HIMA

HEALTH MANAGEMENT ASSOCIATES

Stewards of Affordable Housing for the Future Health and Wellness Outcomes Measurement

PRESENTED TO STEWARDS OF AFFORDABLE HOUSING FOR THE FUTURE

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Research and Consulting in the Fields of Health and Human Services Policy, Health Economics and Finance, Program Evaluation, Data Analysis, and Health System Restructuring

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INTRODUCTION

Stewards of Affordable Housing for the Future (SAHF) is a consortium of 12 not-forprofit members who acquire, preserve and, are committed to long-term, sustainable ownership and continued affordability of multifamily rental properties for low-income families, seniors, and disabled individuals. Together, SAHF members own and operate housing in 49 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands – providing homes to more than 96,000 low-income households across the country. With the support of the Kresge Foundation, SAHF has launched a major initiative to explore how best to use outcome measurement to make the case for the important role these organizations play in promoting a better quality of life for their residents.

The impact of stable, affordable housing goes beyond providing a place to live. Affordable Housing providers are focused on providing their residents with supports that impact a wide range of quality of life factors including employment and financial stability, education and youth development, community engagement, and health and wellness. Organizations like the Stewards of Affordable Housing for the Future (SAHF) have been working to quantify these impacts with a set of standard measures and outcomes that depict the benefits of affordable housing programs on the broader human services system. The results of this work will be used to inform policy-making and funding priorities in an environment with increasing social support needs and diminishing public resources.

As a component of the broader initiative, SAHF engaged Health Management Associates (HMA) to assist in development of a framework for evaluating the impact of member housing organizations on the health and wellness of residents. As part of this effort, HMA was asked to facilitate agreement by SAHF members on a common set of services and outcome measures that could be used to make the business case for service-enriched housing. HMA also was asked to advise on potential public financing strategies for engaging the healthcare system to pursue stable funding that supports housing as a vehicle to improve health outcomes.

Participating SAHF Member Organizations

Four affordable housing providers who are members of SAHF and leaders on the work group focusing on the Health and Wellness area participated in this effort. These organizations provided information about their current programs and services and participated in a convening held in Washington, DC on February 5 – 6, 2013 to discuss health and wellness in the context of affordable housing. They have agreed to play a role in the next steps, which are measuring outcomes and developing the value proposition for affordable housing's role in healthcare going forward. The participating organizations are:

- 1. The Community Builders
- 2. National Church Residences
- 3. Mercy Housing
- 4. Preservation of Affordable Housing, Inc.

Project Approach

To meet the goals of this project, HMA used the following approach:

- 1. Through surveys and interviews, HMA took an inventory of current healthrelated services and supports provided by the participating organizations as well as outcome measures currently used to track these activities.
- 2. HMA conducted a literature search to identify studies that support the role of affordable housing and the type of services provided by SAHF members in achieving improved health outcomes.
- 3. HMA identified "High-Value Service Areas" based on current services, support from the literature, and key healthcare business drivers.
- 4. HMA developed a framework for aligning the services and supports provided by affordable housing programs with the critical measures and outcomes that are being tracked by the healthcare system.
- 5. On February 5 6, 2013, HMA facilitated a convening of SAHF member organizations, SAHF executive staff, and representatives from Kresge Foundation and other funders to review the work products developed by HMA (Tasks 1-4), discuss the common services and metrics that may form the basis for the business case, discuss potential funding strategies, and consider next steps for moving an agenda forward.

This report outlines the results of this approach. The report presents an overview of the healthcare landscape to provide context to the discussion. Changes in our nation's healthcare system driven largely by health reform through the Affordable Care Act (ACA) present challenges to healthcare stakeholders and create opportunities for affordable housing providers. The report also presents a review of the evidence from the literature that supports the value of affordable housing to the healthcare system. This review includes the impacts of housing as a healthcare intervention and evidence supporting specific support services that affordable housing programs are well positioned to provide.

The report provides an overview of the current health related services being provided by SAHF members, key healthcare measures and outcomes, and opportunities to align high-value services with those measures and outcomes. The report then discusses potential revenue sources, recommendations for developing the value proposition for affordable housing to the healthcare system, and recommended next steps to create new partner-ships among affordable housing and the healthcare system.

THE HEALTHCARE LANDSCAPE

The healthcare system in the United States is currently undergoing an unprecedented period of change. Healthcare reforms precipitated by the Affordable Care Act (ACA) are resulting in major shifts in who has access to health coverage, how healthcare is paid for and how it is delivered. Concurrent with these broad national changes and, in some cases, in response to the changes, states are increasingly focused on finding new ways to manage their Medicaid programs, which represent one of the largest expenditure items in state budgets. The changes with the most relevance to affordable housing providers are:

- 1. Medicaid expansion under ACA
- 2. New models of care spurred by healthcare reform
- 3. Increased state emphasis on Medicaid Managed Care
- 4. Increased focus on managing services to people eligible for both Medicaid and Medicare (i.e., dual eligibles)

Medicaid Expansion

Of all of the changes that are contained in the ACA, perhaps none will have as much of an impact on residents of affordable housing developments as the expansion of Medicaid eligibility. The ACA provides for people with incomes up to 133% of the federal poverty guidelines to be deemed Medicaid eligible.^{1,2}

According to the Advisory Board Company, as of March 13, 2013, 27 states and the District of Columbia have chosen to or are leaning towards adopting expanded Medicaid eligibility guidelines. (See map below.) Seventeen states have indicated that they do not plan to or are leaning against expanding eligibility, and six states are undecided. Even with the choice being left up to the states, the Congressional Budget Office anticipates that 11 million more Americans will be enrolled in Medicaid as a result of the ACA. For low-income adults with incomes greater than 133% of poverty, the new Health Insurance Exchanges created by the ACA will provide opportunities to obtain affordable coverage. As a result, in states that choose to expand Medicaid, nearly all residents of affordable housing developments will have access to some form of health insurance coverage.

¹ The ACA includes an across the board five percentage point income disregard, effectively making the new income eligibility floor 138% of the Federal Poverty Level.

² The ACA also eliminates categorical requirements and asset tests by directing states to use Modified Adjusted Gross Income (MAGI) to determine eligibility in most instances.² As a result of the Supreme Court decision in National Federation of Independent Business v. Sebelius, states will have a choice as to whether or not to adopt the new eligibility guidelines.

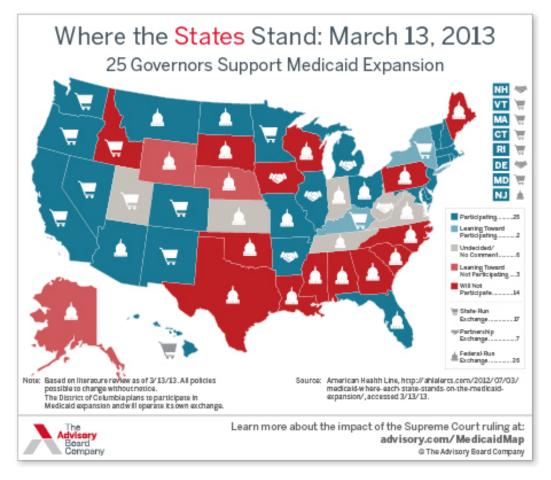


Figure 1. Medicaid Expansion by State

New Models of Care

The ACA places an emphasis on the "Triple Aim": 1) improve the health of populations, 2) improve the patient experience of care, and 3) reduce or at least control costs.³ There is a push to reorganize healthcare systems toward the Triple Aim and, as part of that, develop and implement new models of care that are able to achieve the aims. These emerging models of care place an increased emphasis on community-based services outside of the traditional medical model, a focus consistent with the type of services provided in a service-enriched housing setting.

With the ACA, the federal government has dedicated resources to encourage innovation, particularly focused on publicly funded healthcare programs and emphasizing innovations that produce system-wide change. The Center for Medicaid and Medicare Services (CMS) has established the Center for Medicare/Medicaid Innovation (CMMI), which provides grants to states and healthcare systems that are testing and implementing new models of care.

³ The Triple Aim is a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance. http://www.ihi.org/offerings/initiatives/tripleaim.

Two models of care that have garnered significant attention in this healthcare reform environment are Accountable Care Organizations and Health Homes.

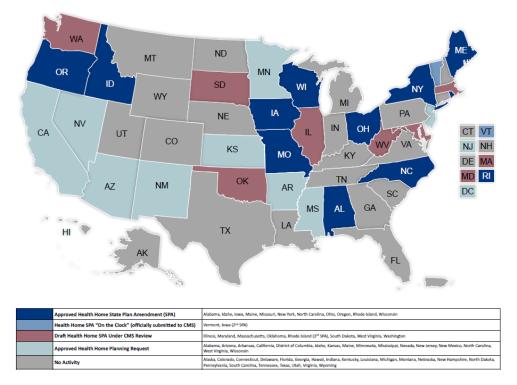
Accountable Care Organizations (ACOs)

CMS defines ACOs as "groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients." Although the ACO initiatives being implemented by CMS to date have focused primarily on the Medicare population, several states, including Oregon, Colorado, Minnesota, and New Jersey are moving forward with ACOs for the Medicaid population. Up to this point, ACO participating providers generally have continued to be paid on a feefor-service basis with the potential for "gain sharing" or shared savings whereby participating providers receive a portion of the savings achieved through improved coordination of services. It is expected that in the future these ACOs may evolve to a point where they resemble capitated managed care organizations, which receive payment from Medicaid and/or Medicare programs to coordinate the full range of services for members, assume risk, and pay participating providers for services rendered. ACOs are important to affordable housing providers as they are potential partners who may be willing to provide funding in return for assistance with managing their target population. It is also conceivable that affordable housing providers could serve as participating providers in an ACO arrangement.

Health Homes

Section 2703 of the ACA provides for the establishment of Health Home projects in the Medicaid program. The Health Home programs established under ACA focus on individuals with chronic physical health and behavioral health needs and emphasize prevention and providing coordination of care and access to care in the most appropriate setting. The concept of a Health Home builds off of initiatives to establish "Patient-Centered Medical Homes" where services for patients are coordinated in a comprehensive and holistic way. States receive enhanced funding from the Federal Government in the form of a 90% funding match. Because of the holistic approach used by the Health Home model, there may be opportunities for affordable housing providers to play a collaborative role in those states choosing to implement such an initiative. The map below from the Integrated Care Resource Center shows states that are pursuing Health Home projects.

