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CMCS Informational Bulletin

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SUBJECT: **Targeting Medicaid Super-Utilizers to Decrease Costs and Improve Quality**

The Medicaid program serves as the county's largest insurer, covering over 62 million Americans.[i] The Center for Medicaid and CHIP Services (CMCS) is committed to supporting innovative care delivery models with potential to improve care, improve health, and reduce costs.

Programs that target "super-utilizers" – beneficiaries with complex, unaddressed health issues and a history of frequent encounters with health care providers – demonstrate early promise of realizing these goals for Medicaid populations. CMCS is issuing this Informational Bulletin to share details of care delivery and payment models to help states and Medicaid providers better meet the complex needs of the highest utilizers of acute care in Medicaid populations.

Section I of this Bulletin describes the key policy decisions that states and providers with existing super-utilizer programs under Medicaid have considered in designing and implementing their programs. It presents a spectrum of possible approaches to address each policy decision based on interviews with state Medicaid officials and providers leading ten super-utilizer programs across the country. Section II provides details of existing Medicaid funding mechanisms and policies that can support super-utilizer programs.

As noted, this informational bulletin is based on interviews with ten super-utilizer programs, including six described in detail in the appendix. CMCS identified these programs based on conversations with CMS and HHS staff, program leaders, foundations, state Medicaid agencies, and outside experts. We appreciate that there are other programs and successful models and invite others to share their experiences and insights with us.

The case studies identified in this round of conversations were primarily oriented towards acute care. Most are not in capitated arrangements, although several programs have some intersection with managed care. We believe that super-utilizer programs also hold strong promise to address the needs of complex Medicaid beneficiaries in long term care settings and in managed care settings, but this informational bulletin summarizes our learning to date. We will continue to refine and develop the lessons on these issues and welcome feedback.

Interest in super-utilizer programs is increasing across the public and private sectors, creating new funding opportunities to support these programs. The Center for Medicare and Medicaid Innovation (CMMI) awarded Health Care Innovation Awards to two initiatives targeting Medicaid super-utilizers. Cooper University Hospital in New Jersey was awarded $2.8 million to expand the Camden Coalition super-utilizer program to serve over 1200 patents with estimated 3-year cost savings of $6.2 million. Rutgers, the State University of New Jersey, was awarded $14.4 million to test community-based super-utilizer models led by safety-net provider organizations in Pennsylvania, Colorado, Missouri, and California with estimated 3-year cost savings of $67.7 million. The first annual report for these CMMI awards will be in 2014. In addition, the Robert Wood Johnson Foundation is funding super-utilizer programs in six communities in New Jersey, Ohio, Maine, California, Massachusetts, and Michigan. These programs include community-based super-utilizer teams that focus on the highest utilizers in a specific geographic area and super-utilizer clinics/ambulatory Intensive Care Units (ICU) that care for patients with the highest utilization.

We look forward to continuing to work with states, providers, and other stakeholders to provide further assistance in developing new care models to improve quality and decrease costs for complex Medicaid beneficiaries. Please contact Stephen Cha, Chief Medical Officer at CMCS, at stephen.cha@cms.hhs.gov for questions about this Bulletin or to suggest additional resources or care models.

Background

A disproportionate share of health care spending in the United States is used to provide care to a relatively small group of patients, with 1% of the population accounting for 22 percent of total health care expenditures annually.[ii] The distribution of spending is even more uneven within Medicaid, with just 5 percent of Medicaid beneficiaries accounting for 54 percent of total Medicaid expenditures and1 percent of Medicaid beneficiaries accounting for 25 percent of total Medicaid expenditures.[iii] Among this top 1 percent, 83 percent have at least three chronic conditions and more than 60 percent have five or more chronic conditions.[iv]

This concentration of spending is expected. Individuals who suffer an acute illness or trauma or who have serious chronic conditions will have higher utilization and incur greater medical expenses compared to the rest of the population. However, there is growing evidence that some of these high-cost patients are not receiving coordinated care, preventive care or care in the most appropriate settings. “Super-utilizers” is the term used to refer to patients who accumulate large numbers of emergency department visits and hospital admissions which might have been prevented by relatively inexpensive early interventions and primary care.[v,vi]

Not surprisingly, many of the same patients continue to generate high costs every year, which provides further support for the value of intervention. The majority (nearly 60 percent) of Medicaid beneficiaries who were among the most expensive 10 percent in one year remained among the top 10 percent in two subsequent years.[vii] These patients may continue to generate high utilization because they receive fragmented care in more expensive acute care settings while lacking access to coordinated care in lower-cost primary care settings. In addition, they may have behavioral health conditions, including mental illness and substance use disorders, or face social barriers such as homelessness, which exacerbate their chronic medical illnesses.[viii]

Some state Medicaid agencies and provider organizations have implemented super-utilizer programs to better address the needs of this population, often by building on existing care management programs and working in close partnerships with primary care providers. By integrating treatment for mental illness and substance use disorders with social supports, programs are addressing the non-medical factors that may be driving high utilization in Medicaid populations. When effectively designed and implemented, these programs can greatly improve the lives of their patients while dramatically reducing their hospitalization and emergency department (ED) visit rates, and thus total medical spending.

SECTION I: KEY POLICY DECISIONS

The following set of key policy questions are presented for review by states and providers interested in launching super-utilizer programs. The state Medicaid officials, Medicaid managed care organizations, and providers leading super-utilizer programs interviewed by CMCS staff identified these as questions they needed to address in order to move forward with their programs.

This list is not meant to be comprehensive, but it provides a high-level overview that may be useful for planning purposes. Several approaches are presented as options for addressing each key policy question based on the experiences of the programs selected as case studies. For more information on any of these approaches, please read the case studies in the Appendix, which include state-level programs underway in Maine, North Carolina, and Vermont, as well as local programs led by CareOregon, Hennepin Health, and Spectrum Health.

1. Should we pursue a super-utilizer program in our state?

Naturally, a state should first consider the fundamental question of whether a super-utilizer program in their state is likely to be successful in improving beneficiary outcomes and reducing unnecessary spending. The core analysis involved in this decision involves (1) identifying the major super-utilizer subpopulations within the state; (2) identifying a provisional set of factors driving high-utilization among these populations; (3) assessing the feasibility of eliminating unnecessary utilization through a set of targeted interventions to address those factors; and

(4) estimating both the potential cost and savings associated with a program that is able to address those drivers and reduce unnecessary utilization.

States can begin this exercise by analyzing their claims data to identify the potential super-utilizer population—in particular, focusing on beneficiary subpopulations that may have higher-than-expected levels of acute care utilization given their diseases or conditions. By analyzing claims data, states can analyze the total costs of care and common diagnoses and treatments for super-utilizers in their state and start to quantify the number and cost of super-utilizers to the state Medicaid program. State Medicaid staff can also talk with providers, payers, and community organizations about the situations of the patients they have encountered to determine what features and patterns to look for, and then confirm these with analysis.

The state can then consider whether these super-utilizer populations represent "impactable" costs. Some people who may fall within a "super-utilizer" group by looking solely at expenditures, simply require expensive treatments that are unavoidable, such as certain traumatic injuries, or patients with cancer or other medical conditions that are costly to treat effectively. In contrast, "impactable" patients typically have a constellation of chronic medical illness, and sometimes, in addition, mental illness or substance use disorders, as well as social barriers driving high preventable utilization of care in acute care settings. A typical "impactable" patient may have multiple ED visits for mental illness or substance use disorders and/or multiple preventable admissions for poorly controlled chronic conditions (such as diabetes complications or heart failure exacerbations).

Given the nature of the "impactable" beneficiary populations, the state can then begin to identify the types of interventions that would be necessary to address the needs of these populations. Finally, the state can estimate the initial and recurring cost of establishing a program that is able to deliver these interventions, and compare that to the potential savings to the state in reduced utilization. A simple sensitivity analysis – comparing low, medium, and high estimates of both cost and potential savings can be performed to understand the general scenarios in which the program will be cost-saving.

Once a state decides to move forward with a super-utilizer intervention, it will need to invest significant resources up-front to build the necessary analytic infrastructure to support an effective, data-driven intervention. This infrastructure includes:

1. **Web-Based Provider Portals with Patient Data**: Allow providers and programs to sort their patients by the number of recent hospitalizations and ED visits so they can consider their patients with respect to their utilization patterns (primarily ED versus primarily inpatient) and develop interventions to meet their needs.

2. **Real-time Utilization Data:** A state health information exchange (HIE) delivers real-time data to programs on a daily basis. HIEs can include utilization data such as ED visits and inpatient admissions as well as clinical data such as discharge summaries, prescriptions filled, and laboratory and radiology results. By aggregating utilization data across hospitals, HIEs can create daily reports of current hospital inpatients classified as super-utilizers. Programs can use these daily reports to identify and engage potential clients during ED visits and hospitalizations, when they are most receptive to the intervention. Another option is for hospitals to provide daily ED and inpatient admission data to a centralized state database through admission/data/transfer feeds.

3. **Decision Support Tools**: Decision support tools can help care managers use these data to identify and prioritize high risk individuals. Some tools identify high risk individuals based on patterns such as frequent hospitalizations. Other tools can identify individuals with gaps in care, such as severe asthma without a controller medicine like inhaled corticosteroids.

