resolving the region-wide issue of data quality and availability is beyond the scope of this assessment, the team felt we would be remiss in not briefly addressing this critical barrier to understanding and improving the system of healthcare and housing available to the most lowest-income, most vulnerable individuals and highest utilizers of emergency services.

Different agencies and different provider types utilized a variety of definitions for even basic concepts such as income level or homelessness.* There was no universal definition of a "high utilizer" and most agencies did not collect the type of data that would have allowed us to develop a working definition for the purpose of evaluation. It was frequently difficult to compare one provider to another, or to develop aggregated datasets for the purposes of defining capacity in the tri-county region.

This issue is not news to providers or to funders: the lack of a unified data system was mentioned frequently by our interviewees and is a topic of discussion at the local, state, and federal government levels. Interviewees described their desire for a fully integrated database that would allow providers to view the types, volume, and history of services accessed by individuals, as well as allowing for accurate, de-duplicated calculations of capacity and projections of need.

While the development of a fully integrated database is appealing from both a service and an analytical perspective, the logistical and regulatory barriers are significant and the potential cost may be prohibitive. Even so, a fully integrated database is not the only solution to some of the data issues identified in this assessment: it is still possible for providers to collect data that would allow for tri-county level understanding of current capacity and potential need.

* The difference in definitions was most striking between housing providers and FQHCs, which adhered to the definitions used by the Department of Housing and Urban Development and the Department of Health and Human Services, respectively. Providers without direct or indirect reporting obligations to one of these two government agencies exhibited even more variation in data collected and reported.

Recommendations:

- Community providers, led by a coordinated care organization, should develop demographic and utilization indicators with clearly defined numerators and denominators.
- These indicators may be used to establish targets and measure current capacity and estimated need.
- For providers operating in multiple counties, indicators should be collected at the county level, allowing for analysis of both county and tri-county data.
- At minimum, the tri-county indicator set should include the following eight key indicators:
  - Race and ethnicity
  - Gender
  - Age
  - Number turned away annually
  - Primary diagnosis
  - Presence of co- and tri-morbidity
  - Housing status
  - Number of individuals served annually, subcategorized by major types of service:
    - Housing: permanent supportive housing; transitional supportive housing; and permanent housing with limited services.
    - Medical: primary care; specialty care; and medical hospitalization.
    - Mental health: outpatient mental health; intensive outpatient mental health (ICM/ACT-level services); residential mental health; and psychiatric hospitalization
    - Chemical dependency: outpatient chemical dependency; residential chemical dependency; medically assisted treatment; detoxification; and recovery housing.
- If it is not possible for healthcare and housing providers to define certain indicators in the same way, due to oversight requirements by HUD and HRSA, these indicators should be cross-walked to the greatest extent possible (for example, cross-walking federal poverty levels with area median income measures).

Conclusion

The initial intent of this assessment was to outline the tri-count region's current capacity for health services and housing for the lowest-income, most vulnerable individuals and for the highest utilizers of emergency services; to estimate where and to what extent there is a need for expansion of those services to serve individuals' needs and reduce unnecessary utilization of high-cost crisis services; and to estimate the potential cost for such an expansion. While we have been able to reach tentative conclusions about some specific services, other potential areas of need were significantly more difficult to estimate due to data limitations. Nonetheless:

First, it is evident that there is significant need for more intensive specialty mental health services in the form of evidence-based models such as Assertive Community Treatment and Intensive Case Management/Integrated Dual Diagnosis Treatment. There is substantial evidence in the literature (Lehman et al, 1999), as well as case studies from our own region (Moore, 2006), that the intensive support offered by these types of programs significantly reduces hospitalizations, utilization of emergency departments and crisis services, and involvement with the criminal justice system, resulting in substantial cost savings to the system as a whole.

Based on consistent observations from hospitals, community mental health providers, other health care providers, and housing agencies, we estimate a need for two ACT teams and two IDDT teams in Multnomah County. Providers in Clackamas and Washington Counties were not able to provide similarly specific estimates; however, given that the combined Medicaid population in those two counties is approximately half the size of Multnomah County's Medicaid population, we may estimate that each of these counties would each benefit from an additional ACT team and IDDT team. It is important to note that there was a lack of consensus about the need for acute-level mental health services in Washington County: while providers expressed a need for these services, the county mental health authority did not concur.

The estimated cost of providing ICM/IDDT services is approximately $7,000 per individual served (internal CCC data), while the cost of providing ACT services is approximately $12,000 per individual served (internal CCC data). Assuming each ACT team serves 100 individuals (the ideal size of an ACT program, according to fidelity standards) and each IDDT team services 60 individuals, and depending on the mix of ICM/IDDT and ACT teams established, the total cost for adding four ACT teams and four IDDT teams would be $6.5M. Approximately 640 highly vulnerable individuals in the tri-county area could be served by these teams. Cost savings for ACT-level services identified in the literature range between $11,000 and $24,000 per individual served, so the estimated cost savings for these individuals would range between $7M and $15.4M.

Second, there is evidence to support a need for more post-hospitalization respite care, for both medical and mental health clients, including a less intensive alternative to current medical respite programs such as the Recuperative Care Program in downtown Portland. When respite beds are unavailable or unaffordable for individuals who are homeless, unsafely housed or otherwise unable to obtain adequate aftercare, hospitals must delay their discharge until significant aftercare is no longer needed, or risk discharging patients to living conditions that do not support recuperation, frequently leads to re-admission for treatment of complications. This substantially increases the cost hospitalizations for homeless and other vulnerable individuals. Post-hospitalization respite care programs have been shown to significantly reduce lengths of stay and associated costs (National Health Care for the Homeless Council, 2011).