Fig. 2- Health Home Projects by State



Source: Integrated Care Resource Center

State Innovation Models

CMMI also recently announced \$300 million in grant funding for states to test approaches for multi-payer payment and delivery system transformation. Most of the States receiving funding from this initiative are engaged in planning efforts, but funds have also been awarded to states in the pre-testing and testing phases of their projects. In February of 2013, CMMI announced that 16 states had received model design planning grants, three received pre-testing grants, and six received model-testing grants. The map below shows the States that have received awards

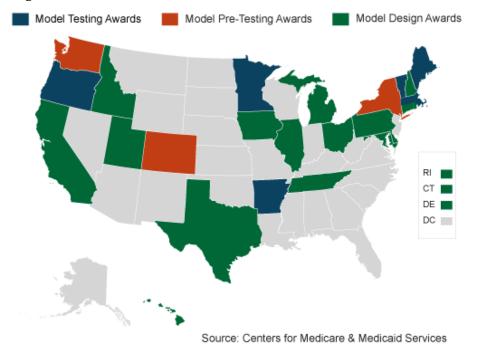


Figure 3. State Innovation Model Awards

Medicaid Managed Care

A third trend in publicly-funded healthcare that is relevant to affordable housing is the increasing focus on Medicaid Managed Care by the states. As states face increasing budgetary pressures, there has been a continuing focus on Medicaid as a major driver of state expenditures. Medicaid represents nearly one-quarter of state budgets. As a result states are turning to Managed Care Organizations (MCOs) to provide better management of Medicaid services and more predictable costs.

State Medicaid Managed Care arrangements follow a few different models:

Capitated Managed Care Organizations (MCOs) are the most common. Under this model, states contract with MCOs to provide a defined set of benefits to Medicaid enrollees and pay them on a risk-adjusted per member per month (PMPM) basis. MCOs bear the financial risk for the cost of delivery of care, and Federal rules require that the PMPM rates be actuarially sound.

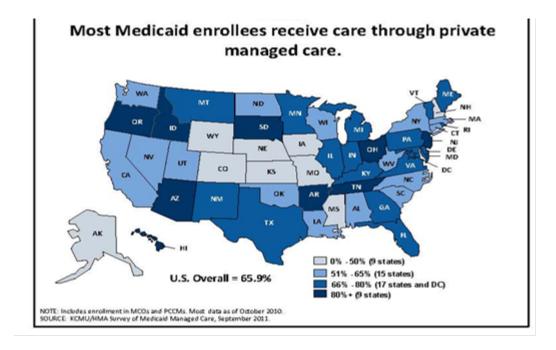
Primary Care Case Management programs build on the fee-for-service system and are administered by the Medicaid agency itself or a contractor. Each Medicaid beneficiary in a PCCM program is enrolled with a primary care provider (PCP) or practice, which is responsible for providing the beneficiary's primary and preventive care as well as specialist referrals when needed. The state generally pays PCPs a small PMPM case management fee in addition to payments for services on a regular fee-for-service basis. Some states have an "Enhanced PCCM" that involves added care coordination, care management, medical home standards, and quality improvement.

Prepaid Health Plans (PHPs) are risk-based (i.e., capitated) health plans that provide a limited set of Medicaid services such as behavioral health, non-emergency medical transportation, long-term care, or dental care. Federal regulations recognize two types of PHPs:those that include any inpatient hospital service are Prepaid Inpatient Health Plans (PIHPs), and those that do not include any inpatient hospital service are Prepaid Ambulatory Health Plans (PAHPs). States sometimes provide services that are "carved-out" of MCOs through these non-comprehensive PHPs.

States are also looking to MCOs to manage populations that are traditionally served in fee-for-service programs. These populations include the elderly and disabled who despite accounting for only about 25% of the Medicaid population represent approximately 65% of Medicaid costs.⁴

In addition to managing a growing segment of the Medicaid population, MCOs will be the principal coverage option for individuals on the newly established Health Insurance Exchanges. The map below from a 2011 HMA report conducted with the Kaiser Center for Medicaid and the Uninsured shows the percentages of Medicaid enrollees in managed care plans by state.

Figure 4. Medicaid Managed Care by State

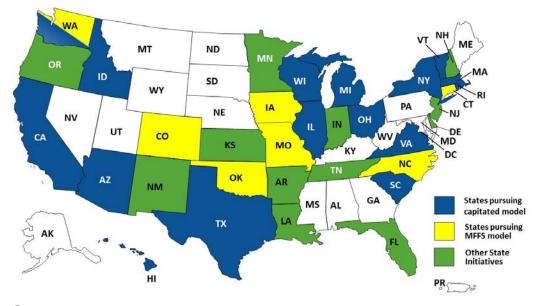


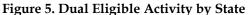
Dual Eligibles

Over 9.1 million older Americans and younger persons with disabilities receive health coverage under both the Medicaid and Medicare programs. This population is known as

⁴ Medicaid and CHIP Payment and Access Commission "Report to Congress on Medicaid and CHIP", March 2012 pg. 43.

the dual eligibles. Although they account for only about 15% of Medicaid enrollment, they represent 39% of all Medicaid expenditures. Much of this expense goes to skilled nursing facilities and other long-term care services not covered by Medicare. To address this high-need, high-cost population, there is an increasing focus on improving the coordination of care for dual eligibles and enhancing the collaboration between the Medicaid and Medicare programs. The ACA created an Office of Medicare/Medicaid Coordination within CMS. Financial demonstration projects were established to explore the ways the programs can better integrate care. Roughly half of the states applied to implement these projects. So far projects in Illinois, Massachusetts, Washington, and Ohio have been approved. A number of other states are pursuing integration initiatives outside of the CMS demonstration projects, with 34 states reporting in a recent Kaiser Family foundation/HMA budget survey that they were pursuing initiatives in these areas. To the extent that SAHF members serve the elderly and disabled population, these efforts by states to better manage care for the dual eligibles and consumers requiring long-term care services more generally are important trends that service enriched housing providers need to be aware of in their states. They may provide potential opportunities as states seek new models of care to better serve these populations.





Source: HMA Map based on CMS Medicare-Medicaid Coordination Office website and Kaiser Family Foundation/HMA 50 State Medicaid Budget Survey, October 2012

As described above, the healthcare landscape, especially government-funded health programs, is in a period of immense change. Affordable housing providers need to understand and adapt to these trends in order to play a role in and be recognized for their contributions to the reformed healthcare system. Understanding healthcare stakeholders and their motivations is particularly important, especially related to potential funding sources to support the services offered by affordable housing providers.

EVIDENCE FOR THE ROLE OF HOUSING IN HEALTHCARE

On the surface, the role of affordable housing in driving improved health outcomes is intuitive. A person struggling day to day with the stress of not having a stable place to live understandably de-prioritizes their own health and wellness as well as the health of family members under their care. Despite this logical reality, there is relatively little in the way of academic literature that supports the health benefits of housing on low-income Americans. Instead, the literature has focused on high-need populations such as those with chronic conditions, substance abuse issues, or HIV/AIDS. These studies also often center on a population of formerly homeless individuals or those at immediate risk of homelessness.

A Seattle study that focused on chronically homeless individuals with severe alcohol problems found that when placed in a supportive housing program that included case management and onsite healthcare services, the use of publicly funded healthcare programs and associated costs went down. Total costs, including healthcare and other related public expenses of the intervention group were 53% less than the control group. The study found that 59% of the mean per person per month cost reduction was attributable to decreased Emergency Department (ED) visits and hospital stays.⁵

A Chicago study found that for a study group of chronically ill homeless individuals, stable housing with case management supports reduced hospital admissions by 29%, length of hospital stays by 29% and ED visits by 24%.⁶

A Los Angeles study of residents of a supportive housing program who were above the 10th percentile in terms of acute care costs and case management and primary and behavioral health services, found a 57% reduction in ED visits, 67% reduction in hospital admissions, and a 75% reduction in total inpatient charges.⁷

The attached chart (Appendix 1), provides a summary of these and other published studies that make the link between supportive housing and its impact on utilization of services and health care costs.

Although the available evidence helps make an effective link between supportive housing and its impact on health care, these studies alone are not sufficient for SAHF mem-

⁵ Larimer, Mary E Ph.D. et al. (2009, April 1) Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons With Severe Alcohol Problems. Journal of the American Medical Association (Vol. 301, No. 13) 1349-1357.

⁶ Sadowski LS, Kee RA, Vander Weele TJ, & Buchanan D. (May 2009). Effect of a Housing and Case Management Program on Emergency Department Visits and Hospitalizations among Chronically Ill Homeless Adults. The Journal of the American Medical Association. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/19417194 (Accessed October 31, 2012).

⁷ Corporation for Supportive Housing (2012, October 10) "Frequent Users Programs Seeing Positive Early Results in Los Angeles" Retrieved from http://www.csh.org/news/frequent-usersprograms-seeing-early-results-in-los-angeles(Accessed October 31, 2012) & Los Angeles Frequent Users Systems Engagement (FUSE) Program Retrieved from http://www.csh.org/cshsolutions/community-work/systems-change/local-systems-change-work/los-angeles-fuse (Accessed October 31, 2012).

bers to make an effective business case to health payers. As noted above, the studies have generally focused on a small, formerly homeless population with intensive healthcare needs and may not be generalizable to the low-income populations served by service enriched housing. Moreover, in each of these studies, additional support services beyond affordable housing were provided and could be credited for the positive health outcomes. There is a need for more rigorous study of the impact of stable housing on its own as a driver of improved health outcomes and decreased costs. Until this evidence is generated, affordable housing providers will need to leverage the impact of the support services they provide in order to open a dialog with the healthcare system about potential partnerships. The next section of the report will look at the health-related services being offered by participating SAHF member organizations and how they can be tracked and measured to demonstrate value to potential healthcare partners.

CURRENT SERVICES, KEY MEASURES, AND HIGH-VALUE SERVICES

Affordable housing providers have long offered their residents not only a stable secure place to live but other important social support services, including health and wellness services. HMA evaluated and took inventory of the health related support services being offered by participating SAHF member organizations through surveys, interviews, and review of program materials. HMA then identified the key measures and outcomes tracked by the healthcare system and identified "High-Value Service Areas" that are currently being provided or could be provided which aligned to the goals of the healthcare system (Triple Aim). The goal of this exercise is to guide SAHF member organizations in beginning to refine their service offerings and develop consistent tracking and measurement mechanisms to build compelling data that supports the argument that housing is a key component to success for the healthcare system.