2. What payers are involved?

Payers typically “own” the financial risk of the patient and are a natural place for states and providers to look for interest and partnership when establishing a super-utilizer program. The case studies in this Bulletin tended to involve primarily Medicaid populations only. However, Medicare, other commercial payers, large public or private organizations that serve as health care purchasers for employees, and even hospitals with large uncompensated care populations have also pursued these types of programs.

Developing a super-utilizer program focused on Medicaid populations offers the advantages of allowing states and managed care organizations to use existing Medicaid data systems and analytic tools and to design targeted services that meet the unique needs of Medicaid super-utilizers.

Partnering with other payers such as commercial insurers and Medicare may provide greater incentives to providers to refer to and partner with the super-utilizer program because more payers in the market are participating. States can seek opportunities to partner with similar initiatives and demonstrations targeting “super-utilizers” in Medicare and commercial markets. Collaborations with commercial insurers and Medicare can provide additional funding opportunities because improvements in care that reduce utilization for program clients will typically translate directly to savings to the payers. However, a super-utilizer program involving multiple payers may create data challenges in assembling an all-payer claims data base and logistical challenges in adapting program services to the different needs of different populations.

3. Who provides the services and what is their relationship to primary care providers?

One of the central questions to address is if the program will work in close partnership with primary care providers to enhance their capacity to care for people who are super-utilizers and provide alternative intensive services, or if the program will transfer these patients from primary care to a specialized care setting. Programs partnering closely with primary care practices use several approaches along a spectrum from highly centralized within the primary care practice to decentralized and based in the community.

Some programs establish intensive services separate from the providers, although with close interactions:

1. **Centralized**: Care managers or outreach workers employed or contracted by the state or the Medicaid managed care organization are embedded in primary care practices. Primary care practices are selected either because they serve a high volume of Medicaid patients or they are high-performing patient-centered medical homes with the infrastructure to work closely with the additional staff to address the needs of their most complex patients. (For examples, see the Vermont or CareOregon cases included in the Appendix.)

2. **Supportive Networks**: Not-for-profit, community-based organizations provide care managers to support a network of primary care practices in their region. The care managers travel between primary care practices and build capacity within multiple practices in their network to address the needs of their highest utilizers. (For an example, see the North Carolina case included in the Appendix.)

3. **Community-Based Care Teams**: Interdisciplinary teams including nurse care managers, social workers, and behavioral health workers based in communities visit patients in their homes and community settings. These teams target the highest utilizers in a geographic region but work with the primary care practices to identify referrals and coordinate care for patients. These teams may be organized by home health agencies, community-based organizations, or large community-based primary care practices such as federally-qualified health centers. (For an example, see the Maine case included in the Appendix.)

Other programs offer more comprehensive services in specialized care settings known as “ambulatory intensive care units.” These separate complex care clinics focus all their attention and resources on a small panel of high-utilizing patients. Programs can provide short-term interventions or take over care of the patients permanently:

1. **Short-Term Intervention in Super-utilizer Clinic:** Provides comprehensive medical, mental health, addiction treatment, and social services for a limited duration (typically 6 to 9 months). After identifying and treating triggers of high utilization and successfully decreasing utilization of unnecessary or avoidable care, this clinic sends patients back to their primary care and specialty care providers with individualized care plans. (For an example, see the Spectrum Health case included in the Appendix.)

2. **Permanent Ambulatory ICU:** Takes over care of patients when their primary care providers agree that the patients have complex needs beyond the capacity of traditional primary care. This specialized super-utilizer clinic has an interdisciplinary staff including physicians, nurse care managers, social workers, pharmacists and behavioral health specialists with extensive experience caring for medically and socially complex patients. The clinic provides comprehensive and intensive services at a much lower provider to patient ratio than traditional primary care. (For an example, see the Hennepin Health case included in the Appendix.)

4. What is the targeting strategy?

A critical element of any super-utilizer program is how it identifies potential patients. Existing programs employ a broad spectrum of approaches ranging from quantitative analysis of claims data and predictive modeling to referrals from providers supplemented by in-person screening interviews. Through its targeting strategy, a successful program will identify candidate patients that are both likely to experience high levels of costly but preventable utilization in the future *and* likely to be "impactable" – capable of being helped by the specific capabilities of the super-utilizer program.

Specific targeting approaches include:

1. **Targeting based on high observed-to-expected costs**: States or vendors may use home-grown or vendor provided risk-adjustment algorithms or "grouper" programs to analyze Medicaid claims data and identify expected costs for each patient in the eligible population. Patients with actual costs significantly higher than expected costs may be targeted on the theory that higher-than-expected costs are likely to be a marker for a failure to provide fully adequate care, and are thus an opportunity to eliminate unnecessary and preventable utilization through an appropriate intervention.

2. **Targeting specific patterns of care**: States may review historical claims data or real-time data from providers (available through a Health Information Exchange or other arrangement) to identify specific care patterns that indicate fragmented care, such as high utilization of EDs and high volume of preventable admissions combined with no primary care visits or visiting multiple primary care and specialty care providers over a relatively short time period.

3. **Targeting very high levels of utilization**: States may use historical or real-time data to identify patients just based on a high volume of inpatient admissions and/or ED visits over the course of the last six to 18 months. The number of ED visits and/or admissions used as the selection threshold differs widely depending on the size and complexity of the eligible population. Different thresholds can yield significantly different types of patients. Criteria based on a high volume of ED visits alone may identify patients with more severe co-existing

behavioral health conditions including substance use disorders, chronic pain, addiction, and mental illness.[ix] Including patients with multiple inpatient admissions may yield more patients with severe chronic medical illnesses.

Some programs have found that targeting based on high levels of spending alone is often a flawed approach. High levels of spending in the absence of excessively high rates of inpatient or outpatient care is often simply a marker of legitimate and necessary medical treatment for a high-cost condition, making it a poor targeting criterion (by itself) for super-utilizer programs aiming to reduce *unnecessary* use of medical resources.

4. **Targeting based on referrals and follow-up investigation:** Programs may accept referrals of potential patients from local providers – such as ED staff or primary care providers – or other community resources – such as social workers. Data sharing must meet state and federal confidentiality requirements. Once the program identifies potential patients, they often collect additional data by delving into the electronic medical record (EMRs). Some specialty providers in mental health and long-term care settings may not have the capacity to conduct deep data dives because they lack EMRs. Complementary or alternative approaches are for program staff to discuss potential participants with their primary care providers and to conduct in-depth interviews with clients. Some of these interviews can be quite extensive and systematic, lasting for several hours. This large up-front investment in time is seen as appropriate given the potential cost of on-boarding and dedicating significant program resources on a client that is ultimately not “impactable.”

5. **Excluding candidate clients with medical conditions associated with high but non-preventable costs:** A complement to several of the previous targeting strategies, used by several programs to avoid “false-positives” when identifying candidate patients, is to exclude beneficiaries with a history of specific medical conditions known to require costly medical treatment, such as cancer or acute trauma.

6. **Targeting by presence of risk factors associated with high, preventable costs:** Conversely, programs may target patients with a history of high cost and utilization that are also known to have psychosocial risk factors such as substance use disorders, homelessness, and mental illness.

7. **Targeting by community:** Targeting underserved areas can be an important factor to consider, since high utilization may be due to inadequate systems of care across a community, particularly with regard to primary care and behavioral health.

5. What services are provided?

The selection of services should be guided by the needs of the individuals selected for the program and access to primary care and behavioral health in the community. Effective super-utilizer programs excel in matching program services to the patient's needs.

Existing programs described in the case studies included in the Appendix offer an array of services in several categories: care coordination, in-person medical care, in-person behavioral health care, assistance with social needs, and health coaching. Care coordination refers to scheduling appointments and coordinating primary and specialty care. In-person medical care includes disease and medication management and in-person behavioral health care includes treatment of mental illness and substance use disorders. Assistance with social needs encompasses help obtaining housing, transportation, and food as well as financial assistance for medication co-pays. Health coaching includes self-management support and teaching clients how to navigate the health system.

Segmenting individuals into subpopulations (e.g., primarily ED versus primarily inpatient) allows programs to tailor their services to the individual's particular needs. Programs can develop different intervention pathways based on the utilization profile and needs of their patients. An intervention that emphasizes social services and behavioral health treatment may be ideal for individuals with high ED visit rates but without many inpatient admissions because individuals who are ED "super-utilizers" may have more addiction and substance use disorders and mental illness diagnoses. In contrast, an intervention emphasizing coordination of medical care and disease management might be best for people with low ED visit rates but a large number of inpatient admissions because individuals who are inpatient "super-utilizers" may be older with greater medical complexity and multiple poorly-controlled chronic medical conditions..

Traditional care management approaches that rely primarily on claims data that provides information on historical utilization and telephonic outreach and support have had limited success in addressing the needs for many super-utilizer populations.[x,xi] Effective super-utilizer programs use real-time data to identify potential patients, engage them while they are still at the hospital or in the ED, and follow-up with existing clients enrolled in the program in a timely way when they are hospitalized or visit an ED. Programs obtain real-time data either through HIEs or admission/discharge/transfer feeds from partnering hospitals. Program staff review real-time data on a daily basis, sending care managers to meet potential and existing clients while they are hospitalized and responding quickly to existing emergent needs.