Area hospitals consistently estimated a need for greater funding to support medical respite care for an additional 50 patients each year. While most of these 50 patients would require the intensive level of clinical and support services provided by existing respite programs with an average length of stay of 30 days, hospital discharge coordinators noted a substantial need for a "light" version of medical respite, providing housing, supervision, wellness checks and food for 8 to 10 days. Current 30-day programs operate at a cost of $4,000 per patient (internal CCC data) and serve approximately 8 individuals per bed per year. Funding for an additional 50 episodes of respite care at this level would cost $200,000 per year. Specific costs of a "light' version of a post-hospitalization respite program are difficult to estimate, but a 15-bed facility would be able to serve around 400 patients yearly and would cost approximately $600,000 to operate (internal CCC data and calculations).

Hospital inpatient psychiatric departments and community mental health providers alike attested to the need for more mental health respite beds in the tri-county area. As with medical patients, a lack of readily available post-hospitalization respite care beds delays discharge, extending stays and increasing costs, or risks discharge to insecure environments that are not conducive to recover, increasing the risk of readmission. Given the range of stated need for respite beds (from 1 to 30), an increased capacity of at least 10 mental health respite beds would be readily utilized. With an average length of stay in current MH respite programs of 12 days, 10 additional

Conclusion, cont.

beds would be able to serve 300 more clients per year, at a cost of about $940,000 (Multnomah County data).

Third, providers identified a need for community health workers to serve vulnerable individuals with complex medical conditions. Community health workers provide a spectrum of services to at-risk individuals in their homes and in the community, including outreach, service coordination, case management, and education; they are employed by health plans, hospitals, and behavioral health and medical providers. They frequently, though not always, reflect the communities they serve, which can promote cultural competency and culturally specific services. CHWs working in a variety of local and international health setting have been shown to improve health outcomes by addressing disparities in access to health services, accompanying clients through the system of treatment and service provision and empowering individuals to participate in the management of their own well-being (The Earth Institute, 2011).

Tri-county residents have access to community health workers through a variety of mechanisms, including 28 community health workers at tri-county FQHCs, outpatient care managers through area hospitals and transition care managers through the C-TRAIN program; however, there are an estimated 5,000 individuals in need of the type of support services offered by community health workers.

The average starting salary for a community health worker ranges between $35,000 and $42,000 (ADEA, 2012). Assuming a caseload of 50:1, the annual salary cost for providing CHW services to the 5,000 identified in -need individuals would be $3.5-4.2M; assuming a caseload of 100:1, the annual salary cost would be $1.75-2.1M. This does not include needed capital to develop supportive programming.

Fourth, there is strong consensus among providers that there is a large gap in very low income and low barrier supported housing required to stabilize many of those who are likely to be the highest utilizers. A wide body of literature indicates that stable and supported housing for individuals who are homeless and experience SPMI can reduce costs to emergency care systems by as much as $24,876 per individual per year in Portland (Moore, 2006) or $16,282 in New York City (Culhane et al, 2002). Of these savings calculated in the New York study, 21% were realized in medical hospitalizations and 50% in psychiatric hospitalizations.

Based on provider estimates, the effort to reduce utilization of hospital inpatient and emergency department costs will require a significant investment into evidence based practice supported housing. Both harm reduction housing paired with ACT teams and recovery housing paired with peer case managers will need to be available to meet the varied needs of the population. Recovery transitional housing, which is operated as alcohol and drug free for those individuals choosing treatment and recovery can typically be provided for a duration of 12 months for singles and 2 years for families before a household is stabilized and able to move on to permanent housing. Central City Concern operates recovery transitional housing for single adults and families who are reuniting with their children from foster care. Results show that 58% of singles and 80% of families are exiting this supported housing clean and sober and to permanent housing as compared to 30-40% completion rates for similar populations reported nationally (Milby, et al. 2005, Kertesz, et al., 2009, Milby, et al. 2009). The total annual cost per household for recovery housing including rent is $9,500 for singles and $10,500 for families as compared to the cost of a residential treatment bed at $37,000.

The estimates provided by behavioral and medical providers suggested a need for approximately 1,360 units of permanent supported housing, 1,400 units of transitional supported housing, and 1,000 units of other permanent housing with limited supports and services. With an estimated average monthly rent of $600, based on average voucher costs made available by Home Forward, the annual cost for these additional units would be: $9.8M for 1,360 permanent supported housing units; $10M for 1,400 units of transitional supported housing; and $7.2M for other permanent housing.

In addition to the need for supported housing linked to programs like ACT and community health workers, health care providers indicated the need for rent assistance for eviction prevention and rapid re-housing programming to assist households in maintaining housing during destabilizing events or to assist in moving from permanent and transitional supported housing to low-income housing, upon stabilization and income acquisition. Funds include incentives for private landlords to rent to those with histories of evictions, criminal justice involvement, and poor or no credit histories. A figure of $2,000 is used for each of the 1,250 households needing eviction prevention and rapid re-housing and is based upon the average cost of short term rental assistance and a landlord incentive to rent to the very highest barrier households with poor credit and criminal histories. Based upon this calculation, $2.5M would be needed for short-term rent assistance and related programs.