Scope of Services Offered by Participating SAHF Member Organizations

All participating SAHF member organizations (SAHF members) are providing some level of support services related to healthcare, even if services are not available at all properties. The type and intensity of service is driven by a number of key factors including:

- 1. Staff resources
- 2. Availability of willing community partners
- 3. Special funding or grants
- 4. Resident needs and demand

Since these four factors vary from property to property, it is challenging to define a core set of common services. For example, staff resources at a property could range from a single property manager or leasing agent to a full complement of resident services and case management staff. Resident demand for services varies based on the demographics of the people living at the property. Properties focused on seniors are more focused on issues such as aging in place while family properties may deal with barriers to preventative care such as transportation and childcare needed to get to medical appointments. As was reported during the convening of SAHF members, this boundary can also be blurred. For example, residents at senior properties sometimes need assistance with services for their grandchildren who spend a significant amount of time staying with them.

In order to engage in partnership discussions with the healthcare system, SAHF needs to define a common set of services, even if services are not provided at all properties.

In reviewing current services, HMA also learned of many special projects and initiatives that sprung from collaboration with local community partners such as federally qualified health centers (FQHCs). Often these projects are funded through time-limited grants or other special funding. Ultimately, securing stable ongoing funding will be necessary to establish long-term programs that can provide a continuous and consistent level of service to residents.

Current Services

A full inventory of the health-related services that HMA identified through its survey and interviews is included in the Master Services Grid (Appendix 2). While the types of services varied slightly from organization to organization, for the most part, the nature of the services was consistent. The following is a list of the common service offerings across the SAHF organizations surveyed:

- Assistance with accessing healthcare benefits
- Assistance with accessing healthcare services
- Coordination of Activities of Daily Living
- Monitoring and assessing community services
- Care coordination
- Health education programming
- Health fairs and community events
- Onsite screenings, assessments and services (provided by the program or through a community partner)
- Nutrition and exercise
- Personal care and attendant care services

In most cases where these services are being provided, they are coordinated by Resident Services Coordinators. Resident Services Coordinators have broad responsibility for implementing programming in a variety of areas not limited to health related services. They are knowledgeable of local community resources and spend time linking residents to those resources. Most have social work or human services backgrounds, many with college degrees and some with advanced degrees. Most importantly, Resident Services Coordinators are trusted resources for residents seeking assistance with a wide range of issues. This level of access and trust uniquely positions SAHF members to engage residents in ways that potential healthcare partners have not been able to do.

Tracking and measurement of these activities varies from organization to organization and from property to property. Most SAHF members are tracking activities using a database solution, but staff compliance with inputting the appropriate data is sometimes lacking. All of the SAHF members surveyed indicated plans to migrate their tracking to systems on the Social Solutions platform. Although accurate tracking is critical, SAHF members will need to consider what measures and outcomes they should track that will be compelling to the healthcare system.

Key Healthcare Measures and Outcomes

With healthcare reform and the continuous focus on containing costs and improving quality and outcomes in the healthcare system, health plans and other healthcare stake-holders are focused on outcomes and measures that help to ensure that care is being provided in an efficient and effective way.

As mentioned earlier, the healthcare system is coalescing around three over-arching healthcare outcomes, described by CMS as the "Triple Aim". These outcomes are:

- 1. Improve the Health of Populations
- 2. Improve the Patient Experience of Care
- 3. Reduce or Control Costs

The healthcare system uses standard measures to indicate how well stakeholders are doing in achieving the Triple Aim. Measures are evidence-based and focused on the effective and efficient delivery of healthcare. For SAHF members to make the strongest case to healthcare payers, services and outcome measures should align with standard and emerging measures utilized by health care payers. This section of the report describes three standard sets of measures that nearly all health plans focus on. It also discusses other key business drivers that guide decision-making of potential healthcare partners.

HEDIS®

The Healthcare Effectiveness Data and Information Set (HEDIS®) is a tool used by more than 90% of America's health plans to measure important dimensions of care and service. HEDIS® allows for an "apples-to-apples" comparison among plans and is used internally by plans to identify areas for improvement. Increasingly, Medicaid programs are using HEDIS® results as a basis for pay for performance programs where incentives and or penalties are assessed against Medicaid MCOs. These could include financial incentives, financial penalties, and preference when it comes to assigning covered lives to an MCO.

HEDIS® measures are organized into the following five domains:

1. Access/Availability of Care

Example: Children and Adolescents' Access to Primary Care Practitioners (% of children in the defined age group who had a visit with a primary care practitioner in the year measured)

2. Effectiveness of Care

Example: Annual Monitoring for Patients on Persistent Medications (% of adults on persistent medication regimens with at least one therapeutic monitoring event.)

3. Experience of Care

Example: See CAHPS® description below

4. Health Plan Descriptive Information

Example: Enrollment by State (total number of members enrolled by state; these measures are informational rather than performance-based.)

5. Utilization

Example: Plan All-Cause Readmissions (the number of acute inpatient stays that were followed by an acute readmission for any diagnosis within 30 days)

CAHPS®

The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) is a subset of HEDIS® that measures health plan members' satisfaction with care in areas such as claims processing, customer service, and getting care quickly. These measures contribute to the "Experience of Care" domain within HEDIS®. Similar to the other HEDIS® measures, CAHPS® measures are sometimes used in pay for performance programs.CAHPS measures also are often published by state Medicaid programs in materials designed to help potential enrollees choose among plan options.

Examples of CAHPS measures include:

- Medical assistance with smoking cessation (tobacco users age 18 and older- annual counseling to quit, advice to use medications, advice on cessation programs annually
- Coordination of Care
- Customer Service

Stars Ratings

The five-star quality rating system for Medicare Advantage Plans (Stars program) is administered by CMS to educate consumers and make quality data more transparent. Stars ratings incorporate results from five different ratings systems, including HEDIS® and CAHPS®. Stars ratings are published by CMS to assist Medicare beneficiaries in making plan choices. CMS has begun to proactively notify members of under-performing plans, offering them an opportunity to switch to a better performing plan. Moreover, beginning in 2012, plans received bonus payments based on their Star ratings.

Stars Domains include:

- Staying healthy via preventative services
- Managing chronic conditions

- Plan responsiveness and care
- Complaints, appeals, and voluntary dis-enrollment
- Customer service

Other Key Healthcare Business Drivers

Standard performance measures like those described above are not the only factors that health plans and other healthcare stakeholders use to drive decision-making.

- Overall costs that contribute to Medical Loss Ratio (MLR) and Administrative Loss Ratio (ALR)
- Hospital re-admission penalties
- Enrollment churn rates

High-Value Service Areas

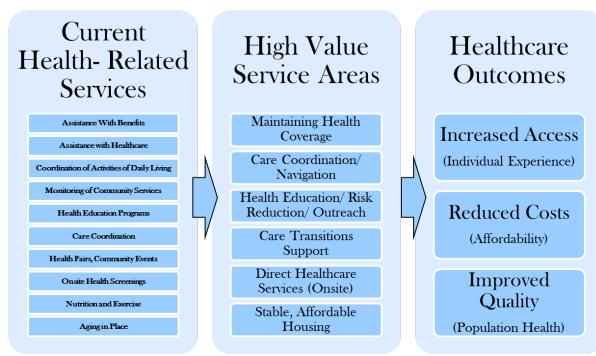
Based on the assessment of services provided by SAHF members and within the context of the key healthcare measures and outcomes, HMA identified six High-Value Service Areas in which SAHF members may want to focus in their efforts to refine service offerings. These service areas align with the services currently being offered or services that SAHF members are well positioned to offer with the key measures and outcomes that health plans are tracking. Activities within these High-Value Service Areas have also been demonstrated to be effective in the literature. The High-Value Service Matrix (Appendix 3) outlines the current services related to the High-Value Service Areas, the evidence that supports the value of the service area, and the measures and outcomes impacted by the services. Below is a description of some of the key activities within each service area.

- 1. **Maintaining Health Coverage**: Key activities include assistance in obtaining and maintaining health coverage and assistance with understanding health plan and provider options.
- 2. Care Coordination and Navigation: Key activities include health needs/risk assessments; assistance in linking to a PCP, behavioral health, preventive care services, and other care; promoting the use of primary care for non-urgent medical concerns; Care coordination for those at moderate and high risk for chronic illness and/or hospitalization; targeted case management for at-risk families and children or seniors; and home safety assessments and changes.
- 3. Health Education/Risk Reduction/Outreach: Key activities include promoting general wellness, nutrition, hygiene, domestic violence education, behavioral health, medication management; supporting health literacy by helping residents understand conditions and important health indicators; fall prevention/risk assessment; and general health coaching to promote self-management of chronic illness.

- 4. **Care Transitions Support:** Key activities include coordination with hospital discharge planning, reinforcement of after-care instructions, and coordination of follow-up visits.
- 5. **Direct Healthcare Services** (*Onsite including services provided by community partners*): Key activities include homecare, disease management, onsite clinics, behavioral health services, routine mobile dental clinics, routine immunizations, routine eye exams, and onsite available clinical staff.
- 6. Access to Stable, Affordable Housing: Key activities include providing housing to potential residents with health risks, working with the healthcare system to ensure housing is not a barrier to community-based care, and serving as a point of contact to assist in keeping residents engaged with their health plan and providers.

The identification of these High-Value Service Areas provides alignment between the services provided by SAHF members and the outcomes that are important to the healthcare system.

Figure 4. Connecting Current Services to Healthcare Outcomes through High Value Service Areas



Levels of Service

As discussed during the convening, the level of service provided will vary from property to property depending on the available resources. As a result, at properties with no dedicated services staff, the activity will be much less intense than at properties with a full complement of services staff. The group defined three levels of service that correspond to the available resources at a given property:

Figure 5. Levels of Service



Level One: This level represents properties with no dedicated services staff. The properties may be managed by a single leasing agent or property manager. Interventions may be limited to existing resident interactions and may include activities such as making information available on external resources to assist residents.

Level Two: This level represents properties with staff dedicated to resident services such as a Resident Services Coordinator. Staff at these properties coordinate resident programming across many subject areas, which may include but are not limited to health and wellness. Activities at Level Two properties may include one-on-one discussions with Residents about their healthcare needs; making and following-up on individual referrals to external resources; and organizing targeted healthcare programs for residents on site (e.g., nutrition classes, walking clubs, chronic disease support groups).