Telephonic case management alone has had limited success, perhaps because people may be difficult to reach by phone and require more intensive, in-person interventions to build trust and provide needed supports.[xii,xiii] Many super-utilizer programs field interdisciplinary care management teams that create personalized care plans, engage in frequent, in-person outreach to clients, and connect clients with behavioral health and social services. Team members may need to meet with a potential client multiple times in-person in their home or community settings in order to build trust and establish a relationship with a client.

The capacity and infrastructure of primary care and behavioral health services in a community are key determinants of the scope of services provided by a super-utilizer program. A program in an impoverished community with a severe shortage of primary care and behavioral health providers may need to deliver intensive in-person medical and behavioral health care because patients have no other options for obtaining this care. At the other end of the spectrum, a program in a community with high-performing patient-centered medical homes and rich behavioral health resources can focus on providing comprehensive care coordination and health coaching.

The physical location where people will receive services is also an important element. For example, providing a range of services within the same physical facility such as an “ambulatory intensive care unit” reduces the need to make separate referrals and appointments, reducing the chance that patients miss important services. Deploying community-based outreach workers or teams who visit patients in their homes and community settings may allow a program to reach high risk individuals who are marginally housed, lack phones, and do not have established relationships with primary care providers. Outreach workers can use home-based models for adults with serious mental illness such as Assertive Community Treatment.[xiv]

After the program identifies the core services, it will need to carefully consider the type of staff (including training, skill set, and experience) who will be able to provide these services to patients most effectively. Programs can include a spectrum from care managers or community health workers only to a multi-disciplinary team that includes a combination of providers (doctors, nurse practitioners, and/or physician assistants), nurses, pharmacists, social workers, behavioral health specialists (psychiatrists, psychologists, mental health counselors, chemical dependency counselors, and/or peer specialists), care managers, health coaches, and/or community health workers. One key feature of successful programs is that they recruit staff with many years of experience working in the field with very vulnerable and complex patients.

Another key function for any super-utilizer program is establishing feedback loops, based on both quantitative data such as dashboards; and qualitative data, such as patient surveys to determine whether their needs are being better met. These kinds of feedback systems are essential to the rapid cycle improvement model that forms the core of successful super-utilizer interventions.

<u>6. How is the program funded?</u>

States should consider how to pay super-utilizer programs for services provided directly to Medicaid patients and how to fund other essential program components such as program planning, management and evaluation. The way in which care team organizations are paid can create powerful incentives, and should be considered carefully. The potential savings to the organizations that currently bear the risk for patients should be considered when developing the program payment structure as a way to achieve long-term sustainability. Aligned payers and providers are a potential source of funding because programs that improve care and reduce utilization for program clients will typically generate savings for the payers, but care must be taken to avoid duplication of funding streams.

Existing programs that serve Medicaid beneficiaries use several different payment mechanisms:

1. **Medicaid Case Management Payment:** Use fixed per-member-per-month (PMPM) Primary Care Case Management or other care coordination fee to fund care managers supporting primary care practices. (For examples, see the North Carolina and Vermont cases included in the Appendix.)

2. **Multi-Payer Case Management Payment:** The program receives Medicaid Health Home PMPM payments for Medicaid beneficiaries, Medicare PMPM payments from the Multi-Payer Advanced Primary Care Practice Demonstration and federally qualified health center (FQHC) Advanced Primary Care Practice Demonstration for Medicare beneficiaries, and PMPM payments from commercial insurers for privately insured individuals. The PMPM payments fund Community Care Teams working in partnership with Medicaid Health Homes, Advanced Primary Care Practices, and FQHCs. (For an example, see the Maine case included in the Appendix.)

3. **Per-Episode of Care Payment for Program Services:** The program receives a single payment for each episode for each insured individual from payors (including Medicaid managed care organizations). This payment covers all program costs for the specific duration and can be adjusted up or down based on the complexity of the individual’s condition(s) as represented by a risk score of some sort – for example, the cumulative number of medical, psychosocial, and behavioral conditions of the individual. (For an example, see the Spectrum Health case included in the Appendix.)

4. **Per-Member Per-Month Payment to Managed Care Organization (MCO):** The state Medicaid agency provides a risk-based capitation payment for each Medicaid client enrolled in an MCO which is part of a larger integrated delivery system. The MCO uses that payment to cover the costs of providing both medical and behavioral health services as well as the data analytics and care interventions for super-utilizer programs. (For an example, see the Hennepin Health case included in the Appendix.)

5. **Shared Savings for Total Cost of Care:** Similar in some respects to a fully capitated model, the state Medicaid agency enters into a partial risk-sharing arrangement with the care team

organization, providing a negotiated share of the savings if program clients incur lower-than-expected costs over a fixed time period (and perhaps penalizing the care team organization if clients incur higher-than-expected costs). For example, Minnesota's Integrated Care Model will implement Medicaid shared savings to hold providers accountable for care delivered by sharing in savings and losses for the total cost of care.

SECTION II: HOW MEDICAID CAN SUPPORT SUPER-UTILIZER PROGRAMS

Medicaid has a variety of existing authorities that can provide sustainable support to super-utilizer programs. An essential step is identifying the best funding pathway to support the design and development of the necessary statewide data and analytic infrastructure. Improving the interface of a state's Medicaid Management Information Systems (MMIS) (MMIS, which primarily contains Medicaid claims data) with a statewide HIE with robust Medicaid functionality is one method a state may use to develop an effective statewide super-utilizers program. States can either focusing on enhancing MMIS functionality on the Medicaid side or on building Medicaid functionality on the HIE side.

States committed to developing MMIS functionality should consider pursuing the enhanced 90 percent federal matching payment for Design, Development, and Implementation of MMIS. These enhanced federal payments can support the design and development of real-time admission/discharge/transfer (ADT) data feeds, data analytic tools, and MMIS decision support systems.

States interested in enhancing Medicaid functionality on the HIE side should consider pursuing the enhanced 90 percent federal matching payment available to cover Medicaid's "fair share" of design, development, and implementation costs associated with the HIE's ability to help providers achieve the requirements for Meaningful Use. The Health Information Technology (HITECH) funding under the Recovery Act can also support on-boarding costs charged to Medicaid EHR Incentive Program providers and hospitals through subsidies.

An additional option, administrative contracts, can support utilization review and data analysis to identify the "impactable" population of individuals who are super-utilizers.

Medicaid Health Homes and Integrated Care Models can support a variety of components that are central to successful super-utilizer programs such as interdisciplinary care teams and comprehensive care coordination services while providing flexibility for states to develop tiered rate methodologies. Targeted Case Management can enhance other models such as Health Homes or traditional managed care because states can target intensive case management services to specific complex populations.

Finally, CMS has worked to enhance data resources for states that are focused on Medicare-Medicaid enrollees.

1. *Enhanced Federal Match for Design, Development, and Implementation of MMIS*

States that modify their MMIS to support real-time data analytics for super-utilizer programs can receive an enhanced 90 percent federal matching payment under section 1903(a)(3) of the Social Security Act (the Act) for design, development, and installation of the new MMIS subsystem or component. Enhancements such as upgrading or augmenting MMIS or MMIS decision support systems or adding MMIS components including a data warehouse, advanced query and report tools, and power programmers can qualify for the enhanced 90 percent federal matching payment. These enhancements must be under the state Medicaid agency and integral to an approved MMIS system that has been certified by CMS. The 90 percent federal matching payment also applies to all staff or contractors directly involved in the design and installation of the MMIS or its subsystem.

MMIS funding can support the data infrastructure for super-utilizer programs by developing admission/data/transfer feeds that are delivered to providers and programs in real-time or via batch transfers every 24 hours. States could also add analytic tools to MMIS that enable providers to better understand and characterize their Medicaid super-utilizer populations.

For continuing operations and maintenance of MMIS, states can receive a 75 percent federal matching payment. All professional staff or contractors directly involved in operating and maintaining the MMIS or its subsystem can qualify for the 75 percent matching payment (including systems managers, programmers, and other IT staff) under section 1903(a)(3) of the Act.

Medicaid staff who use the MMIS data and reports to operate and manage super-utilizer programs can receive the 50 percent federal match for Administrative Contracts described below. One exception is for power programmers who write the code that is used to execute the reports in the system. Because they are considered to be directly developing, operating, and maintaining the system, power programmers qualify for enhanced MMIS funding (90 percent federal match during design and installation phases and 75 percent federal match during maintenance and operations phase). If staff are both developing the reports and using them in a program management function, their costs should be allocated according to the percent of time spent on MMIS development work versus program management functions.

An advantage of obtaining the enhanced MMIS funding to develop the data infrastructure for super-utilizer programs is that states can obtain 75 percent Federal Financial Participation (FFP) for ongoing maintenance and operations (M&O). In addition, states can integrate real-time utilization data with the Medicaid claims data in their MMIS and develop robust analytic tools focused on the Medicaid super-utilizer population. This pathway may be optimal for super-utilizer programs focused on Medicaid fee-for-service populations.

In order to be eligible for the enhanced federal match rate, a state's MMIS must comply with the seven standards and conditions listed in the Federal Register, Vol. 76, No. 75, dated April 19,

2011. States must submit an Advanced Planning Document to CMS for review and prior approval in order to receive this funding.