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Appendices

Appendix 1:
Methodology and tools

In large part, the methodology of the community needs assessment was guided by the type and quality of data available. To validate findings, the assessment team utilized data triangulation whenever possible; for example, mental health capacity in Multnomah County was calculated using both payer data supplied by Verity and provider data supplied by agencies. The team also used methodological triangulation, combining structured interviews that gathered qualitative data with quantitative data supplied by sources such as Uniform Data System reports required by HRSA.

Interviews were based on a semi-structured interview script and checklist that guided in-person or telephone conversations with representatives of participating agencies.

Interview participants included executive directors, clinical directors, program managers, directors of operations, asset and resident services managers, quality management and performance improvement officers, nurses, discharge planners and managers of social work and case management. Notes of participants' responses and comments were taken during the interviews and presented back to participants and other agency representatives for review.

Additional insight and information was provided by information conversations with quality management and compliance staff, CFOs, asset managers, operational specialists, care management officers and executive assistants. Both interviewees and others graciously made themselves available throughout the assessment process for follow-up and gathering of additional figures, such that the information presented in this report is a compilation of initial interview notes, amendments and supplemental data.

Data was organized by provider type (housing, behavioral health, FQHC and hospital) in order to consolidate similar information and calculate overall capacity, the vulnerable population being served and the number of high utilizers of emergency services in each line of service. The completeness and consistency of information gathered varied, and while attempts were made to fill in gaps of information needed to calculate these figures for all participating agencies, some data was not able to be retrieved due to time limitations.

Where available, exact figures or given estimates of total capacity, vulnerable population served and high utilizers were used. For agencies unable to provide these figures, conservative estimates of vulnerability and high utilization were calculated based on available indicator data, only when deemed appropriate. Please refer to Appendix 2 regarding challenges to data collection and limitations of these calculations.

Interview script

Interviewer: We are conducting a community needs assessment of CareOregon. In light of the upcoming transformation of healthcare, we would like to quantify our current service capacity and the unmet need for the most vulnerable lowest income and homeless population in the Tri-County area. For the purposes of these questions, let's concentrate on service and housing capacity for the very lowest-income and homeless individuals and families who are the highest utilizers of hospitals and emergency departments.

1). How many vulnerable lowest-income and homeless individuals does your agency have the capacity to serve in a year? Do you have demographic information about these individuals? How many of these individuals does your agency have to turn away each year? If you have a wait-list, how many of these individuals are on it? Do you have demographic information about your wait-list? Do you track the number of individuals you turn away?

- Singles, Families, Transition Aged Youth, Children
- If not disclosed: What is the source of your data
- Optional/if appropriate: How confident do you feel that that data is accurate?

2). Does your agency track hospital and emergency department utilization? If so, what percentage of the population you serve are defined as high utilizers? What criteria do you use to define high utilizers?

3). How many of these high utilizers have the following high risk factor?

- Major mental illness only
- Severe Addiction Disorder only
- Chronic Health Condition/s only
- Co-morbid
- Tri-morbid

4). How many individuals, families and/or transition aged youth does your agency have the capacity to house over the course of a year? Is this through Permanent Supported Housing inventory, Transitional Housing inventory and/or rental assistance? What model do you prescribe (housing first, alcohol and drug free community, other) Please estimate how

Interview script, continued

many more of each category your agency would need to address the unmet need for these highest utilizers?

5). Which of the following evidence-based practices does your agency use to coordinate the care for high utilizers and at what capacity per year?

- Assertive Community Treatment (ACT)
- Expedited Benefit Acquisition Support Teams
- Community health workers (CHWs)
- Culturally Specific programming
- Integrated Dual Diagnosis Treatment (IDDT)
- Step-down mental health crisis and/or medical respite care
- Supported housing
- Peer Case Management
- Supported Employment

6). What else does your agency need to more comprehensively serve the most vulnerable, lowest income and highest utilizers of hospitals and emergency departments?

Interview checklist

Yearly Capacity (for lowest income & homeless individuals)	✓	Capacity	Notes
Total			
Single adults			
Families			
Children			
Transition-age youth			
Turned away			
Waitlist			
Data source		----------	*Reliability?*

Hospital and ED Utilization	✓	#/%	Notes
Track?			
Percent of high utilizers			
Definition of high utilizer			
Major mental illness only			*Common dx?*
Severe addiction disorder only			
Chronic health condition only			
Co-morbid			*Common dx?*
Tri-morbid			

Housing Capacity	✓	Capacity	Notes
Single adults			
Families/children			
Transition-age youth			
Perm. supported housing			
Transitional housing			
Rental assistance			
Other			
Housing model		----------	*Why?*

Estimated Housing Need	✓	Need	Notes
Permanent housing			
• Housing first			
• ADFC			
• Other			
Transitional Housing			
• Housing first			
• ADFC			
• Other			
Rental Assistance			
Other			

Evidence-based Practice	✓	Capacity	Notes
ACT			
Benefit acquisition support			
Community health workers			
Culturally specific programs			
IDDT			
Peer case management			
Step-down or respite care			
Supported housing			
Supported employment			
Other practices			

Other Needs	✓	Capacity	Notes
Evidence-based practices			
Other			

Appendix 2:
Explanation of calculations

Capacity calculations for health care

There are several factors that complicated calculation of behavioral health and medical capacity:

Data at each of these levels of specificity was not collected systematically. Most organizations were able to provide the total number of clients served in 2010 or 2011, but the kinds of services these clients accessed were not systematically documented. For example, while the number of residential beds and housing units was consistently collected, the number of clients served in these respective units was not. The capacity calculation for outpatient services presented in the report was based on total clients served, an estimated 15% turnover in residential units and the assumption that an additional 700 clients most likely being served in various housing units were also receiving outpatient services. Capacity in specific programs (e.g. ACT or ICM) was deliberately noted, but recorded capacity in residential treatment was frequently split between number of clients and number of units, making comparison or consolidation across providers difficult.