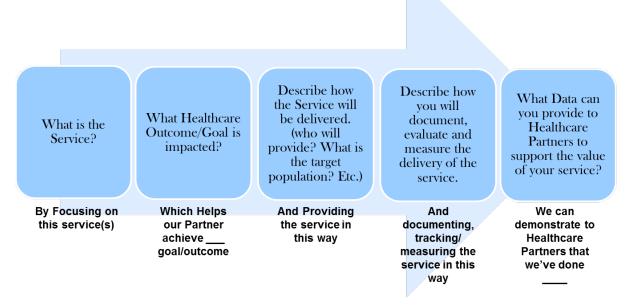
Level Three: This level represents properties with staff dedicated to providing healthrelated support services. In addition to service coordination, these properties may have case management staff who routinely assist residents in accessing healthcare services and/or healthcare professionals who are employees of the housing provider or a community partner who routinely provide direct healthcare services at the property. Activities at Level Three properties may include participation of housing staff on interdisciplinary care teams, on-site availability of clinical staff to respond to resident issues, and direct provisions of skilled services such as home health and attendant care that may allow residents to "age in place."

As a follow-up to the convening, SAHF participants were asked to identify the specific services they could deliver in each of the High-Value Service Areas listed above and at each of the levels of service listed above, how the services could be tracked and measured, and what healthcare outcomes would be impacted. This information will be compiled to help identify a common set of services and measures. As stated, tying a common set of services and measures to health outcomes will support the development of the value and an eventual business case.

THE AFFORDABLE HOUSING VALUE PROPOSITION FOR HEALTHCARE

Whether a SAHF member is approaching a Medicaid MCO, Accountable Care Organization, Health Home project, or a Medicaid Director to discuss partnership opportunities, it is important to articulate the value proposition of the support services provided by affordable housing providers. As discussed previously, defining the service and its connection to healthcare outcomes using broadly accepted healthcare measures will make this message more resonant. HMA has developed the following approach for framing the services SAHF members provide in a way that will get through to potential healthcare partners.

Figure 5. The Value Proposition Framework



The first step in composing the value proposition is to define the specific support services that a SAHF member provides and tie it to the appropriate healthcare outcome(s)/goal(s). This step is depicted in the first two boxes on the graphic above. The next step is to provide additional detail on the service. What populations are targeted? What evidence-based tools are used? What is it about the service design that will make it successful in impacting the outcome(s)/goal(s)? Next is a description of how the service is tracked, measured, and evaluated. What data will be collected by SAHF members to track/measure the service? Finally, SAHF members will need to articulate what they will be able to demonstrate with data to potential healthcare partners. What healthcare measures are impacted?

POTENTIAL REVENUE SOURCES AND FUNDING STRATEGIES

HMA was also asked to explore potential funding sources and strategies that SAHF members could potentially pursue to support their health and wellness-related services. As detailed earlier in the report, the changing health care landscape is providing new opportunities for affordable housing providers to partner with healthcare payers and secure funding for services provided on-site. With the expansion of Medicaid under ACA, a significant portion of residents will now be Medicaid eligible, and the direction of reforms occurring in this program is consistent with the type of services provided by SAHF members. For this reason, HMA's analysis has focused on potential funding streams associated with Medicaid. Change is happening rapidly in the Medicaid system, and the landscape is very much evolving and in flux. That means that there is still opportunity to get a "seat at the table" if armed with an effective value proposition and business case.

Medicaid Fee for Service

In exploring funding opportunities available through Medicaid, there are a number of different avenues that SAHF members can consider. Historically, Medicaid has primarily been a fee-for-service program that paid enrolled providers for services based on a set fee schedule. Generally, fee-for-service Medicaid has a number of limitations that make it a less appealing target for potential partnership. These include:

- Less-flexible payment methodologies: Fee-for-service payments are made according to fee schedules maintained by the state. Updating fee schedules is a long process in most states, and payment rates may go years without being updated. Reimbursement rates are often tied to input costs and are generally much less generous than payments available from other healthcare payers.
- Strict provider requirements and service definitions: Medicaid fee-for-service programs often have strict provider requirements that may preclude housing providers from being enrolled in the program. The services provided must also meet certain standard statewide definitions of service set by the state to be reimbursed and complex administrative structures are required for billing.
- **State-wideness requirements:** According to Federal Medicaid regulations, the Medicaid program must offer the same services to all enrollees in the state. State Medicaid programs can get relief from this requirement through the use of waivers, which will be discussed later in this section. Obtaining a waiver of Federal Medicaid requirements can be a long and laborious process.

Not only is fee-for-service a difficult road for non-traditional providers such as housing providers to navigate, state Medicaid programs increasingly are moving away from fee-for-service and are looking to Medicaid MCOs to manage benefits. The most recent data available indicate that two-thirds of Medicaid recipients are in some form of managed care, and that percentage is expanding as states look to MCOs to manage chronically ill members, dual eligibles, and individuals requiring long-term care. Given these trends

and the issues noted above, a more productive strategy by SAHF members seeking to leverage Medicaid dollars includes efforts to partner with Medicaid MCOs.

Medicaid Managed Care Plans

A delivery system that relies on Medicaid MCOs would appear to hold some potential for SAHF members as collaborative partners. As stated, capitated MCOs receive a per member per month (PMPM) payment, generally are given flexibility to manage enrollees' care, and are at risk for expenditures above this capitated amount. As a result, MCOs are positioned and have fiscal incentive to explore innovative approaches that improve outcomes and contain costs. Reasons that MCOs could make a good potential partner for collaboration include:

- Medicaid MCOs have greater flexibility to pilot individual community-based approaches.
- Medicaid MCOs are able to fund non-traditional services through their administrative budgets, provided that the service results in significant cost-savings.
- MCOs have special incentives to improve the management of care for their enrollees, particularly for higher-need/higher-cost enrollees.
- MCOs are increasingly assuming responsibility for populations that they are not used to managing, including dual eligibles, elderly patients, and disabled patients. Opportunities exist for organizations that can assist MCOs in managing these difficult-to-manage populations.
- Reimbursement potentially based on input costs of service as well as gainsharing based on dollars saved.

The MCO route is not without its hurdles. Since housing-related services typically have not been funded by MCOs, a strong business case will be required to convince organizations that they should invest in these services. The competition for MCO investment in cost saving initiatives is strong with many potential options evaluated based on their ability to achieve savings. Likewise, the MCO time horizon for results is short so cost savings must be achievable in the near rather than longer term. As discussed at the convening, the argument for funding is thus easier to make for interventions that "bend the cost curve" for higher-need/higher-cost individuals. The flexibility that MCOs have to fund innovations is also not absolute and may vary from state to state depending on contractual requirements. Notwithstanding these and other challenges, MCOs do hold some promise as partners and potential funders for SAHF members if an effective case can be presented.

1115 Waivers

1115 waivers provide another funding mechanism that states can utilize to fund services that traditionally have not been reimbursed under the Medicaid program. Section 1115 of

the Social Security Act gives the Secretary of Health and Human Services (HHS) broad authority to waive certain provision of the Medicaid statute. Typically this authority has been used to waive requirements related to statewide consistency in a program (e.g., to target a Medicaid initiative in a particular area of a state), comparability of benefits (e.g., to use an alternative benefit package for certain categories of beneficiaries), freedom of choice of providers to allow restriction of enrollees to a single delivery system and to make more wholesale change in program design. Moreover, Section 1115 gives the Secretary authority to provide reimbursement for "costs not otherwise matchable," so-called CNOM authority. This means that HHS can allow states to claim federal matching funds for expenditures that would otherwise not be reimbursable under the Medicaid program. For example, states have used an 1115 to gain matching funds for expanded eligibility to non-Medicaid populations or for state/county public health programs.

There are limits to the authority given to the Secretary under this waiver mechanism. The Secretary cannot waive provisions codified in other sections of the statute (e.g., cost sharing requirements) nor can she grant CNOM authority for an expenditure prohibited elsewhere in the act (e.g., exceeding limits applicable to disproportionate share hospital funding). Importantly, 1115 waivers are also required to be budget neutral to the Federal government. In order to satisfy this requirement states must work with CMS to determine a "without-waiver" expenditure limit, that is, the amount of Medicaid money a state would have spent in the absence of a waiver against which "with waiver" spending projections will be compared. Actual spending is compared to this limit each year and states are required to take corrective action if Medicaid waiver funding exceeds this limit.

One potential strategy would entail use of the 1115 and CNOM authority to help fund housing and/or housing based support services. While the 1115 mechanism has not typically been used in this context, New York State has an 1115 waiver amendment proposal before CMS that could serve as a test case for this approach. The housing proposal is a small piece of a much larger proposal that seeks to reinvest some \$2 billion of Medicaid "savings" to support a range of health related activities utilizing the Section 1115 authority. Among these the waiver proposes establishment of a five-year, \$150 million program to fund the supportive housing capital expansion and services. The federal government has yet to make a decision on the New York proposal, and the comprehensiveness of the amendment increases potential issues that may be raised. If approved, however, it could provide an opening for other states, including those that already have a comprehensive 1115 waiver already in place, to use this mechanism to fund housing and housing-related services.

Other Medicaid Funding Mechanisms

Several other Medicaid authorities are worthy of mention as SAHF members explore potential funding opportunities:

Health Homes: Section 2703 of the Affordable Care Act provides enhanced federal funding to states (90% Federal match for two years) for establishment of health homes to serve individuals with chronic physical health and behavioral health needs. States have flexibility to determine the appropriate entity or entities to serve in this role, but health homes are intended to build on the Patient-Centered Medical Home model and foster a "wholeperson" orientation to care, including preventive health and comprehensive care management and care coordination for high-need individuals. Given the type of healthrelated services provided by SAHF members and the fact that consumers with complex health needs often reside in their housing, staff on site at housing developments could serve as partners and potentially be reimbursed for serving as part of the health home team. To date, eleven states have been approved to provide health home services and one of these states, New York, has included housing organizations as part of the consortiums providing these services.

Section 1915(c) Home and Community Based Services (HCBS) Waiver: Through 1915(c) waiver programs, states are able to provide home and community-based services to Medicaid consumers who would otherwise require an institutional level of care (i.e., nursing home placement). States can offer a range of services under an HCBS waiver program, including case management (i.e., supports and service coordination), homemaker, home health aide, personal care, adult day health services, habilitation (both day and residential), respite care, and other types of services that assist in diverting and/or transitioning individuals from institutional settings. These programs are generally reimbursed on a fee-for-service basis and providers would need to meet basic program requirements to enroll as providers in the program. However, to the extent SAHF members provide direct health care service to residents, the HCBS waiver is a potential funding source.

Home and Community-Based State Plan Option (1915 (i): Section 1915(i) of the Social Security Act provides states an option to offer home and community-based services through an amendment to their Medicaid state plan (rather than more cumbersome waiver process) to individuals who do not meet the institutional level of care criteria required for the 1915(c) HCBS waiver. As in the case of HCBS 1915(c) waiver service, SAHF members could potentially be funded under this authority to the extent they provide this type of direct care service; however, it comes with the inflexibility of the fee-for-service reimbursement system and is an option, that for a variety of policy reasons, states have not generally utilized.