2. Enhanced Federal Match for Health Information Exchanges

State Medicaid agencies can receive enhanced 90 percent FFP for their administration and oversight of the Medicaid EHR incentive program, including reasonable administrative expenses related to their efforts to promote the adoption of HIE, under the HITECH Act. A State Medicaid Director's (SMD) Letter on August 17, 2010, clarified that states can receive the enhanced 90 percent FFP for Medicaid's fair share of the costs to design, develop and implement statewide Health Information Exchanges. It also describes CMS' expectations of state Medicaid agencies' roles in promoting and participating in HIEs. [xv]

Please note that the participation of the state Medicaid agency in a state-designated or private HIE, as well as the decision to apply for this enhanced FFP, is optional and at the discretion of the state.

States could use the enhanced 90 percent federal match for Medicaid "fair share of costs" to build functionality into their HIE. As outlined in a second SMD Letter on May 18, 2011, that provides additional guidance on state expenditures related to the development and sustaining of HIEs, "funding from Medicaid should be part of an overall financial plan that leverages multiple funding sources to develop and maintain HIEs between hospitals, health systems, and individual practices." [xvi]

States must work with commercial payers, sister agencies, and health systems to pay their fair share of costs to design and develop the HIE, if they, too, will benefit from the development of the functionality.

An advantage of obtaining the HITECH funding to support the enhancement of a HIE to support a super-utilizers program is that the 90 percent FFP may be used to subsidize the on-boarding costs of eligible providers and eligible hospitals participating in the Medicaid EHR incentive program on a time limited basis. An HIE is only robust if many providers are participating, and this is especially important for identifying super-utilizers, who often access multiple care settings across a region. This funding can provide incentives that helps an HIE reach the "tipping point", generating more comprehensive utilization data to identify and engage super-utilizers. In addition, the HIE is ideal for a multi-payer super-utilizer program because it is not limited to Medicaid and can also identify super-utilizers in the commercially insured and Medicare populations.

It is important to note that the 90 percent enhanced federal match under HITECH funding is only meant to support time-limited activities such as HIE design, development, and implementation (DDI). Once the HIE moves to maintenance and operations, it will need to sustain itself without this additional federal funding. A sustainability model is required by CMS before Medicaid HITECH funds can be approved for disbursement.

States are required to submit Advanced Planning Documents and state Medicaid HIT Plans to CMS that clearly describe vision and direction of the state in regard to HIE, along with their funding requests, their cost allocation, measurable milestones, any MOUs to other agencies, and documented agreements with other payers to pay their share. Additionally, any request for proposal (RFP) or contract issued from this funding requires federal approval as well. States are encouraged to consult with CMS before submitting these plans to obtain technical assistance regarding the funding options and to identify whether certain components are more appropriate to receive MMIS funding and/or HITECH funding.

3. Administrative Contracts

States could expand their existing contracts to conduct ongoing utilization review and data analysis to support super-utilizer programs through an Administrative Contract under Section 1903(a)(7) of the Act and receive a 50 percent federal matching payment. These costs must be “necessary for the proper and efficient administration of the state plan” in accordance with section 1903(a)(7). These administrative costs cannot duplicate costs that are paid through any source and must not duplicate activities that are already offered through other programs or entities.

Only state Medicaid agencies are allowed to claim the matching payment for Administrative Claims from CMS. Therefore, a non-profit organization that leads a community-based super-utilizer program would need to partner with their state Medicaid agency in a contractual arrangement to become a vendor of the state in order to assist with data analysis and utilization review activities. A contract would need to clearly state the specific data collection, analytic, and utilization review activities performed by the organization that are not duplicative of existing efforts being conducted by the state Medicaid agency and meet the requirements for the proper and efficient administration of the Medicaid program.

4. Medicaid Health Homes

Health Homes authorized under section 2703 of the Affordable Care Act are a promising option to support super-utilizer programs because they support interdisciplinary care teams and a comprehensive set of services including many of the core components of super-utilizer programs. States receive an enhanced 90 percent federal matching payment for the first eight quarters of operation of the Medicaid Health Home. The enhanced matching payment is tied to the Health Home’s operation, not to individual beneficiaries. After the first eight quarters, Health Homes receive the state’s regular federal matching payment.

Health Home payments can support care delivered by interdisciplinary teams with members including physicians, nurse care coordinators, nutritionists, social workers, behavioral health professionals, or other professionals designated by the state and approved by the Secretary. Health Home services include comprehensive care management, care coordination and health promotion, comprehensive transitional care from inpatient to other settings, individual and family support, referral to community and social support services and health information technology.[xvii]

Under section 1945(h)(2) of the Act, a state can select a Health Home population that has one persistent and persistent mental health condition, two or more chronic conditions, or one chronic condition and is at risk for a second. The chronic conditions specified in section 1945(h)(2) include a mental health condition, a substance use disorder, asthma, diabetes, heart disease, HIV/AIDS and BMI > 25. The Secretary has flexibility to expand the list of chronic conditions.

States may target the highest cost beneficiaries with the most severe conditions in the Health Home population under CMS interpretation of current statute. According to the CMS letter to state Medicaid directors on November, 16, 2010: "The State may elect in its State plan to provide Health Home services to individuals eligible to receive Health Home services based on all the chronic conditions listed in the statute, or provide Health Home services to individuals with particular chronic conditions. While all individuals served must meet the minimum statutory criteria, States may elect to target the population to individuals with higher numbers or severity of chronic or mental health conditions."[xviii]

A state could select a population for its Health Homes that includes the majority of the individuals fitting its definition of super-utilizers after it determines which chronic and mental health conditions are most prevalent among its most expensive beneficiaries, and which conditions are most impactable. States have already obtained Health Home state plan amendments (SPAs) that include target populations with high cost conditions such as developmental disabilities and intellectual disabilities.[xix] Once a state obtains approval for its Health Home SPA, the state could enroll its highest cost, highest need beneficiaries with the most severe conditions into its Health Homes first. States are not required to actively assign all eligible individuals who meet their criteria to Health Homes but they cannot limit Health Homes to only the highest cost beneficiaries with the most severe conditions. The state would need to ensure that the Health Home is available to all eligible individuals who are referred to or interested in receiving Health Home services.

States can also structure payment methodologies that incentivize Health Homes to deliver more intensive care management services to the most complex patients who have the greatest need.[xx] The CMS letter to state Medicaid directors on November 16, 2010, states, “section 1945(c)(2)(A) of the Act expressly permits states to structure a tiered payment methodology that accounts for the severity of each individual’s chronic conditions and the “capabilities” of the designated provider, the team of health care professionals operating with the designated provider, or the health team.”

States have developed different approaches to make Health Home payments for eligible beneficiaries enrolled in Medicaid managed care. Two states are currently making payments to the managed care plans, and two states pay the providers directly for providing Health Home services.[xxi]

5. Integrated Care Models

Integrated Care Models (ICMs) are care delivery and payment models that reward coordinated, high quality care. ICMs can include patient-centered medical homes, accountable care organizations, or other models that emphasize person-centered, continuous, coordinated, and comprehensive care. CMCS released guidance on how states can implement ICMs in a Medicaid fee-for-service environment, including a new state plan amendment option that allows states to move more quickly.[xxii] Future guidance is forthcoming on how to implement ICMs for Medicaid managed care populations.

ICMs provide an avenue for states to develop payment mechanisms that support intensive care interventions and reward providers who lower costs and improve quality for their highest utilizers. Section 1905(t) of the Act authorizes coordinating, locating and monitoring activities that may support Integrated Care Models (ICMs). Under the Medicaid state plan, ICM activities must be available to all eligible individuals; however, states could have a tiered reimbursement structure that pays providers more for caring for beneficiaries with complex conditions and care needs. According to the State Medicaid Director's Letter released on July 10, 2011, "states may vary payments to providers based on the level of activity/service that will occur within a quarter and/or variations in the costs of delivering the care coordination activities." The letter clarifies that "a state could implement a tiered rate methodology that pays one rate for providers who maintain a staff of care coordinators."[xxiii]

A state that implements an ICM could also develop a shared savings methodology that calculates the total cost of care associated with super-utilizers and incentivizes providers to reduce population cost (and increase quality) specifically for the super-utilizers within the state. For a state to employ this option under the Medicaid state plan, it must offer and reimburse coordinating, locating and monitoring services for all individuals eligible under the state plan. States that wish to target ICM activities to specific populations or within limited geographic regions would need to use section 1915(b) or 1115(a) authority to waive state plan requirements. States could use this authority to target services to individuals with high needs who have characteristics typically associated with super-utilizers or focus on a locality with a high prevalence of Medicaid utilization.

6. Targeted Case Management

Under Section 1915(g) of the Act, states could add an optional Targeted Case Management (TCM) service to the state plan to support care managers that address the needs of super-utilizers. Under Section 1915(g), "the State may limit the case managers available with respect to case management services for eligible individuals with developmental disabilities or with chronic mental illness." TCM could be used to assist super-utilizers with mental health, substance use disorders, and/or developmental disabilities gain access to needed medical, social, educational, and other services. Case managers assess individuals' needs, develop person-centered care plans, refer individuals to services, and monitor receipt of services and the need for care plan changes.