While some agencies included numbers served in all programs, some interviews focused on specific programs or subgroups (e.g. highest acuity MH clients) identified as being the most vulnerable. This frequently meant that total capacity was not immediately captured, preventing an accurate calculation of percent vulnerable clients served and potentially omitting other vulnerable clients receiving services in other programs. For example, the Homeless Program at Multnomah County's Westside Clinic included in this assessment served 875 homeless adults in 2011 but departmental data indicated that a total of 2800 homeless individuals were served across all county clinics.

Data at each of these levels of specificity was not consistently available. While total clients served was the most reliably collected data point for this assessment, honing in on the "most vulnerable" population and the number of high utilizers proved challenging. As noted in the report text, data around the identified indicators of vulnerability were not consistently available across all participating agencies. Among agencies that routinely collected client income information, data came in a variety of forms, including total dollar amount, percent AMI and percent FPL. While benchmarks were created to define the lowest income level for this assessment, retrieving data at this level of granularity or converting these various data forms to one standard unit was either not possible or would have prohibitively time consuming, both for the assessors and for participating organizations. The capturing of homeless status was also particularly varied, even among agencies that consistently included this information in enrollment or admissions documentation, with episodically homeless not being readily distinguished from chronically homeless.

Data regarding client health status proved to be the most challenging to gather, with many agencies noting that individual diagnoses were reliably collected but their internal behavioral health and medical data systems were not integrated to allow for easy retrieval of comprehensive morbidity prevalence. Many agencies had discrete data around mental health, addictions and medical diagnoses, from which interviewees estimated the rate of co- and tri-morbidity. Several agencies performed labor intensive chart reviews of a sample of clients in order to produce a more accurate data-based prevalence estimate.

Level of acuity of mental illness or addiction disorder was commonly used to define the "highest needs" clients, with ASAM assessment levels signifying high need in addictions services, and LOCUS level (or Level of Care in Washington County) and CASII or ECSII scores (for children) determining highest need in mental health services. Certain chronic physical conditions were identified by CareOregon as predictors of high medical needs and frequent and/or high-cost visits at hospitals and EDs, including diabetes, congestive heart failure and chronic obstructive pulmonary disease. Not all health status data was available at this level of specificity, so many estimates of morbidity prevalence were based on enrollment in mental health, addictions or medical services without consideration of acuity.

The net effect of these inconsistencies is an estimate of vulnerability and/or high utilization among the population being served by tri-county clinical providers that is not entirely reliable. Discrete data around specific criteria, namely income, homelessness and lack of insurance, were often combined conservatively to estimate the number of vulnerable clients served. A lack of health status data pared down by acuity level most likely overestimated severe co- and tri-morbidity, which would have rendered overly high approximations of vulnerability or high utilization among agencies using this figure as a benchmark. Data provided to CCC by CareOregon indicate that 10% of their total insured population presents with at least two of the seven identified risk factors of increased frequency and cost of hospitalizations (the physical conditions listed above plus anxiety, substance use, schizophrenia and/or personality disorder, and family and social problems). By contrast, all community service providers included in this assessment estimated much higher rates of comorbidity, ranging from 20-100%.

Some legitimate variation may exist between the insured

Capacity calculations for health care, cont.

population covered by CareOregon and the more mixed population of insured and uninsured clients being served by many community providers included in this assessment. A comparison of UDS data provided by all FQHCs showed that organizations serving a higher rate of uninsured clients saw more documented homelessness and primary diagnoses of chronic physical conditions, addictions disorders and mental illness (ranging from two to 24 times greater). However, there are many confounding factors in this data, namely variation in how data for the UDS report is collected and consolidated and differences in the ethnic diversity of the clients being served by each FQHC. Certain conditions are simply more prevalent among certain populations, regardless of insurance status, so while this data may seem to support an assumption of greater comorbidity in the populations served by organizations included in this assessment, the available data is simply not reliable enough to be conclusive.

Few agencies had data around hospitalization and use of emergency services among clients served. Even for those organizations that routinely collected that data, it was usually available only in individual client charts and not systematically compiled to determine who among the clients with documented contacts with emergency services qualified as "high utilizers" given the frequency of those contacts. Without specific data, it is impossible to evaluate the accuracy of the figures for high utilizing clients provided by the participating agencies, which could be over- or underestimated, possibly to a significant degree.

Capacity calculations for housing

The capacity presented in this report is not the total inventory of available housing units and/or subsidies and assistance packages available to residents in the tri-county area. As noted in the report text, these figures are estimates of the units or subsidies available to the most vulnerable population being served. Housing providers faced similar challenges to behavioral health & medical services providers (noted above) in determining who among their residents qualified as most vulnerable and/or high utilizing. Some Housing Authorities noted that they provide the physical asset only, without direct delivery of support services, and often cannot accommodate residents with high clinical needs or severe disability. Many CDCs and community housing agencies partnering with service providers noted that service agencies may track data regarding residents' income, homeless status and health status, but that data was frequently unavailable to them.