RECOMMENDED PLAN OF ACTION

As the foregoing analysis suggests, the changing health care landscape does provide some potential opportunities for SAHF members seeking partners and funding for their health and wellness activities. Taking advantage of these opportunities will require an understanding of what is important to the healthcare system and how the support services provided by SAHF members align with the Triple Aim and help achieve the improved healthcare outcomes sought by health care payers. Based on the research and analysis done to date and the discussion at the February convening HMA recommends the following plan of action.

Establish Current Standing through Data

The first step for affordable housing providers to establish themselves as recognized stakeholders, and potential collaborative partners in the healthcare system is to show the

role they play today in healthcare. To do this SAHF members should establish standard practices for capturing, collecting, and reporting data on current activities that impact residents' healthcare status. As mentioned in the introduction to this report, SAHF is engaged in an initiative to identify key outcomes measures across a range of domains, including health and wellness. HMA has identified a proposed set of metrics that demonstrate the impact of activities that are currently occurring across the majority of SAHF participant properties. HMA used the following resources to identify these metrics.

- 1. The inventory of current services compiled through HMA's survey and interviews with SAHF participants.
- 2. Discussions with SAHF participants at the February convening.
- 3. Responses from SAHF participants to a follow-up assignment after the convening that asked participants to define services according to the three levels of intensity described in this report and propose outcomes metrics at each level.

Recognizing that the immediate goal is to identify broad-based outcomes measures, this initial set of core metrics is focused on activity that occurs across the majority of SAHF participant properties and is useful to demonstrate the role that affordable housing providers could play in supporting the health needs of their residents. This data should also be useful in informing service development approaches and the design of potential partnerships with other healthcare stakeholders. They represent a necessary first step in developing a more comprehensive set of metrics that can later be used in making the business case, as described further below. The identified metrics are outlined in Appendix 4 to this report.

Build the Business Case

While affordable housing providers play an important – if under-recognized – role in healthcare today, the threshold for full collaborative partnerships with healthcare payers is even higher. A top priority for SAHF must be to continue to build and refine the business case for the funding of health and wellness activities provided by SAHF members. This is a process begun with the HMA engagement but much more intensive work is required going forward. As indicated by the remarks of the external stakeholders participating in the SAHF convening, health care payers and government officials/policy-makers will require significant education and there are many interests competing for their attention. A strong business case is a necessary prerequisite for efforts to successfully engage these stakeholders.

HMA has proposed a framework that can help guide SAHF members in the formulation of a value proposition in support of their housing-related services; however, significant works remains to use this tool to develop an effective business case. The steps required to utilize this proposed framework include:

1. **Define and Develop the Services:** SAHF members need to establish clear service definitions that describe the activities that occur at the property-level that contribute to improved health outcomes. The High-Value Services matrix developed

by HMA represents an initial attempt to align health and wellness activities provided by SAHF members with services groupings likely to be of benefit to health care payers, but this needs to continue to be refined and fleshed out in more detail. In this process it may be necessary to modify services to align with health system expectations. For example, are the services being provided evidencebased? Are the tools being used recognized in the healthcare industry? Are services being delivered in a way that is compliant with appropriate healthcare regulations and requirements? Alternatively, data showing outcomes of services offered by affordable housing providers that would be considered non-traditional in the healthcare industry will need to demonstrate impact on metrics that matter to the healthcare system. Also, as suggested at the convening, SAHF members should consider developing a tiered approach with varying levels of services based on the staffing available at each property, the demographics of the resident population, and availability of other external resources.

- 2. Enhance the Data: Once the services are defined, SAHF members will need to implement standard approaches for gathering data to track and measure activities. This data will build upon the initial set of core metrics identified above. SAHF members should recognize that their potential healthcare partners are in a better position to measure actual measures and outcomes but that they will need more robust data than that embodied in the initial metric set to support the assertion that their services led to improvement. In building the data, HMA has recommended that the data to be tracked and measured should be aligned with metrics that payers and government use to evaluate their program and to which they are held accountable. The Community Solutions tool is a platform that can help ensure consistency across programs once the relevant data to be collected have been identified.
- 3. **Build the Business Case:** Using the Value Proposition Framework laid out earlier in this report, and a clearer vision for services and the metrics these activities are likely to impact, SAHF members can begin to build a business case for healthcare stakeholders to partner with them.

There is a need for an overarching business case that the SAHF organization can use to make the argument on behalf of its members with more broad-based national constituencies, for example, HHS and HUD, national MCOs, national associations, the media, etc. SAHF should continue to take the lead in building the general business case, working with its member organizations to build the value proposition. As the audience moves more toward the local level and individual housing organizations, the business case can be adapted to reflect the target audience and strengths of the organization making the case. SAHF likewise can help support the individual housing organizations as they work to build these more localized messages, consistent with the overall SAHF business case.

Next Step: Reconvene subset of SAHF members to continue to work to refine service definitions and metrics necessary to make an effective business case to health care payers.

Identify Potential Partners

Developing an outreach plan and finding willing partners in the healthcare system that recognize the value that affordable housing has to healthcare will be vital. The first step is to understand the stakeholders in the healthcare system. As Estelle Richman from HUD emphasized during the convening, outreaching to key decision-makers and stakeholders can make all of the difference. Key people and organizations to reach out to include:

- Federal agencies, including HHS and HUD
- National membership organizations, e.g. NGA, NAMD, ACAP
- National and locally-based MCOs
- Key state officials, including state Medicaid Directors and Human Service Agency heads, state Housing Directors, governors' offices, and legislative leaders
- Local officials at city and county levels
- Leaders on health reform

SAHF and its members will need to develop and execute an outreach strategy that begins to communicate the business case. The SAHF national organization can play an important role in leading this effort with some of the national players, involving individual SAHF members as necessary and feasible. However, a sizable amount of this outreach will need to occur at the state and local level, and the potential target of opportunities may vary significantly based on health reform priorities at these governmental levels. SAHF can play a role in helping individual members to promote SAHF member interests, for example, in states where there are multiple SAHF properties. First, however, a plan must be developed that begins to cultivate natural constituencies and works to make the business case from the top down and the bottom up.

Next Step: Develop and execute an outreach plan to engage key policy audiences, including HUD, HHS, and CMMI, in this effort and how it may intersect with related initiatives underway. This would also include a roundtable or series of focus groups with health care purchasers (e.g., MCOS, ACOs, state Medicaid agencies) to get their feedback on the approach recommended in this report and ways it could be refined to better address the needs of a changing health care delivery system.

Prove the Concept

The third prong of the proposed action plan involves developing additional evidence on the efficacy of SAHF member health and wellness interventions and goes hand in glove with development of the business case and an outreach plan. SAHF and SAHF members would benefit from the engagement of willing healthcare partners in pilot projects that could serve as a vehicle to prove the concept of affordable housing as a cost savings strategy. As mentioned above, although intuitively obvious, most of the evidence on the link between health care and housing relates to supportive housing for homeless individuals and is less persuasive when making the case for the type of health and wellness interventions provided by SAHF members. SAHF members should consider as a first step working with a specific MCO and a handful of properties. Set clear expectations around the project design and how outcomes will be measured. HMA suggests linking resident-level data from the SAHF members' tracking systems with claims data housed at the MCO to draw conclusions on impacts to healthcare utilization and costs. Pilot programs with valid outcome studies can play an important role in developing relationships at the local level and making the case more broadly for the important role that service-enriched housing can play as a partner in the health care delivery system.

Next Step: Further refine and develop the pilot concept and identify SAHF properties that may serve as potential pilot sites for partnership with health care payers.

CONCLUSION

As this report has highlighted, the healthcare system is undergoing a period of unprecedented change as it moves to near universal access to health coverage in an economic environment that demands reduced costs and increased efficiency. Healthcare stakeholders are focused on delivering these cost savings and system efficiencies by transforming the healthcare delivery system in ways that produce higher quality care. Care delivery models are increasingly relying on stronger collaboration with non-traditional stakeholders, including affordable housing providers. This creates opportunities for affordable housing providers to assert their role in a more holistic healthcare system by educating potential healthcare partners about the support services they provide and the impact they have in helping the system achieve its goals. It is also an opportunity to make the case for including affordable housing in delivery system reform initiatives in a way that better recognizes the role of housing by providing new, stable, sources of financial support.

The first task in this endeavor is to document, through data collection and research, the impact that affordable housing is having on resident health today and establish affordable housing providers as logical partners for healthcare payers. Through this effort a strong business case can be built and, with it, a base of support among key decision makers in the healthcare system, particularly those who lead programs serving the residents of affordable housing properties. This will require identification and extensive outreach to potential partners among Medicaid agencies, Medicaid MCOs, ACOs, and other integrated delivery systems seeking to achieve the Triple Aim for their members. Working with these and other interested partners (e.g., private foundations) to engage in pilot programs can likewise help to prove the concept that stable, affordable housing provides a basis for improved healthcare outcomes and will lay the groundwork for additional investment by health care payers in service-enriched housing.

APPENDICES

Appendix 1 - SAHF Literature Scan Appendix 2 - Master Services Grid Appendix 3 - High Value Services Matrix Appendix 4 - Baseline Health and Wellness Outcomes Measures

Appendix 1. SAHF Literature Scan

SAHF Literature scan Selected studies

Program Services I		Health Outcomes Measured	Results	
Chicago Housing for Health Partnership 2003-2007 ⁱ (Health Outcomes for HIV-positive Homeless patients.)	 Supportive Housing (mix of scattered site and housing partnerowned) Intensive Case Management including: Housing referrals System Navigation Life Skills Coordination of Medical Appointments No traditional health services were rendered at the housing site. Participants qualified by having 1 of 15 identified Chronic Conditions, the published study focused on outcomes for HIV patients who made up 35% of the intervention group. 	 Survival with intact immunity (patient is alive 12 months after enrollment with a CD4 count of greater than or equal to 200 and a viral load of less than 100,000) CD4 Counts Viral Loads Fraction of patients with undetectable viral loads. 	 55% of patients in the intervention group achieved survival with intact immunity compared to 34% in the usual care group. CD4 counts differences were not statistically significant between the intervention group and the usual care group. Median viral load in the intervention group was 1356 compared to 10417 in the usual care group. 36% of the intervention group had undetectable viral loads compared to 19% in the usual care group. 	
1811 East Lake Seattle 2005- 2007 ⁱⁱ	 Supportive Housing in a "Housing First" program Onsite Case Management services related to substance use and life goals Meals Onsite healthcare services 	 Cost and Use of; hospital-based medical services, publicly funded drug and alcohol detox and treatment, emergency medical services and Medicaid funded ser- vices. Emergency department, inpatient, and outpatient encounter data (including date of service, length of 	 Total costs of the intervention group were 53% less than the total costs of the control group. (includes non- healthcare expenses) 59% of mean per person per month cost reductions in the intervention group were at- tributable to healthcare ex- penses. 	