Targeted case management services may employ a multi-disciplinary team approach to serve super-utilizers. Case managers coordinate the team's resources and expertise to inform a comprehensive, medical, educational, and social assessment as well as to create and implement a comprehensive plan of care. States may develop differential rates based on case or task complexity to reflect the need to draw on additional resources to develop and implement comprehensive assessments, care plans, and follow through activities.

TCM adds value to other models such as Health Homes or traditional managed care models. As a stand-alone service, it would be difficult to achieve the efficiencies of managed care or to take advantage of shared savings available under ICMs. TCM services are reimbursed at the traditional state-specific FMAP rate, which is less generous than the enhanced 90 percent federal matching payment available for the first eight quarters of operation of Medicaid Health Homes. After the first eight quarters, Health Homes are reimbursed at the same state-specific federal medical assistance percentage rate that states receive for TCM. One advantage of TCM is that the authority for states to target case management activities to specific populations or within limited geographic regions is built into the statutory provision so there is no need for the state to obtain a section 1915(b) waiver.

7. Medicare Data Access and Assistance

For states designing initiatives focused on Medicare-Medicaid enrollees, the Medicare Medicaid Coordination Office (MMCO) provides both access and no-fee assistance with Medicare Parts A, B, and D data for the support of care coordination efforts. MMCO's State Data Resource Center (SDRC) provides state Medicaid agency staff direct access to Medicare data experts, who can assist in requesting and using Medicare data as part of those agencies' care coordination activities. The State Data Resource Center (SDRC) established a SDRC website: www.statedataresourcecenter.com. The website houses a range of information on the Medicare data available to agencies, the no-fee process for requesting that data, frequently asked questions about the data, and use restrictions.

Assistance from a team of Medicare data experts through SDRC is currently available. States may visit the SDRC Website at www.statedataresourcecenter.com for assistance with:

- Understanding Medicare data and its applicability to an agency's proposed intended use for care coordination;

- Obtaining Medicare data from CMS, including gaining an approved Data Use Agreement or addenda;
- Linking databases and creating analytic databases;
- Addressing anomalies within CMS data—including assisting agencies who may or may not be familiar with the data available at CMS and its use; and
- Using available data, based on an agency's priorities for care coordination.

States may also find the following specialized data useful:

- Medicare-Medicaid Linked Enrollee Analytic Data Source (MMLEADS) is a suite of 2006-2009 linked data files for Medicare-Medicaid eligibility, enrollment, utilization, and expenditure data. This data source includes health care information for all dually eligible Medicare-Medicaid enrollees, and, for comparison purposes, all Medicare-only beneficiaries and Medicaid-only beneficiaries with disabilities. This is available by request through the SDRC.

- Chronic Condition Data Warehouse (CCW) clinical condition indicators, or "flags", have been developed from the claims data for 27 chronic conditions that were deemed to be relevant to the study of Medicare-only beneficiaries. The CCW is CMS's database to facilitate research on chronic illness in the Medicare population and ultimately improve the quality of care and reduce program spending. With the assistance of subject matter experts, MMCO developed and made available additional CCW flags for 8 mental health conditions, tobacco use, and 14 conditions related to intellectual, developmental, and physical disability. More information on these flags is available at: www.ccwdata.org.

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CMCS Informational Bulletin Appendix: Super-Utilizer Program Case Studies

CareOregon Community Care Program

CareOregon is a non-profit health services organization (and former Medicaid managed care organization) that serves low income Medicaid recipients across the state of Oregon by providing health plan services, education, and community support to its partners and their members.. Approximately fifty percent of the Medicaid residents served by CareOregon receive primary care in safety-net primary care practices, including 12 Federally Qualified Health Centers (FQHCs). CareOregon's160,000 members include pregnant women, children, aged and disabled individuals, and dual eligibles. A high prevalence of mental illness and addiction characterizes CareOregon's adult Medicaid population with 21 percent of adults diagnosed with at least one chronic medical condition and a substance abuse disorder or complex mental illness (including schizophrenia, schizoaffective disorder, or bipolar depression).

CareOregon is one of eleven partner members of Health Share of Oregon, a Coordinated Care Organization (CCO) that receives a global budget from the state of Oregon to provide integrated physical, mental, and dental care to a population of 160,000 Medicaid beneficiaries across the three county region around Portland, Oregon. Oregon's new Medicaid CCOs were legislatively created to bring together all parts of the health care delivery system, from providers and health systems to community service agencies, public health and consumers to "transform" health care through new care delivery models and payment incentives with the goal of achieving lower costs and improving outcomes. Oregon's unique form of mandated "accountable care" has drawn a great deal of attention as a potential model for national health care reform.

In 2011, CareOregon developed the Community Care Program, a model that embeds experienced community outreach workers into high-performing primary care practices and clinically-relevant specialty practices to enhance their ability to provide individualized "high touch" support to their super-utilizers. These "engagement specialists" develop meaningful partnerships with high-cost patients by working with them in the shelters, homes, or foster care settings where they live and visiting them in the Emergency Department (ED) and hospital.

The program was initially piloted by CareOregon in partnership with two FQHCs that are high-performing Medicaid Health Homes with significant volumes of super-utilizers using funding from CareOregon's administrative costs. A Healthcare Innovation Challenge Award from the Center for Medicare and Medicaid Innovation provided funding for Health Share of Oregon to expand the program to employ 14 CareOregon community outreach workers who are currently working with 12 primary care practices and 2 specialty practices. The CMMI Healthcare Innovation Challenge Award is also allowing Health Share to build on CareOregon's experience to pilot the use of community outreach workers and other non-traditional health care workers in a variety of non-primary care settings including a regional Emergency Medical Response System and a large community ED. HealthShare intends to scale up to approximately 40 outreach workers by 2015.

Clients are invited to join the program if they have at least one non-obstetric hospital admission and/or six or more ED visits in the past year and are already receiving care from a primary care or specialty care practice in Health Share's network. Potential clients are identified using real-time hospital census and ED census data combined with provider knowledge and input. Providers can refer patients who they believe are on a steady trajectory of declining health, will likely end up in the ED or hospital without more intensive assistance, and have modifiable risk factors. CareOregon has found that clients are most likely to have persistent high costs if they have any of the following risk factors: admissions related to chronic conditions and co-morbidities, acuity and utilization patterns increasing over time, mental illness or substance abuse disorders, social barriers, a history of trauma, or cognitive impairments.

Outreach workers visit potential clients in their homes or communities to initiate a relationship, identify fit for the program, and invite clients to join the program. The program is voluntary and clients can decline to participate. Outreach workers often accompany clients to appointments with specialists or mental health providers, and assist in coordinating these visits with the Health Home team. Although the Health Home is the hub of the outreach workers' daily operations, CareOregon and Health Share provide a "community of practice" environment by linking the outreach workers through: 1) weekly multidisciplinary huddles to discuss challenging cases with peer colleagues and clinical consultants (nurse, psychiatrist, pharmacist), 2) standardized tools, workflows, and documentation guidelines, 3) competency-based trainings, and 4) centralized supervision and performance monitoring. Clients are typically engaged with their outreach worker for six to nine months, although a small number of clients remain in the program for longer periods of time, particularly if they are nearing the end of their life.

CareOregon identified the following root causes of high utilization by interviewing clients: childhood and life trauma that often translates into distrust of health care providers, negative prior experiences with the health care system, co-existing substance use disorders, mental illness, mild cognitive deficits, lack of timely access to psychiatric assessment and mental health respite services, extensive care coordination needs, and inability to afford or access services critical to optimal health and self-management (i.e. transportation, stable housing, healthy food, medications, place to exercise, etc.) Outreach workers use a trauma recovery model to address these root causes, providing trauma-informed care while addressing the social determinants that often drive high utilization.

The program hires outreach workers based on behavioral interviewing; the only requirements are a college degree and two years of experience with outreach to vulnerable populations. Increasingly, they are hiring outreach workers with experience working in behavioral health or social services. Due to the complexity of the super-utilizer population, which is characterized by complex medical co-morbidities exacerbated by poverty, unstable housing, cognitive impairment, substance abuse, and/or mental illness, the case load for each outreach worker is approximately 30 clients, with only 20 in active status.

Outreach workers collaborate closely with other health home team members (clinical pharmacists, mental health providers, psychiatrists, chemical dependency counselors, and peer wellness specialists) to develop and implement a highly individualized care plan for each client. Outreach workers might provide any of the following services based on their client’s needs: motivational interviewing, client advocacy, role modeling of self-advocacy and relational skills, assistance with complex problem solving related to living in poverty with multiple health issues, and/or assistance navigating the health care system including arranging transportation support, care coordination, health literacy education, self-management skill development, and coaching including medication adherence support

CareOregon receives real-time encounter data feeds with ED visits and hospital admissions that are transmitted daily from most of the hospital systems in their region. These are used for case finding, but are triaged first by a clinically-trained triage coordinator to prioritize patients with potentially avoidable admissions and consistent patterns of utilization. Historical claims data also are used for program planning to examine the proportion of high utilizing members that are assigned and receiving care from particular primary care clinics to help identify which clinics may be most suitable for the program, and what the staffing needs are for these clinics.