It is not typically within the scope of most housing provision to track utilization of hospitals and emergency departments, or specific clinical diagnoses and prevalence among residents. Many housing providers are required to collect and report client information through the Homeless Management Information System (HMIS), including addictions disorders, mental illness, and chronic physical or medical conditions; however, this data is collected discretely and is difficult to consolidate to determine the prevalence of comorbidity. Some agencies track ambulance arrival at each building in incident reports, but this data was not always readily available and would have been at best an indication of frequency of use by an entire population rather than high utilization by given individuals. Some agencies were able to rely on their experience with residents and close partnerships with service providers to estimate vulnerability based on clinical needs, but most were reluctant to hazard a guess. Some identified housing programs linked to intensive case management or service provision that targeted high needs individuals or families, such as Bridges to Housing.

Many housing agencies did have reliable data around income level and source of income, which helped inform estimates of vulnerability based on the lowest income criterion. Percent AMI is a more standardized unit expression of income among housing providers and many housing units specifically target households at or below 30% AMI ($15,150 for an individual adult and $21,600 for a family of four) Units catering to the disabled may typically house residents receiving SSI or SSDI, who are well below the 30% AMI income level. It is important to note that the results varied dramatically from one organization to another, ranging from one housing provider ranking 70% of their large portfolio of housing as qualifying for the intended population to another provider who used a more literal definition of their housing qualifying as PSH for homeless individuals based upon designation by their county human services authority.

Inconsistent definitions of housing types also complicated the determination of housing capacity for this report. As the model of permanent supported housing has evolved, the criteria that define it have adapted to the needs of the community in the service areas implementing the practice, yielding a range of variation in what is considered "PSH.". County human services or housing authorities in this catchment area each have designated PSH units under their prevue, but many housing providers noted additional units of housing connected to a similar level of services that mimic supported housing but do not officially qualify. Some of these units were included in the count of PSH while others where merged into the category of units with unknown services. There were also instances of unclear distinction between permanent and transitional housing, with some transitional units becoming de facto permanent placements for residents who thrive in the environment and with the given level of supports. Other units identified as permanent housing see turnover more typical of transitional housing, such that the number of units included in each count were a combination of official and practical definitions of housing type.

Projected costs and savings calculations

Behavioral health and medical providers consistently identified a need for increased intensive mental health and dual diagnosis treatment. We identified evidence supporting the addition of:

Assertive Community Treatment teams (ACT): the most researched evidence based practice model for serving individuals diagnosed with serious and persistent mental illnesses, including those with co-occurring substance use disorders. Over the last 10 years, this model has also successfully been applied to chronically homeless populations with primary substance use disorders and co-morbid chronic health conditions. This approach uses a multidisciplinary treatment team with a 1:10 client to staff ratio to provide intensive community and home based services necessary to stabilize and maintain individuals in the community by providing integrated and coordinated care based on level of need. ACT teams are staffed by individuals with expertise in mental health, addictions, supported housing, benefits and entitlements and peer mentoring. ACT teams also typically include nurse prescribers to assist with medication management. This assessment recommends four additional ACT teams serving the fidelity-based number of 100 individuals each.

Projected Cost: $4,800,000 = $12,000 per client per year x 400 clients.

Projected Savings: A reduction in healthcare costs of up to 50% a year can be realized based on a study of 11 chronic homeless serving ACT teams with supported housing. Mares, A. & Rosenheck, R. (2010, April). Twelve Month Client Outcomes and Service Use in a Multisite Project for Chronically Homeless Adults. *Journal of Behavioral Health Services & Research*, Vol. 37, No. 2. A 2006 study of a Portland homeless ACT team calculated a savings of over $24,000 per client per year across multiple emergency service systems when comparing expenses pre and post ACT enrollment.

Supported Housing: Many behavioral health and medical care providers identified a need for additional very low income supported housing to improve health outcomes for vulnerable and high-utilizing individuals. This included both harm-reduction housing for those who may be active in their addictions and addictions recovery housing. Providers estimated a need for three major types of housing, with approximately equal numbers of units designated as harm-reduction and recovery housing. While the needs far exceed what can be reasonably funded in a one year time period, the need is great and calls for both the repurposing of existing subsidized housing and potentially new housing developments in order for the health system to realize the full potential of cost savings.

Projected Cost: $22,972,000 = $600 per household per month x 12 months

- 1,360 units of permanent supported housing at a total cost of $9,792,000
- 1,400 units of transitional supported housing at a total cost of $10,080,000
- 1,000 units of other permanent housing with some services but not at PSH level $6,000,000.

Additionally, providers indicated the need for rent assistance for eviction prevention and rapid re-housing programming to assist households in maintaining housing during destabilizing events or to assist in moving from permanent and transitional supported housing to low-income housing, upon stabilization and income acquisition. Funds include incentives for private landlords to rent to those with histories of evictions, criminal justice involvement, and poor or no credit histories. The recommended funding based on 1,250 households benefiting from these funds annually would be $2,500,000.

Projected Savings: Savings realized through supported housing indicate those similar to ACT programming, as the 2 are often paired together. A 2002 study of a New York City homeless ACT team paired with supported housing (Culhane, et al) realized a savings of over $11,000 per person in psychiatric and medical hospitalizations. Evidence supporting savings in healthcare expenses for those in addictions recovery housing are best drawn from the U. S Department of Health and Human Services report on cost savings of treatment. Patients who completed treatment showed a 39% reduction in ER visits, a 35% reduction in hospital stays and a total medical cost savings of 26% when compared to those who did not complete treatment (HHS, 2009).