Chicago Housing for Health Partnership Program 2003- 2007 (impact of case manage- ment on ER visits and Hospitali- zations among a chronically ill homeless population.) ^{III}	 Transitional housing at respite care centers Subsequent placement at stable housing Case Management services Housing placement Coordination of appropriate medical care Substance abuse and mental health referral coordination as needed Weekly case management team meetings to coordinate housing, social ser- 	stay and billing amounts) EMS calls and transports Medicaid Claims Data Utilization measured over an 18 month period: Number of hospitalizations Total Hospital Days Number of Emergency Room visits 	 The intervention group showed reductions across all three study metrics as com- pared to a control group who received usual care: 29% relative reduction in Hospital Admis- sions. 29% relative reduction in Hospital days. 24% relative reduction in Emergency De- partment visits.
Canon Kip Community House and the Lyric Hotel, San Fran- cisco, CA 1994-1998 ^{iv}	 vice and medical needs of participants. Supportive Housing (low demand model) Array of Onsite services through an interagency collaborative included: Case Management Psychiatric Care Healthcare services Vocational training. 	 Emergency Department Use, overall and broken out by Medical Emergency Services and Psychiat- ric Emergency Services Participants who used service Visits per participant Total number of visits. Inpatient Hospital stays overall and broken out by Medical vs. Psychiatric. Participants with hospital stays Number of stays per partici- pant Total number of hospital 	 Percentage of residents with an emergency department vis- it went from 53% pre-service to 37% post service (12 month period before and after ser- vice) Total number of emergency department visits fell 56%. Likelihood of hospital admis- sion went from 19% to 11%.

Frequent Users Systems En- gagement Pilot, Corporation for Supportive Housing, Los Ange- les, CA 2012. ^v	 Supportive Housing Case Management Primary and Behavioral Health Services. Targeted to consumers above the 10th percentile in terms of acute care costs. 	 stays. Average ED visits Average and Total ED charges Average Inpatient Admissions Average Inpatient Days Average and Total Inpatient Charges. 	 After 1 year the program is reporting positive outcomes: 57% reduction in average ED visits 59% reduction in average and total ED charges 67% reduction in average inpatient admissions. 75% reduction in average and total inpatient charg- es.
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¹ Buchanan, David MD, Kee, Romina MD, Sadowski, Laura S. MD, MPH, & Garcia, Diana, MPH (2009). The Health Impact of Supportive Housing for HIV-Positive Homeless Patients: A Randomized Controlled Trial. *American Journal of Public Health* (Supplement 3, Vol 99, No. S3) S675-S680.

¹ Larimer, Mary E Ph.D. et al. (2009, April 1) Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons With Severe Alcohol Problems. *Journal of the American Medical Association (Vol. 301, No. 13)* 1349-1357.

¹ Sadowski LS, Kee RA, Vander Weele TJ, & Buchanan D. (May 2009). Effect of a Housing and Case Management Program on Emergency Department Visits and Hospitalizations among Chronically III Homeless Adults. *The Journal of the American Medical Association*. Retrieved from

http://www.ncbi.nlm.nih.gov/pubmed/19417194 (Accessed October 31, 2012).

¹ Martinez, Tia E. J.D. & Burt, Martha R. Ph.D. (July 2006) Impact of Permanent supportive Housing on the Use of Acute Care Health Services by Homeless Adults. *Psychiatric Services*. (Vol. 57 No. 7) 992-999.

¹ Corporation for Supportive Housing (2012, October 10) "Frequent Users Programs Seeing Positive Early Results in Los Angeles" Retrieved from <u>http://www.csh.org/news/frequent-users-programs-seeing-early-results-in-los-angeles</u>(Accessed October 31, 2012) & Los Angeles Frequent Users Systems Engagement (FUSE) Program Retrieved from <u>http://www.csh.org/csh-solutions/community-work/systems-change/local-systems-change-work/los-angeles-fuse</u> (Accessed October 31, 2012).

Appendix 2. Master Services Grid

Mercy Housing

Health- Related

Service/ Actvitity	Description	Frequency	Setting	Who provides the service?	Qualifications of Service provider?	Measurement	Notes
		at move in or					
	Administered by	upon			Mostly	C	
	Resident Services Staff to determine the health and well-	engagement with resident		Resident	college educated	Social Solutions	
	ness related provider and ser-	services and		Services	(80%), some with social work	(SIMS)	Mercy Housing Operational
Health and	vice needs of a resident. The in-	again if resi-		Coordinator/	background, but	Capturing the	Excellence
Wellness	terview tool is	dent situation		Case	not a	data elements	Series Chapter
Interview	non-clinical in nature.	changes	onsite	Managers	requirement	as well.	13.
	Performed by Resident Services			0			
	Staff, this assessment is a re-						
	view of resident functioning to					total	
	determine if referral for initial					functional	
	or increased in-home support is					score and	
	necessary. The assessment is	at move in and		Resident		areas and	
	non-clinical in nature and may	then annually		Services		gaps in	
	result in a resident being re-	or as needed if		Coordinator/		service	
ADL Screening	ferred to an external entity for	condition		Case		tracked in	
and Support (SH)	formal, clinical assessment.	changes.	onsite	Managers		SIMS	

Risk and Resiliency Re- view (SH)	Currently in Pilot, 25 questions across 10 domains. Including recent hospitalization, depression, overall health.	at move in and then annually or as needed if condition changes.	onsite	Resident Services Coordinator/ Case Managers	Pilot being tracked manually in a spreadsheet, post pilot would be tracked in SIMS	based on academic literature and governmental standards
Preventative and Primary Care	Health services delivered onsite by trained health professionals, including third party providers. E.g. vision screenings, dental exams and wellness visits	mostly on a quartly basis frequency depends on population and available resources	onsite	external healthcare professionals, may or may not be a consistent provider who considers to be their patients	SIMS captures the providers that are onsite and which residents have participated	

Behavioral Health Care	Services delivered onsite by trained health professionals including third party providers with the intention of preventing or treating behavioral health problems. This includes substance abuse and mental health assessments and counseling sessions.	weekly at supportive properties	onsite	external healthcare professionals, generally delivered by consistent providers who consider residents their patients.	SIMS captures the providers that are onsite and which residents have participated	Providers may be billing external healthcare pay- ers for service, or are fi- nancing through block grants with associated reporting requirements.
Health Benefits Acquisition	Resident Services staff directly assist residents in accessing health or wellness entitlements such as Medicaid, Medicare, and state and locally funded health subsidy supports such as food stamps or WIC.	Follows from the health interview	onsite	Resident Services Coordinator/ Case Managers (may be a specialist if there is a direct funding stream)	activity captured in SIMS	No formal track- ing process for follow-up. More formalized pro- cess in supportive prop- erties.

Health Education and Risk Reduc- tion	Providing residents with general information and coaching in- tended to reduce risk for aquir- ing or exacerbating health or mental health conditions and/or promoting general wellness in- cluding diet/nutrition, hygiene, domestic violence, BH, and medication adherance. This ser- vice is generally delivered by non-clinical staff.	one/ one may flow from the health and wellness interview or classes/ group discussion	onsite	Resident services staff (RSS) or external part- ner	activity captured in SIMS	Groups likely provided by an external partner, Individual education provided by RSCs
Food Assistance	Coordination of food resources including on and off- site food banks, food pantries, summer lunch programs, and other meal programs delivering food to site.	Ongoing	onsite	Resident Services Coordinator/ Case Managers	activity captured in SIMS	
Physical Activity	Engaging adult residents in health and wellness activities that promote physical excersise	ad hoc, ongoing	onsite	both RSS and community partners	activity captured in SIMS	
WellBeing Checks (SH)	A systematic approach for moni- toring the basic health, safety and wellness of high needs residents through brief, regular contacts.	mostly a daily activity	onsite	Resident Services Coordinator/ Case Managers	activity captured in SIMS	

Transition plan- ning (to and from IP) (SH)	Creation of a transition plan for residents at high risk of hospitalization. The plan may in- clude a contingency plan in case the res- ident is incapacitated, primary family and medical contacts, advanced directives, and a "circle of sup- port" plan. This planning also in- cludes post-discharge activities.	As needed	onsite	Resident Services Coordinator/ Case Managers	activity captured in SIMS	most cases involves direct communication with a family member or dis- charge planner.
Referrals and Verification	Referral to services off-site, with follow-up on whether the referral was com- plete and if the resident needs further service.	As needed	onsite	Resident Services Coordinator/ Case Managers	SIMS captures information on # of referrals and where the res- ident was sent.	

Preservation of Affordable Housing Inc. Health-Related Services * many services currently in the design/testing phase

				Who provides	Qualifications of		
Service	Description	Frequency	Setting	the service?	Service provider?	Measurement	Notes
	POAH, through a grant, has proposed to construct onsite						
Onsite rehab/	rehab/ exercise facilities at			External			
exercise facilities	targeted properties.	tbd	Onsite	providers		tbd	
							While this
							concept was
							included in a
							grant proposal, it
							is not a focus at
							this time. More
	POAH, through a grant, has						focus is being
	proposed to construct onsite						placed on the
	Medical Exam space at targeted						Onsite re-
Onsite Medical	properties with basic Medical			External			hab/exercise
Exam space	equipment.	tbd	onsite	providers		tbd	facilities.
	POAH is pursuing a relationship			External			
	with a Visiting Nurse Association,			providers,			
	or Home Health Agency to ensure			mostly		Healthwise	
Partnership with	weekly prescense of a Health			volunteer,		1/2 time	
Visiting Nurse	Professional onsite at targeted			funding is a		nurse, 1/2 so-	
Association	properties.	weekly	Onsite	problem.	RN, LPN	cial worker	

Data Sharing with Primary Care Providers	POAH is exploring what data can be collected at the property and shared with Resident's Primary Care Provider to support PCP condition management efforts (i.e. blood pressure readings)	tbd	Onsite	Resident Services Staff	tbd	
FQHC partner- ships	POAH has partnered with FQHCs connecting them with targeted properties and facilitating the promotion of FQHC services to their residents.	ad hoc	Onsite	RSS coordinating with FQHC	tbd	
Onsite Health Screenings	Based on Resident Feedback POAH has facilitated onsite health screenings in partnership with community health providers including dental exams, Asthma Screening, blood pressure, blood sugar and BMI measurement.	ad hoc	Onsite	External Partners	resident participation is tracked.	
Onsite Health Education groups	POAH has partnered with com- munity health providers to pro- vide a youth focused education group on HIV/AIDS and Pregnan- cy prevention	dependant on relationships and funding sources.	onsite	External Partners	resident participation is tracked.	