CareOregon also has developed a web-based registry and tracking system which is used by outreach workers for five primary purposes:

1. Create and maintain lists of patients in the program, for purposes of tracking client status.
2. Document client encounters, which allows collection of productivity and programmatic data (including time spent in transit, time spent on each task, etc.)
3. Provides a 12 month claims-based profile for each client (including primary care services, ED visits, hospital admissions, and pharmacy fills.)
4. Alerts of other community-based programs clients may be enrolled in to assist in coordination and non-duplication across programs, to the degree the data systems are integrated (programs funded by the CMMI award are already integrated.)
5. Alerts via secure e-mail when their clients visit the ED or are admitted to the hospital.

CareOregon is in the process of creating dashboards to allow for continuous feedback, based in part on quarterly reports required by CMS as part of the Medicaid section 1115 demonstration waiver program in Oregon. These reports contain information on utilization, engagement, caseload capacity, turnover, as well as performance on quality metrics. CareOregon is also examining the role for case-based learning and qualitative data for purposes of learning, improving and evolving the program.

In July 2013, CareOregon plans to complete an evaluation of the program's effect on health care cost and utilization for its members who have engaged in the program. They intend to use a smaller comparison group of eligible clients who have declined participation in the program. Individual client and small population utilization trends have been promising but until recently, the program was not at an appropriate scale to conduct a robust evaluation.

For more information about the CareOregon Community Care Program, please contact Rebecca Ramsay at ramsayr@careoregon.org.

Community Care of North Carolina Priority Patients Program and Transitional Care Program [1]

Community Care of North Carolina (CCNC) is a statewide program established in 1998 by the North Carolina Department of Health and Human Services to provide population health management for Medicaid beneficiaries; to support and engage primary care providers and reduce preventable ED utilization; and to help coordinate a comprehensive approach to care through Medical Homes led by primary care providers.

The state uses a fee-for-service model to reimburse providers for care provided to Medicaid beneficiaries, so reductions in unnecessary utilization among this population translate directly to savings to the state Medicaid budget. The CCNC program is multi-faceted, with a number of program components that target and support high-utilizer subpopulations.

The program comprises 14 geographically distributed "community networks" responsible for working closely with beneficiaries and local providers. In addition to administrative and operational staff, CCNC networks employ a number of care managers (usually nurses or social workers), a pharmacist, a psychiatrist and a behavioral social worker. The program also maintains a central office, which hosts a program office, call center and informatics center responsible for producing the majority of the analytics needed to support day-to-day network activities. The program provides a fixed per-member-per-month (PMPM) fee of between $2.50 and $5 to primary care providers to serve as Medical Homes, with requirements that they offer 24-hours-a-day/7-days-a-week availability and coordinate with community network staff. Primary care providers participating in CCNC deliver about 90 percent of North Carolina's Medicaid primary care.

The CCNC "Informatics Center" is an electronic data exchange infrastructure maintained in connection with health care quality initiatives for the state of North Carolina and the CCNC

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[1] The North Carolina Department of Health and Human Services was unable to provide feedback on this case at this time. They noted that the state legislature, in the upcoming state budget, has proposed further analyses of the cost-effectiveness and outcomes for CCNC, but nothing has been finalized to date.

provider community. Currently, the Informatics Center receives statewide Medicaid claims data updated weekly. Additional data sources include: real-time hospital admission/discharge/transfer data from 57 North Carolina hospitals, laboratory results from three large lab services providers, state immunization registry and birth certificate data, and additional clinical data abstracted from the primary care medical record or documented by care managers in the course of patient care. Information is accessed by the Community Care networks to identify patients in need of care coordination; to facilitate disease management, population management, and pharmacy management initiatives; to enable communication of key health information across settings of care; to monitor cost and utilization outcomes; and to monitor quality of care and provide performance feedback at the patient, practice, county and network level.

Of North Carolina's approximately 150 hospitals, 56 provide CCNC with twice-a-day ADT (admission/discharge/transfer) feeds detailing clinical encounters with program participants, while many others provide access to hospital information systems. Many participating hospitals also host embedded CCNC care managers.

While not formally affiliated with the CCNC program, mental health agencies, faith-based organizations, Area Agencies on Aging, disability centers, and other community or regional organizations are often engaged by network staff to provide additional local support to clients as necessary.

The CCNC program serves 1.3 million of North Carolina's approximately 1.8 million Medicaid beneficiaries. Roughly 80 percent of the CCNC population is comprised of children with relatively few medical needs, while the adult population includes many individuals with complex clinical and behavioral health needs, including approximately 300,000 aged, blind or disabled (ABD) beneficiaries. Forty-one percent of ABD beneficiaries have at least one type of mental illness, developmental disability, or substance use disorder.

While CCNC offers a number of services that contribute to reductions in unnecessary utilization for all participants, one CCNC component in particular – the CCNC Priority Patients program, initiated in 2011 – focuses exclusively on "super-utilizers" within the broader CCNC population. Approximately five percent of the overall CCNC population receives services through the Priority Patients program at any given time. Candidates for the Priority Patients program are identified in several ways:

1. CCNC analyzes claims data to estimate expected spending for each beneficiary given his or her individual clinical history. Targeted beneficiaries are those with the largest difference between actual and expected spending for potentially preventable inpatient admissions or ED visits.
2. If beneficiaries do not have sufficient historical claims data to produce an expected spending estimate – for example, dual eligibles for whom only partial claims data is available to CCNC – the program targets beneficiaries with one or more hospital admissions in the last six months, two or more ED visits in the last six months, and

evidence of at least one of the following conditions: congestive heart failure, diabetes, ischemic vascular disease, asthma, or chronic obstructive pulmonary disease.

3. Direct referrals of patients from local providers.
4. Patients with unmet chronic pain needs are identified based on a clinical history of more than 12 narcotic prescriptions filled and more than 10 pain-related ED visits in the last 12 months.

CCNC utilizes 3M™ Health Information System's Clinical Risk Groups (CRGs) to risk-adjust performance measures and identify high-opportunity patients. CRGs are the basis of a hierarchical clinical model that uses standard claims data – including inpatient, outpatient, physician and pharmacy data – to assign each patient to a single, mutually exclusive risk category. CCNC uses CRGs to identify priority patients with more historical hospital costs than would be expected given their clinical burden. The Priority Patient List (PPL) methodology sorts all of the non-dual Medicaid enrollees into one of more than 1,000 mutually exclusive clinical risk groups, and establishes "weights" for each CRG which reflect the average cost of care for patients in that CRG. Next, the algorithm flags patients whose hospital spending is at least $1,000 above expected for their individual CRG and who also meet an outlier threshold of 3.5 standard deviations above the median. Care managers then review the clinical histories of those flagged on the PPL list and develop an individualized approach to reach out to the patient and intervene to prevent even more potentially preventable hospital costs.

Clients who qualify for the Priority Patients program receive a comprehensive needs assessment, resulting in an individualized care plan that is shared and agreed to by the client and his or her family, the care manager, and the client's primary care physician. Care managers typically support 50 to 75 clients at any given time, and frequently check in with clients in their panel – often at the client's home – to ensure that the care plan is being followed and the beneficiary is doing well.

Care managers are familiar with local community organizations and state agencies that can help meet their clients' needs, and facilitate these connections when appropriate. They also communicate with their clients' primary care physicians to share relevant information – for example, that a client is having difficulty adhering to a care plan or has been hospitalized, or any new social or environmental concerns that have arisen. Care managers also work with clients to prepare them for provider encounters by encouraging them to ask questions when instructions are not clear (and to bring a list of questions to the visit), to gather their medications in advance of the visit, and to bring a personal health record to the visit.. CCNC care managers sometimes accompany patients to physician visits when such assistance is requested.

When comparing trends in total cost of care among patients on the PPL list who received the intervention versus a historical cohort who would have been flagged had the initiative been occurring at the time, CCNC sees an approximately 6 percent reduction in total cost of care (and nearly 10 percent among patients with the highest above-expected spending) relative to the expected spending that would have happened if no intervention had occurred.

A separate CCNC component – the CCNC Transitional Care program – focuses on patients at the time of discharge and aims to prevent readmissions by providing additional support following an inpatient hospitalization. Clients are identified as “Transitional Care Priority” if they fall into disease and severity clusters that have been found to benefit from transitional care. CCNC uses the CRGs described above to help flag beneficiaries who will benefit from transitional care management services. By identifying patients in real-time who are currently in the hospital, CCNC works with them to make a successful transition to their homes.

CCNC care managers in the Transitional Care program are embedded in large hospitals and routinely round at smaller ones, to visit patients at the bedside, interact with the hospital team, and coordinate discharge planning. Local care managers conduct post-discharge home visits to perform medication reconciliation (with a full review of the client’s medications by a network pharmacist when necessary), educate the patient and family on “red flags” that could signal complications and appropriate actions to take, and complete subsequent follow-up activities to ensure that the client is following discharge instructions and seeing their primary care provider soon after hospital discharge. Key elements of transitional care include: medication management, patient/caregiver education, improved self-management, and ensuring appropriate follow-up care. Care managers facilitate a team approach and “warm hand-offs” between providers, reconnecting patients with primary care medical homes and community resources.