Appendix 3:
Participating providers

The profiles presented in these charts are summaries of information derived from agency websites and programs or services specifically discussed during the assessment interviews. The participating organizations may provide other services or cater to various client populations beyond what is listed below.

Health Care Provider	Size*	Services	Clients**	Service area
Mental health services				
MHASD-Verity	Large	Insurance, service provision & coordination; outpatient, intensive, residential, crisis, respite, outreach, dual diagnosis, school-based; housing; *services partially provided through partners*	Adults, children, youth, families	Multnomah
Washington County Mental Health Division	Large	Service coordination; outpatient, intensive, residential, outreach, housing; *services provided through partners*	Adults, children, youth, families	Washington
LukeDorf	Small	Service provision; outpatient, intensive, residential, outreach, dual diagnosis; housing	Adults, (youth)	Multnomah, Washington
Sequoia Mental Health	Small	Service provision: outpatient, intensive, residential, step-down; housing	Adults	Washington
Telecare	Small	Service provision: outpatient, intensive, residential, outreach, crisis (assessment focused on Gresham Recovery Center, ACT team & CATC only)	Adults, (youth)	Multnomah
Addictions services				
DePaul	Medium	Service provision; detox, outpatient, intensive, residential, dual diagnosis; housing (*have small MH contract with MultCo & WashCo)	Adults, youth, families	Multnomah, Washington
Lutheran Community Services NW - Hope Spring	Small	Service provision; outpatient, dual diagnosis; housing (*provided through partners*)	Adults, families	Washington
Volunteers of America	Medium	Service provision; outpatient, residential, day treatment; housing; corrections rehab	Adults, (youth)	Multnomah
Mental health & addictions services				
Cascadia Behavioral Health	Large	Service provision; MH outpatient, intensive, residential, outreach, crisis, respite, dual diagnosis; outpatient addictions; homeless program; housing	Adults, children, youth, families	Multnomah, Clackamas
CODA	Medium	Service provision; MH outpatient, residential; addictions detox, outpatient, intensive, residential; housing	Adults, (youth)	Multnomah, Washington, Clackamas
Lifeworks NW	Large	Service provision; MH outpatient, intensive, residential, school-based, step-down; addictions outpatient, intensive, residential; housing	Adults, children, youth, families	Multnomah, Washington. Clackamas
Mental health, addictions, & medical care (FQHCs)				
Central City Concern	Medium	Service provision; primary care, pharmacy, respite; integrated MH & addictions; MH outpatient, intensive; addictions outpatient, detox, women's residential; housing	Adults, youth, families	Multnomah

* Small= <1,000 total clients Medium= 1,000-10,000 total clients Large= 10,000+ total clients

** (youth)= served as adults, no specific programming

Health Care Provider	Size	Services	Clients	Service area
Mental health, addictions, & medical care (FQHCs), continued				
Clackamas County Health, Housing & Human Services	Large	Service provision & coordination; primary care, respite; MH outpatient, intensive; integrated addictions services; housing; *services partially provided through partners*	Adults, children, youth, families	Clackamas
Multnomah County Health Department	Large	Service provision; primary care, dental, pharmacy, school-based, HIV/STD, family, TB; (assessment focused on homeless program & HIV clinic, adults only)	Adults, children, youth, families	Multnomah
NARA	Medium	Service provision; holistic primary care; MH outpatient, intensive, residential; addictions outpatient, residential; youth services	Adults, children, youth, families	Multnomah
Outside In	Medium	Service provision; primary care, respite; MH intensive; dual diagnosis, integrated addictions services; youth services; outreach; housing	Youth, adults	Multnomah
Virginia Garcia	Large	Service provision; primary care, dental, pharmacy; integrated MH & addictions services	Adults, children, youth, families	Washington
Hospitals- emergency services				
Adventist	Large	Service provision; assessment focus on ED, acute inpatient, psych inpatient only	Adults	Multnomah
Kaiser Sunnyside	Large	Service provision; assessment focused on ED only	Adults	Clackamas
Legacy	Large	Service provision; assessment focused on ED, acute inpatient only, at Emanuel & Good Samaritan hospitals only	Adults, children, youth	Multnomah, Washington. Clackamas
OHSU	Large	Service provision; assessment focused on ED, acute inpatient, psych inpatient only	Adults, children	Multnomah
Providence	Large	Service provision & insurance; assessment focused on ED only	Adults, youth	Multnomah

Housing Provider	Size*	Housing & Services	Service Area
County Housing Authorities			
Housing Authority of Clackamas County	Large	Public housing, affordable housing; Section 8 vouchers; units for singles, families, disabled, mentally ill, elderly, homeless, families & farm workers; resident services, employment services, *clinical services (through partners)*	Clackamas
Home Forward	Large	Public housing, affordable housing, shelters; Section 8 & Shelter+Care vouchers; units for singles, families, disabled, elderly, homeless (assessment focused on Bud Clark Commons); resident services, *clinical services through partners*	Multnomah
Washington County Department of Housing Services	Large	Public housing, affordable housing, shelters; Section 8 vouchers; units for singles, families, disabled, elderly, homeless, domestic violence victims, corrections, farm workers; resident services, homeless employment support, *clinical services (provided through partners)*	Washington
Community Development Corporations			
Hacienda CDC	Medium	Affordable housing; units for families (mostly), singles, domestic violence victims, farm workers; resident services, financial & employment support, entrepreneurship, rent & energy assistance, home ownership, education, healthy living, *clinical services (provided through partners)*	Clackamas, Multnomah
REACH CDC	Medium	Affordable housing; Section 8 vouchers; units for singles, families, elderly, mentally ill, disabled, homeless; resident services, financial support, goal setting, *clinical services, rental assistance (provided through partners)*	Multnomah