Notes:

Scope of Resident Services programming is usually determined by legacy of the property, HUD 202 funding ect. Medicaid Waiver in OH similar to PACE but not as intensive. Less intensive than permanent supportive housing.

			Tieann-K	elated Services			
Service	Description	Frequency	Setting	Who provides the service?	Qualifications of Service provider?	Measurement	Notes
Health Education and Fitness	Ongoing programming offering physical exercise (fitness classes, walking clubs etc.) and ongoing Health Education (including nutrition and healthy eating groups) More informal, cooking clubs, not involved.	2 times a month based on Resident demand	Onsite	Community en- gagement spe- cialists (similar to Resident Service Coordinator) At the 5 pilot sites staff are special- ized.	Some community organizing/advocacy program management. No specific Health and wellness background. Resident Service Coordinators have Social work MSW background)	Monthly data collection related to program participation. Sign in sheets. Social Solutions will be used to track outcomes. 5 sites are focal points.	Health as not been an outcome area of focus. Services developed as resident interest.
Community- wide Health Events	One time events such as health Fairs with local healthcare providers in attendance; periodic health screenings for adults and youth	twice a year, one a quarter. Local hospital relation- ships drive frequency.	Onsite	Varies, Community Health providers.	Health professionals		
Support Services referrals	Working with residents to refer them to support services to assist with items such as Living Wills, Durable Healthcare Powers of Attorney, and transportation to health ser- vices.	ongoing	Onsite	Resident Service Coordinators	See description of Resident Services Coordinator below		

The Community Builders Inc. Health-Related Services

	_						
		as needed,					
		most often					
		as a result				tracking and	
		of health				measurement is	
		status im-				not a formalized	
		pacting				process. Some	
		other is-				RSCs use a data	
		sues such				system called	
		as em-				STEPS to do	
		ployment				tracking, but uti-	
		problems				lization is not	
		caused by				universal. Will	
Family and Indi-	Health referrals for mental or	health re-			See description of	migrate to social	
vidual Health	physical health including chronic	lated		Resident Service	Resident Services	solutions later	
Referrals	illnesses.	absences.	Onsite	Coordinators	Coordinator below	CY 2013.	
	Health Professionals come						
	onsite to provide diabetes	mostly					
Onsite Health	screenings, breast exams, dental	, during a					
Resources	exams, eye exams.	health fair.	Onsite	External Partner	Health professionals		
						Quarterly	
						reports with	
						aggregate usage	
						and the types of	
						issues that	
	TCB has partnered with Ceridian					people are	
	to extend EAP benefits to					helping. Out-	
EAP program	residents in their managed					reach campaign	
benefits	properties.	ongoing	Onsite	EAP provider		in 2013.	

Health Provider Partnerships	TCB has partnered with community health providers to offer special programming. In Worcester, MA they partner with UMASS Memorial Hospital to offer health education groups.	ad hoc	onsite	External Partner	Health professionals		
Clinical Educa- tion partner- ship.	Nursing clinical affiliation education, nurse faculty members working with residents to assess health issues. 1 year partnership. Focused on Diabetes. Cascade village in OH. Working with people identified with diabetes, pre-diabetic, 23 week program. 10 participants, 12 interested. recruitment began in July.		onsite	External Partner	Nursing students and their faculty.		
Resident News- letters Transition assis-	Health and Wellness information included in monthly resident Newsletters Staff will meet with residents and discharge planners at hospitals and nursing homes to help facilitate a resident's return	Monthly	Onsite Hospi- tal/Nur	Resident Service Coordinators Resident Service	See description of Resident Services Coordinator below See description of Resident Services	n/a	
tance	to a community setting	as needed	sing Home	Coordinators	Coordinator below		

Additional Notes:

Resident Service Coordination Qualifications: Most have college degrees, social work backgrounds, some with MSW.

Health-related Services Who provides **Qualifications of** Setting Service provider? Service Description Frequency the service? Measurement Notes Helping residents understand mail they've received about as needed Activities Medicare, help with dealing based on See Resident tracked in data with Co-pays, Medicaid system called Assistance with resident Service ervices Coordinator Benefits eligibility maintenance "Ask Online" Coordinators Qualifications below requests onsite Helping residents find healthcare providers, appointments ect. Linking to non-skilled care as well as skilled See Resident as needed care. Linking to Primary Care, based on Services Assistance with Linking to Homecare providers. resident Service Coordina-Coordinator Healthcare Follow-up post-discharge Qualifications below requests onsite tors Connection to meal delivery program, food bank, other food See Resident resources. Congregate meal Service Services Coordination of sites where food is provided by Coordinator Coordinators and an outside provider meals daily onsite external partners Qualifications below Coordination of Home Service Manage-Coordinator House Cleaning, Laundry, genment/Maker arranges with Services eral household chores as needed **External Partners** external partners onsite

National Church Residences

Monitoring of services being provided	Helping residents deal with community service providers, acting as an advocate for the resident in dealing with community service providers	as needed	onsite	Service Coordina- tors	See Resident Services Coordinator Qualifications below	
Health Educa- tion Programs	Educating on wellness: bring in educators/speakers educational forums: healthy eating, flu shots ect. Thousands of presentations a year.	varies by property	onsite	External Partners	Health Professionals	Service Coordinator arranges with external partners

Notes:

Service Coordinator Qualifications: Bachelors degree in social work/human service field or equivalent experience. Stationed onsite, available to residents to meet on concerns, Linking residents to services.

Case Management at "Previous Homeless" sites

Lower resident to staff ratio, Social work type people.

Skilled nursing services

NCR has programs that provide an "assisted living" level of care using clinical staff that are employed by NCR.

Current Services	High Value Ser-	Key Findings (why is it of	Outcomes	Measurement
	vice Areas	value)		
Health and Wellness Interview (Mercy) Assistance with Ben- efits (NCR) Resident Services Coordinator role (all providers)	Maintaining Health Coverage	 Up to 41% of children experienced some gap in Medicaid Coverage over a period of 3 years. (1) More than half of children that lose Medicaid coverage are still eligible(2) Gaps in coverage could lead to unnecessary administrative costs related to the repeated re-processing of eligible enrollees. (3) Adults and Children with unstable coverage experience access issues and report more unmet medical needs than people with continuous coverage. (4) The cost of care is sometimes higher after a gap in coverage due to untreated health conditions worsening during periods with no coverage. (5) 	Continuous Coverage results in: Improved Access to Care. Reduced Costs related to admin- istrative burdens of re-enrolling eligible members. Reduced Costs driven by contin- uous care management interven- tions uninterrupted by gaps in coverage.	 Key measures include: Medicaid Churn Rate. (Medicaid Agency) Volume of re-processed eligible applications (Medicaid Agency) Enrollment Churn Rate (MCO) Member Acquisition Cost (MCO) Care Management Outcomes (impacted by gaps in coverage) (MCO)

Appendix 3. High Value Service Matrix

Current Services	High Value Ser- vice Area	Key Findings (why is it of val-	Outcomes	Measurement
Referrals and Verifi- cation (Mercy) Health Needs As- sessment (Mercy) Family and Individual Health Referrals (TCB) Assistance with Healthcare (NCR) Monitoring of Ser- vices being provided (NCR) Role of Resident Ser- vice Coordinator (POAH) Support Services Re- ferrals (TCB)	Care Coordina- tion/ Navigation	 Lay community health workers have been shown to be effective in reducing care costs by re-directing patients to lower, more appro- priate levels of care. (6) Studies have shown that the inability to find Medicaid Provider, or to schedule ap- pointments has led to members forgoing needed care (7) Health Plans are measured on Clinical Metrics driven by Ac- cess to preventative Services 	Improved Access to care through identification of community providers and coordination of appointments. Decreased Costs through promotion of primary care and the medical home and an associated reduction in high cost acute service utilization.	 Key related measures include: HEDIS measures focused on Maternity Care HEDIS Emergency Room Utilization Rates % of Members with Health Risk Assessment within 90 days CAHPS measures related to Getting Needed Care and Getting Care Quickly.

Current Services	High Value Ser- vice Area	Key Findings (why is it of val- ue)	Outcomes	Measurement
Health Education and Risk Reduction (Mercy) Onsite Health Educa- tion Groups (POAH) Health Education and Fitness (TCB) Community-wide Health Events (TCB) Health Education Programs (NCR)	Health Educa- tion/ Risk Reduc- tion and Out- reach	 Patient Self- Management positive- ly impacts health out- comes and reduces costs (8) Poor Health Literacy negatively impacts health outcomes and cost. (9) Health Plans are measured on clinical metrics that are driven by patient behavior change (smoking, obe- sity, medication ad- herence) 	 Improved Quality driven by better self-management, behavior change, and health literacy. Decreased Cost driven by improved health outcomes. 	 Key related measures include: CAHPS- Medical assistance with smoking cessation HEDIS- Care for older adults including advance care planning, medication review, functional status assessment. HEDIS- Weight assessment and coun- seling for nutrition and physical activi- ty for children and adolescents. HEDIS Chronic Condition Manage- ment metrics. (Use of Appropriate Asthma Medication, Diabetes Care: HbA1C testing and control etc) HEDIS- Ambulatory, Inpatient and ED utilization rates
Transition Assistance (TCB) Transition Planning (Mercy)	Care Transitions Support	 Health Plans and Hospitals are more focused than before on preventing ReAdmissions (Penalties for Re-admissions) (10) Services Enriched Housing can provide supports to reinforce post-discharge care instructions and follow-up visits. (11) 	 Improved Quality driven by better adherence to post-discharge care instructions, care coordination and a holistic approach to care. Decreased Costs driven by prevention of costly re-admissions. Increased Access through facilitated coordination and communication with Outpatient Providers. 	 Key related measures include: STARS Re-admission rates (# of Re- admissions for the same condition within a defined time period) HEDIS- Outpatient follow-up follow- ing BH Hospitalizations. HEDIS- Inpatient Utilization Rates. (Total impatient discharges/ 1000 member months) HEDIS – ED Utilization rates for (Total number of visits/1000 member months