Patients in CCNC’s CRG-identified risk groups receiving transitional care experience a 20 percent reduction in readmission rates. This effect is still evident a year after discharge, with reduced likelihood of a second and third readmission during the following year. Data indicate that providing transitional care to only six high-risk individuals will prevent one hospitalization in the coming year, with the “number needed to treat” as low as three for the highest risk cohorts.

CCNC is funded by the state Medicaid agency. A December 2011 report, conducted by Milliman, Inc. for the North Carolina Department of Health and Human Services, estimated fiscal year 2010 net savings (after accounting for program services) of $25.40 per member per month, representing a total annual net savings of $382,000,000 to the state Medicaid program. While the report did not estimate the isolated savings associated with the Priority Patients program, it found that the net savings within the high-complexity ABD beneficiary population was $42.13 per member per month during the same period; this represents a net 3.3 percent savings in total spending for that population. The Milliman Report estimated total (federal plus state) savings for FY2007 through FY2010 to be nearly $1 billion.

A June 2012 report by Treo Solutions found that in 2010, ABD beneficiaries participating in the CCNC program experienced a 34 percent lower rate of hospitalizations and a 15 percent lower rate of ED visits compared to non-participating ABD beneficiaries, after accounting for differences in risk between the groups.

For more information about the CCNC Priority Patients Program, please contact Dr. Thomas Wroth at twroth@n3cn.org and Jennifer Cockerham at jcockerham@n3cn.org.

Hennepin Health and Hennepin County Medical Center Coordinated Care Clinic

Minnesota expanded Medicaid to low-income childless adults under a state plan amendment in 2010, receiving federal Medicaid matching funds to cover adults ages 21 to 64 years old with incomes up to 75 percent of the federal poverty level. Hennepin Health is a Medicaid accountable care organization pilot program that delivers integrated medical, behavioral, and social services to members of this Medicaid expansion population. Its partners include Hennepin County Medical Center, NorthPoint Health and Wellness Center (a county-owned FQHC), Metropolitan Health Plan, and the Human Services and Public Health Department. The partners have a risk-sharing agreement and share in any cost savings. This payment model aligns incentives among the provider partners to improve population health, and provides the financial rationale to decrease expensive preventable inpatient and ED services by funding care coordination services.

Metropolitan Health Plan, a Hennepin Health partner, has a Medicaid managed care contract with the state of Minnesota, receiving a per-member per-month (PMPM) payment for each newly eligible Medicaid beneficiary who enrolls with the plan. This PMPM payment covers medical, pharmacy, behavioral health, and dental services traditionally included in the state's managed care plans. Metropolitan Health Plan uses the PMPM to pay for Hennepin Health's data analytics and care interventions targeting super-utilizers. Hennepin Health currently has 6,120 members. Its population is very medically and socially complex: 45 percent of patients have substance abuse disorders, 42 percent have mental health needs, 30 percent require chronic pain management, 32 percent are in unstable housing, and 30 percent have at least one chronic disease.

Hennepin Health uses one county-wide data system that integrates all the information from the Metropolitan Health Plan and providers including Hennepin County Medical Center and NorthPoint Health and Wellness Center. This integrated data system is critical because it allows providers and care coordinators to see patients' utilization patterns across providers and to develop care interventions based on system-wide data. In addition, Hennepin Health created radar reports, which are dashboards by provider type that report critical measures based on the provider's specialty. For example, nurses see critical lab values on their radar reports for clients while community health workers see missed appointments, pending appointments, and benefit end dates. Pharmacists have real-time access not only to prescribed medications but also to filled medications, other prescribers, and timeliness of fills. The Metropolitan Health Plan provides real-time analytic support, which is critical for focusing services.

The most expensive 5 percent of Hennepin Health’s patients are responsible for 64 percent of their costs. Their goal is to decrease inpatient and acute care by at least 10 percent for this highest cost population, in order to fund increased primary care and preventive care while achieving savings. To achieve this goal, they employ a utilization tiering approach. Tier 3 patients meet any of the following criteria: 1) Three or more inpatient admissions in the past year; 2) Two or more psychiatric admissions in the past year; or 3) Five or more visits in a six month time period (including multiple ED visits and medical detox stays). Tier 2 patients have one or two inpatient admissions in the past year, any chronic disease (including diabetes, hypertension, chronic pain, etc.), and are taking at least four medications. Tier 1 patients do not have any admissions or ED visits but have social needs such as unstable housing.

All Tier 2 and 3 patients are assigned care coordinators who are alerted when they are admitted to a hospital, visit the ED, or enter local homeless shelters or addiction treatment facilities. Tier 2 and moderate risk Tier 3 patients remain in their current primary care practices but receive intensive support from care coordinators who are typically nurses or social workers. The care coordinators are embedded in primary care practices and work with an interdisciplinary team comprised of social service navigators who reach out to patients in jails and shelters, housing navigators, a vocational navigator, and health nurses and community health workers who visit patients in their homes and community settings. Care coordinators work with patients to develop action plans and involve other team members based on their patients’ specific needs.

Hennepin Health has partnered with the Hennepin County Medical Center (HCMC) Coordinated Care Clinic, a separate but aligned ambulatory ICU, to provide comprehensive care to 47 high risk Tier 3 Hennepin Health patients with greater than three admissions per year at any hospital. The clinic cares for a greater population than just Hennepin Health members, also targeting any patient with at least three hospitalizations at HCMC in the prior year. Exceptions are sometimes allowed, usually at the request of another provider or to further minimize risk. For example, patients with two hospitalizations and multiple ED visits may be referred to the clinic. As a result, the clinic currently cares for 210 total patients and plans to expand to 300 patients in 2013. The clinic’s current patient population is 22 percent Hennepin Health, 50 percent other Medicaid, 26 percent Medicare (primarily dual eligibles), and 2 percent other payers.

Serving as a patient-centered medical home oriented toward meeting all the needs of its complex patients, the clinic provides comprehensive multidisciplinary care and care management. The clinic has identified eight factors that lead to the need for complex care coordination: chronic pain, impaired cognition, active chemical dependency, medical non-adherence, disruptive mental health problems, unstable housing, medical complexity, and lack of community or family support. By providing integrated primary care, behavioral health services including chemical dependency treatment and mental health counseling, medication treatment management, care management, and assistance addressing social needs, the clinic strives to address these factors.

The clinic's nurse care coordinator typically visits potential patients during inpatient admissions to invite them to join the clinic and schedules their first visit within 72 hours of discharge if they accept. New patients are assessed by a medical provider, the nurse care coordinator, clinic social worker, pharmacist and a psychologist and chemical dependency worker as needed. The clinic has a daily staff "huddle" to review the work of the day and two one-hour team meetings every week to discuss challenging patients and all hospitalized clinic patients. To create a welcoming environment so that patients will prefer to come to the clinic instead of seeking care at the ED, the clinic accommodates all walk-in patients in addition to seeing patients by appointment. Care coordinators are at the center of care, assessing with the patient their needs and strengths, determining goals and actions to achieve those goals, and connecting them – often in a person to person hand-off – with appropriate resources.

Hennepin Health observed a 2 to 5 percent decrease in readmissions and a 35 percent decrease in ED visits over the first 10 months of the pilot for the average of 5,800 patients enrolled per month. The patients in Tier 3 experienced a 50 percent reduction in hospitalizations over this period.

The HCMC Coordinated Care Clinic observed a 38 percent decrease in ED visits and a 25 percent reduction in inpatient admissions compared to baseline utilization in their population of 232 patients during the first 30 months of clinic operation. Over the first year, total charges for all medical care for these patients dropped by 23 percent, representing an average savings of $24,170 per patient.

For more information about Hennepin Health, please contact Jennifer DeCubellis at Jennifer.DeCubellis@co.hennepin.mn.us. For more information about the HCMC Coordinated Care Clinic, please contact Dr. Paul Johnson at Paul.Johnson@hcmed.org.

Maine Community Care Teams

Maine's Patient-Centered Medical Home (PCMH) Pilot and Community Care Teams (CCT) initiative provide multidisciplinary care management support to some of the state's highest-need residents. The CCT program, initiated in 2012, builds on the earlier CMS Multi-Payer Advanced Primary Care Practice (MAPCP) demonstration project, with 10 CCTs currently active and supporting the most complex and highest-need patient populations of the 75 primary care practices participating in the Maine PCMH Pilot and MAPCP initiative (representing just over 25 percent of the state's population). Within these practice populations, patients of all payer types are eligible to receive additional care management support from the CCT, including Medicaid, Medicare, dual-eligibles, the commercially insured, state employees, and the uninsured.

Maine has several statewide data systems that help support providers and CCTs. Primary care practices and CCTs in the multi-payer PCMH Pilot and MAPCP demonstration rely heavily on the MAPCP/RTI web portal that provides them with timely access to Medicare data. This data allows practices and CCTs to identify and sort their patients by the number of hospitalizations, ED visits, and Hierarchical Condition Category (HCC) scores, providing them with a tool to identify high-utilizing and/or high-risk patients.

Maine's Medicaid program has developed a similar web-based portal for its Medicaid Health Homes initiative, and is working to develop this same capacity of providing practices and CCTs with a list of their patients that includes the number of hospitalizations, ED visits, and costs. Most of the primary care practices have access to HealthInfoNet (HIN), Maine's statewide Health Information Exchange (HIE), which provides them with access to real-time patient information across settings of care. With funding from a State Innovation Model (SIM) grant awarded by the Center for Medicare and Medicaid Innovation, HIN is also refining its ability to provide primary care practices and CCTs with real-time notification of events such as ED visits and hospital admissions and discharges. In addition, Maine's PCMH practices are required to have fully implemented EMRs, which can help with case management and care coordination for their highest risk patients.