* Small= <1000 total residents Medium= 1000-3000 total residents Large= 3000+ total residents

Participating providers, continued

Housing Providers	Size	Housing & Services	Service Area
Community Development Corporations, continued			
ROSE CDC	Small	Affordable, Housing First, some ADFC housing; Section 8 vouchers; units for families (mostly), singles, seniors, disabled, addictions recovery; resident services, youth programs, *rent assistance, clinical services (provided through partners)*	Multnomah
Other Housing Providers			
Cascade AIDS Project (CAP)	Small	Coordination of access to affordable, Housing First Housing; HOPWA, McKinney, Shelter+Care, KNAP funding; units for singles, HIV+, mentally ill, addictions recovery, disabled, homeless, corrections, youth *(housing provided through partners)*; housing support, case management, rent, utility & emergency assistance, employment support; provision of clinical & support services related to HIV (screening, education, outreach)	Multnomah, Washington
Central City Concern (CCC)	Medium	Affordable, Housing First, ADFC housing; Section 8 & Shelter+Care vouchers; units for singles, families, homeless, disabled, mentally ill, addictions recovery, corrections, transition-age youth (TAY); resident services, rent assistance, clinical services *(partially provided through partners)*	Multnomah
Community Partners for Affordable Housing (CPAH)	Small	Affordable, Housing First, some ADFC housing; Section 8 & Shelter+Care vouchers; units for families (mostly), singles, elderly, disabled, homeless, veterans, addictions recovery; resident services, youth programs, *clinical services (provided through partners)*	Washington
Human Solutions	Medium	Affordable, Housing First housing, shelters; units for singles, families, homeless, disabled, mentally ill, addictions recovery; resident services, eviction prevention & rent assistance, employment training, education, *clinical services (provided through partners)*	Multnomah
Impact Northwest	Medium	Rapid Re-Housing, some ADFC housing; units for families (mostly), singles, youth, elderly, homeless, mentally ill, addictions recovery; resident services, rent & energy assistance, eviction prevention, employment support, food assistance, family & senior services	Multnomah
Innovative Housing (IHI)	Medium	Affordable, Housing First housing; Section 8 vouchers; units for singles, families, disabled, mentally ill, homeless, addictions recovery, corrections; resident services, emergency support, *clinical services (provided through partners)*	Clackamas, Multnomah, Washington
Native American Youth & Family Center (NAYA)	Large	Affordable, Housing First housing; units for families, homeless; resident services, rent assistance, financial & economic education & development, career skills training, home ownership, specialized clinical & cultural services for youth, elders & families	Multnomah
Northwest Housing Alternatives	Medium	Affordable housing, shelter; Section 8 vouchers; units for singles, families, elderly, homeless, mentally ill, addictions recovery, disabled; resident services, rent assistance, *clinical services (provided through partners)*	Clackamas, Multnomah
Northwest Pilot Project	Medium	Coordination of access to affordable, some Housing First housing; units for elderly (mostly), singles, families, homeless, disabled, mentally ill, addictions recovery, veterans *(provided through partners)*; housing services, rent assistance, eviction prevention, service navigation & coordination, clinical services *(provided through partners)*	Multnomah
Portland Community Reinvestment Initiatives (PCRI)	Medium	Affordable, some ADFC housing; Section 8 vouchers; units for families (mostly), singles, elderly, disabled, addictions recovery, targeting ethnic minorities; resident services, home ownership, foreclosure prevention, financial education, entrepreneurship, healthy living, *some clinical services (provided through partners)*	Multnomah

Appendix 4:
Programs and practices

Agencies serving the lowest-income and most vulnerable individuals in the tri-county region employ a variety of evidence-based practices, promising practices, and innovative programs to meet clients' needs.