Current Services	High Value Ser- vice Area	Key Findings (why is it of val- ue)	Outcomes	Measurement
Skilled Homecare Services (NCR) Attendant care Services (NCR) External Partners providing preventa- tive Services includ- ing dental exams, health screenings, immunizations) (All providers)	Vice Area Direct Healthcare Services (Onsite)	 For seniors who do not live with or near their children or another family caregiver, in- vestments in Home and Community-Based services reduce the risk of Nursing Home admission (12) Effective Home Care reduces Acute Hospital Days and Hospital Re- admissions (13) Preventative Health Services drive acute care costs down. Health Plans are fo- cused on Access issues related to Preventative health (especially den- tal services) 	Increased Access achieved by bringing services to the pa- tient/resident. Decreased Costs through promo- tion of preventative care and an associated reduction in high cost acute service utilization.	 Key related measures include: HEDIS Children's Dental Care- Annual Visit HEDIS Immunization metrics HEDIS- Access to Preventive/Ambulatory Health Services metrics. HEDIS- Routine Health Screening Metrics HEDIS – Utilization rates in all care settings

Current Services	High Value Ser- vice Area	Key Findings (why is it of val- ue)	Outcomes	Measurement
All Providers	Access to Stable, Affordable Hous- ing	 Stable housing is a pre-requisite to effective healthcare management. Housing providers have unique access to their residents that health plans do not have. Safe, stable housing prevents high inpatient and Emergency room utilization (14) 	 Increased Access to preventative services as a result of more comprehensive engagement in the healthcare system. Decreased Costs driven by reductions in avoidable inpatient admissions and health complications. Improved Quality driven by better patient engagement when stable housing isn't a constant worry. 	 Key measures include: STARS and HEDIS metrics related to re-admission HEDIS Emergency Room Utilization Rates HEDIS- Inpatient Utilization Rates. (Total impatient discharges/ 1000 member months)

Literature

- (1) Gerry Lynn Fairbrother, Heidi Park Emerson and Lee Partridge "How Stable is Medicaid Coverage for Children?" Health Affairs, 26, no. 2 (2007): 520-528.
- (2) B.D. Sommers, "From Medicaid to Uninsured: Drop-out among Children in Public Insurance Programs" Health Services Research 40, no. 1 (2005): 59-78.
- (3) G. Fairbrother et al. "Costs of Enrolling Children in Medicaid and SCHIP" Health Affairs 23, no. 1(2004): 237-243.
- (4) K.D. Aiken, G.L. Freed, and M.M. Davis, "When Insurance Status Is Not Static: Insurance Transitions of Low Income Children and Implications for Health and Health Care," *Ambulatory Pediatrics* 4, no. 3 (2004): 237-243; J.Z. Ayanian et al., "Unmet Health Needs of Uninsured Adults in the United States," *Journal of the American Medical Association* 284, no. 16 (2000): 2061-2069; S.R. Collins et al., "Wages, Health Benefits, and Workers' Health," Issue Brief, October 2004, The Commonwealth Fund^{vi} (accessed 21 January 2013); and C. Schoen and C. Des Roches, "Uninsured and Unstably Insured: The Importance of Continuous Insurance Coverage," *Health Services Research* 35, no. 1, Part 2 (2000): 187-206.
- (5) L. Ku and D.C. Ross, *Staying Covered: The Importance of Retaining Health Insurance for Low-Income Families,* December 2002, The Commonwealth Fund^{vii} (accessed on 21 January 2013)
- (6) Whitley, Elizabeth M., Everhart, Rachel M., Wright, Richard A., "Measuring Return on Investment of Outreach by Community Health Workers" *Journal of Health Care for the Poor and Underserved*, Volume 17, Number 1 (2006) pp. 6-15
- (7) DeVoe, Jennifer E. et al. "Insurance+ Access (does not equal) Healthcare: Access for Low Income Families" Annals of Family Medicine 5, no. 6 (2007): 511-518.
- (8) Lorig, Kate R., Sobel, David S. et al, "Effect of a Self-Management Program on Patients with Chronic Disease" Effective Clinical Practice 4, no. 6 (2001): 256-262.
- (9) Williams, Mark V., Baker, David W. et al. "Relationship of Functional Health Literacy to Patient's Knowledge of Their Chronic Disease; A Study of Patients with Hypertension and Diabetes" Arch Intern Med 158 (1998): 166-172.
- (10) <u>http://www.nytimes.com/2012/11/27/health/hospitals-face-pressure-from-medicare-to-avert-readmissions.html?_r=0</u>
- (11) <u>http://www.advisory.com/Research/Cardiovascular-Roundtable/Cardiovascular-Rounds/2011/07/Studies-Show-Results-of-Transitional-Care-Models-Within-Real-World-Settings</u>
- (12) Muramatsu, Naoko, et al. "Risk of Nursing Home Admission Among Older Americans: Does States' Spending on Home-and Community-Based Services Matter?" J Gerontol B Psychol Sci Soc Sci. 2007 May ; 62(3): 169–S178.
- (13) Hughes, Susan L, et al. "Impact of Long Term Home Care on Hospital and Nursing Home Use and Cost" Health Services Research, 22, no. 1 (1987): 19-47.
- (14) ¹ Corporation for Supportive Housing (2012, October 10) "Frequent Users Programs Seeing Positive Early Results in Los Angeles" Retrieved from <u>http://www.csh.org/news/frequent-users-programs-seeing-early-results-in-los-angeles</u>(Accessed October 31, 2012) & Los Angeles Frequent Users Systems Engagement (FUSE) Program Retrieved from <u>http://www.csh.org/csh-solutions/community-work/systems-change/local-systems-change-work/los-angeles-fuse</u> (Accessed October 31, 2012).

¹http://www.commonwealthfund.org/~/media/Files/Publications/Issue%20Brief/2004/Oct/Wages%20%20Health%20Benefits%20%20and%20Workers%20Health th/788 Collins wageshltbenefits workershlt ib%20pdf.pdf

¹<u>http://www.commonwealthfund.org/~/media/Files/Publications/Fund%20Report/2002/Dec/Staying%20Covered%20%20The%20Importance%20of%20Retaining%20Health%20Insurance%20for%20Low%20Income%20Families/ku_stayingcovered_586%20pdf.pdf</u>

Appendix 4. Baseline Health and Wellness Outcomes Measures

SAHF Baseline Health and Wellness Outcomes Measures

In order to establish initial, high level outcomes metrics that demonstrate the Health and Wellness impact of affordable housing providers, HMA has identified the following metrics as a result of the SAHF convening held in February, and responses from the participating housing providers to the follow-up assignment related to identifying metrics for high value health and wellness service areas.

Collection of data on these high level metrics will help demonstrate that affordable housing providers are in a position to have even greater impacts on resident health status through the collaborative development of programs and services with key healthcare system stakeholders including Medicaid MCOs, Accountable Care Organizations, and Providers. This is the first step in building a business case around the role of Affordable Housing in Healthcare that will support new avenues of funding for housing providers from the healthcare system.

These metrics are designed to be basic enough that they could be collected by property management staff regardless of whether a property has a formal resident services program. In some cases the property manager could enlist residents as volunteers to collect information such as attendance at community events related to healthcare.

Category	Metric	Measurement	Outcome
 Maintaining Health Coverage 	 a. # and % of Residents with health coverage. b. # of residents who re- ceived information about how to obtain af- fordable health cover- age. c. # and % of Residents who report having a re- lationship with a PCP. 	Data Collected through Annual Resident Surveys and on Intake forms when a new resident moves into a property.	-Demonstrates that Affordable Housing Providers can effectively collect healthcare related data. -Identifies residents who would benefit from additional interven- tion by the Health System or from targeted initiatives by the Housing Provider. -Allows for research into the question of whether residents of affordable housing providers are more or less likely to have health coverage and/or a relationship with a PCP as compared to a control group.

2	Liesth Education /Dist.		H of booth information	Continued in Desident Continu	Demonstrates that Affaulably
2.	Health Education/Risk	a.	# of health information	Captured in Resident Service	-Demonstrates that Affordable
	Reduction/Outreach		events held at the prop-	tracking tools, or reported on a	Housing providers can offer
			erty per year	standardized form by property	unique access for potential part-
		b.	# of residents who at-	managers where there is no res-	ners to educate residents
			tended events.	ident services coordinator.	-Demonstrates resident willing-
		с.	Inventory of subject		ness to participate in such
			matter addressed.		events.
3.	Direct Healthcare Ser-	a.	# of residents receiving	Captured in Resident Service	-Demonstrates that Affordable
	vices (provided by Hous-		and type of health	tracking tools, or reported on a	Housing Properties can be an ef-
	ing provider OR a Com-		screenings conducted on	standardized form by property	fective "place of care"
	munity Partner)		site (e.g. blood pressure,	managers where there is no res-	-Provides an opportunity to en-
			diabetes, vision, BMI)	ident services coordinator.	courage further resident en-
		b.	# and type of immuniza-		gagement with more "perma-
			tions administered on-		nent sources of care"
			site (e.g. Influenza)		
		с.	# and type of onsite mo-		
			bile clinic visits (if appli-		
			cable)		
4.	Care Transitions support	a.	# of residents with re-	Self-reported hospitalizations	-Establishes Affordable Housing
			ported inpatient hospi-	captured in Resident Service	Providers as a stakeholder for
			talizations	tracking tools	care transitions initiatives.
		b.	# of residents who move		-Positions Affordable Housing
			to the property directly	Origination and Destination data	Providers to collaborate with
			from a healthcare set-	collected upon move-in or	Healthcare stakeholders to pre-
			ting.	move-out.	vent re-admission.
		C	# of residents leaving		-provides a baseline for the
		0.	the property who move		measurement of future targeted
			directly into a long term		interventions.
			healthcare setting.		
			neutricare setting.		

ig	are Coordination/ Nav- gation (where applica- le)	b.	 # of referrals to health- related community re- sources (by type). # of residents assisted with referrals. # of Healthcare-related resident concerns ad- dressed. 	Captured in Resident Services tracking tools at properties with Resident Services staff.	 -Demonstrates that Affordable Housing Providers with Resident Services programs effectively link residents with needed supports. - Demonstrates role Affordable Housing Providers can play in supporting a more person-
		d.	# of follow-up conducted after a referral has been made.		centered, holistic approach to care delivery. -Demonstrates that Resident Services staff are a trusted source of assistance for resi- dents