Evidence-based practices

12-step Facilitation
Acceptance & Commitment Therapy
ACRA- Adolescent Community Reinforcement Approach
Adult Treatment Panel for Hyperlipidemia- ATP 3 Guidelines
Advisory Committee on Immunization Practice- Schedules for Adult and Pediatric Immunizations
AF- CBT- Alternatives for Families (Cognitive Behavioral Therapy)
Ages & Stages (children's MH treatment)
American Cancer Society- Standard of Care for Cancer Detection
American Congress of Obstetricians and Gynecologists- Routine Screening & Treatment Recommendations for Annual Women's Exams
American Indian Life Skills
ARC- Attachment, Self-Regulation, Competency
Art therapy
ASAM PCC 2R- American Society of Addiction Medicine Patient Placement Criteria
ASIST- Applied Suicide Intervention Skills Training
B2H- Bridges to Housing (supportive housing model)
Case planning tools developed by the National Indian Child Welfare Association
CBT- Cognitive Behavioral Therapy
Child-Parent Psychotherapy
Chronic disease management
Clinical pharmacy
Clinical Recovery System Model
CM-TFT- Culturally Modified Trauma Focused Treatment
Critical Time Intervention
DBT- Dialectical Behavioral Therapy
Depression Impact
EMDR- Eye Movement Desensitization & Reprocessing
Family Check-Up Model
Hepatitis C treatment in HIV+ patients
IHS Best Practices for diabetes prevention & diabetes treatment
IHS Standard of Care for chronic kidney disease
IMR- Illness Management & Recovery model
Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure
MAT- Medically Assisted Treatment (addictions treatment)
Matrix Model (outpatient stimulant abuse treatment)
MIA-STEP- Motivational Interviewing Assessment: Supervisory Tools for Enhancing Proficiency
Moral Reconation Therapy
Motivational Enhancement Therapy
NIH guidelines for Diagnosis & Management of Asthma
Older Adults Program
Opiate prescription
Parent-Child Interaction Treatment
PEAKS- evaluation model to assess effectiveness, accessibility & safety of service delivery (used in housing)
Pet therapy
Pharmacy coordination with diabetes treatment
Positive Youth Development
Project Venture (Native American youth substance abuse prevention)
Recovery Mentors
Relapse Prevention Therapy
Relational World View model
Relationship-based Care Coordination
Seeking Safety
Social Service Competency-Based Training
Strategies for Self-Improvement
TF-CBT- Trauma Focused Cognitive Behavioral Therapy (for child traumatic grief)
TREM- Trauma Recovery & Empowerment Model
VASE- Video Assessment of Simulated Encounters (part of Motivational Interviewing)
Wrap-around MH services for children

Promising programs

"Andando bicicleta/Walking Your Bike"- program at Hacienda CDC in which children learn about how to ride bicycles, safety issues, and the benefits of exercise during a one-week training and receive a donated bike with helmet

CCC's CEP (Community Engagement Program) recognized as a Center for Excellence in providing integrated mental health, addictions, medical & support services

C-TRAIN (Care Transition Innovation)- pilot project among hospitals (OHSU, Providence) and primary care providers (CCC, OHSU, Virginia Garcia) to ensure effective transition from hospitalization and frequent ED use to accessing community resources for medical care

Diabetes Program- the approach to diabetes treatment at NARA's Indian Health Clinic has yielded astounding results that are being studied by other medical institutions

Health Food Access Initiative- survey conducted by PCRI to better understand food access barriers and needs

Home Ownership Retention- program at PCRI providing

Promising programs, continued

culturally-specific, educational, referral and support services to prevent eviction for seniors

Hot Spot program- collaborative effort with Multnomah County Health Department and CareOregon to address needs of high utilizers.

Integrated Care Team- pilot project at Virginia Garcia with St Vincent's Hospital to connect high utilizers to primary care clinics

Intensive Community Care Team- project funded through CMMI grant to embed integrated care coordinators at 6 mental health homes in Washington County

Long Term Care- pilot project at Virginia Garcia with CareOregon to link patients with case managers, often making home visits, to ensure needed care is received and well coordinated

Medical and MH Care Coordination- LifeWorks staff embedded at FQHC partner Virginia Garcia's clinics to better coordinate care and provide support for management of mental and physical illness

Micro Business Enterprise- coaching on small business development and operation offered at PCRI

Micro-Mercantes- business training and entrepreneurial support for residents at Hacienda CDC with little education or English language skills, allowing them to begin businesses (selling tamales at Portland's Saturday Market and offering catering services)

Project Respond- Cascadia's mental health crisis hotline and response team, coordinating clients in crisis with clinicians, case managers, law enforcement and emergency services

STARTS (Support, Training and Assistance to Realize Tomorrow's Success)- financial and goal setting classes at REACH CDC

Appendix 5:
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Appendix 6:

Abbreviations

A&D-	Alcohol & drug
ACT-	Assertive Community Treatment (mental health)
ADFC-	Alcohol & Drug Free Community (housing)
AMHI-	Adult Mental Health Initiative
AMI-	Area Median Income
ASAM-	American Society of Addiction Medicine (addictions assessment tool)
BH-	Behavioral Health
CASII-	Child & Adolescent Service Intensity Instrument (mental health)
CATC-	Crisis Assessment & Treatment Center (Telecare, Multnomah County)
CCHC-	Coalition of Community Health Clinics
CDC-	Community Development Corporation
CHW-	Community health worker
CNA-	Community Needs Assessment
CODA-	Comprehensive Options for Drug Abusers
ECSII-	Early Childhood Service Intensity Instrument (mental health)
ED-	Emergency department (hospital)
FPL-	Federal Poverty Level
FQHC-	Federally Qualified Health Center
HA-	Housing Authority
HR-	Harm Reduction (housing)
ICM-	Intensive Case Management (mental health)
IDDT-	Integrated Dual Diagnosis Treatment (mental health & addictions)
LGBTQ-	Lesbian, gay, bisexual, transgender & queer
MAT-	Medically Assisted Treatment (addictions)
MH-	Mental health
MHASD-	Mental Health & Addictions Services Division (Multnomah County)
NARA-	Native American Rehabilitation Association
OHSU-	Oregon Health & Sciences University
PSH-	Permanent Supported Housing
PSRB-	Psychiatric Security Review Board
SPMI-	Severe & persistent mental illness
SSDI-	Social Security Disability Insurance
SSI-	(Social Security) Supplemental Security Income
TSH-	Transitional Supported Housing
VOA-	Volunteers of America