CCTs are fielded by independent organizations of various types, including home health agencies, large hospital systems, FQHCs, community mental health organizations and partnerships of primary care practices. Each CCT helps support multiple PCMH Pilot practices. They are geographically distributed by region to serve pilot practices across the state, with each CCT serving client populations of at least 10,000 (in primarily rural regions) and up to 50,000 or more patients (in more urban areas). Maine's complex patients tend to move fluidly between different primary care practices and emergency departments within a region, but are far less likely to move out of a region altogether. The affiliation of CCTs to particular regions is meant to match this geographic "loyalty" and improve the chances that clients will experience some consistency in the CCT personnel they interact with even when shifting from one provider to another.

The targeting criteria used by teams to identify candidate clients is standardized across the state. It includes criteria such as patients with three or more ED visits in the last six months; five or more ED visits in the last year; three or more inpatient admissions in the last six months; five or more inpatient admissions in the last year; or a referral made by the candidate's provider or health plan identifying the client as high-risk or high-cost. While the state maintains a centralized all-claims database, data from that database is de-identified by law. For the present time, individual CCTs are required to identify candidate clients within their regional catchment areas using their own means – often through developing strong connections with regional hospitals and other provider organizations.

Maine's Medicaid program has also incorporated the CCT structure into its Medicaid Health Homes initiative (as defined by Section 2703 of the Affordable Care Act). Maine has defined its Medicaid Health Home model to include both a PCMH primary care practice and a partnering CCT that provide the necessary services to high-risk beneficiaries. Maine's Medicaid program is rolling out its Health Homes initiative in two stages.

“Stage A” targets Medicaid beneficiaries with chronic medical disease, with health care needs managed primarily by the PCMH primary care practice and additional support provided by the CCT for the most complex and highest-need patients. Medicaid beneficiaries are eligible for MaineCare Health Homes under “Stage A” if they have two or more of the following chronic conditions or one condition and are at risk for a second: chronic obstructive pulmonary disease, hypertension, hyperlipidemia, tobacco use, developmental disabilities and autism spectrum disorders, acquired brain injury, cardiac & circulatory congenital abnormalities, and seizure disorders..

“Stage B” will target Medicaid beneficiaries with Serious Mental Illness, with the expectation that care will be managed primarily by a behaviorally-oriented CCT, with support from a partnering primary care practice. The Medicaid Health Home program per-member-per-month (PMPM) payments will be allocated accordingly, with the larger share going to the lead organization.

The composition of each CCT varies depending on the needs of the region it serves, and teams are given substantial freedom to bring on necessary staff based on their client population. Each CCT is expected to include a core team of nurse care managers, social workers, and behavioral health workers. Similarly, while the exact services and supports provided to clients varies between teams, most of the CCTs provide some form of the following: individualized assessments to determine a care plan; intensive case management that addresses both medical and behavioral health needs; providing in-home visits; health coaching in appropriate areas; and connecting clients with appropriate community resources to help meet food, financial, and heating, transportation, and education needs.

As a multi-payer initiative, the program is funded by a number of sources. In general, the respective payer provides the CCT with a PMPM payment to cover clients from their own beneficiary populations. Maine has elected to split its $10 PMPM payment for Medicare beneficiaries from the CMS MAPCP program to provide a $2.95 PMPM to CCTs, and the remaining $6.95 PMPM to the PCMH Pilot practice. Through its participation in the Medicaid Health Homes initiative, Maine’s Medicaid program provides approximately $12 PMPM to PCMH primary care practices and approximately $130 PMPM to CCTs for Medicaid beneficiaries with chronic illness eligible for the “Stage A" Health Homes initiative. The CCTs receive the $130 PMPM for patients who are “attested” to in the MaineCare Portal, meaning that they are actual CCT patients receiving a “minimum billable service.”

Although aggregate outcomes data are not yet available from the payers, CCT tracking across the state is demonstrating reductions in both ED utilization and hospital admissions for individual patients. Patients are reporting high levels of satisfaction with the program and provider referrals for CCT services are increasing. Maine Quality Counts is also collecting de-identified patient stories quarterly and hopes to create a library that will be available to CCTs and statewide leaders to showcase the impact of CCTs on high-need individuals.

For more information about the Maine Community Care Teams, please contact Dr. Lisa Letourneau at lletourneau@mainequalitycounts.org, Helena Peterson at hpeterson@mainequalitycounts.org, and Kitty Purington at Kitty.Purington@maine.gov.

Spectrum Health Center for Integrative Medicine

Spectrum Health is a non-profit integrated delivery system in West Michigan that is comprised of 9 hospitals, 130 ambulatory and service sites, 2 physician groups totaling 751 providers, and Priority Health, a health plan with 600,000 members. The Spectrum Health Center for Integrative Medicine (CIM) is an ambulatory ICU that provides comprehensive, interdisciplinary services to “super-utilizers” of Emergency Department (ED) care. Currently serving 450 new patients per year, the center’s patient population is comprised of 36 percent Medicaid managed care, 26 percent Medicare, 12 percent uninsured, and 26 percent commercially insured (including dual eligible patients). CIM partners with Network180, a behavioral health services agency, that provides behavioral and addiction assessments and treatment plans to clients.

CIM targets patients with at least ten ED visits or three or more inpatient admissions to Spectrum Health in the past year with behavioral health conditions and social issues. Patients with 10 to 19 ED visits are considered borderline, and are screened using a chart review to identify patients who will benefit, who are then invited to receive care at the CIM. Patients who are not socially or behaviorally complex, do not have two or more years of high ED use, and whose high utilization seems driven more by the medical complexity of their case than by social issues or behavioral health conditions receive phone-based care coordination and pain management support. These patients will not be fully enrolled in the program unless the patient does not have a primary care physician (PCP) or the PCP refers the patient for the clinic’s care coordination and a second opinion. Patients with greater than 20 ED visits are viewed as the “ideal” clients, and are automatically contacted to enroll in the clinic.

Using a risk reduction model of care, CIM accurately diagnoses both medical and behavioral health conditions, develops individualized care plans, provides integrated physical and behavioral health stabilization treatment, and transitions patients into effective primary care homes. Clients receive an initial comprehensive biopsychosocial evaluation that includes 1) full history and physical by a physician trained to care for “super-utilizers;” 2) mental health evaluation; 3) comprehensive addiction screening and planning; and 4) comprehensive social work management and intervention. Based on this assessment, CIM physicians, case managers, and social workers develop a personalized care plan for each client. CIM takes over care from the PCP and specialists, providing all medical and behavioral health care on-site, writing all prescriptions, and ordering all tests. A unique feature of the CIM is its high accessibility: it offers non-traditional and walk-in appointment times, 24/7 on-call access to providers, and a policy against terminating patients regardless of missed appointments and behavioral challenges.

The interdisciplinary care team at CIM is led by an emergency medicine physician certified in addiction medicine with extensive training in pain management. The team includes a physician assistant with experience managing chronic medical diseases and a nurse case manager with experience in motivational enhancement therapy, motivational interviewing, and de-escalation. It also includes a licensed Masters level social worker with over ten years of experience who is trained in cognitive behavioral therapy, substance use disorders, and behavioral modification.

When clients exit the program after six to nine months, their receiving primary care provider is briefed on the client's circumstances by the CIM team and given an in-depth Care Manual, which covers all identified medical conditions, social barriers to care, substance use disorders and psychological conditions that require ongoing treatment. CIM staff will maintain contact with patients and continue to provide support to receiving providers indefinitely to help ensure that health improvements are maintained.

By partnering with Priority Health, CIM has developed an "episode of care" payment model that is central to its financial viability. CIM receives a single payment from Priority Health for each of their Medicaid managed care and commercially insured clients that covers all services provided by CIM for the six to nine month duration of the intervention. The amount of the payment is based on the client's cumulative number of medical, psychosocial and behavioral conditions (clients with 0 to 3 total conditions across all domains are assigned to Level 1; clients with 4 to 7 total conditions are assigned to Level 2; and clients with more than 7 conditions are assigned to Level 3). CIM receives $700 for each Level 1 client, $1400 for each Level 2 client, and $2100 for each Level 3 client. Behavioral health follow-up visits are billed separately on a fee-for-service basis if patients are referred to outside mental health providers. Other commercial insurance plans currently pay CIM on a fee-for-service basis, but are negotiating "episode of care" payments.

CIM observed a 65 percent reduction in ED visits in a cohort of 53 prospectively randomized program clients over their first six months of program participation. The total cost of the clinic is $850,000 per year. Spectrum Health demonstrated a $3.2 million decrease in charges over one year for patients seen in CIM. Priority Health saved close to $500,000 for its members who participated in the program in the first year.

For more information about the Spectrum Health Center for Integrative Medicine, please contact Dr. Corey Waller at Corey.Waller@spectrumhealth.org.

Vermont Chronic Care Initiative

The Vermont Chronic Care Initiative (VCCI) is a statewide program that provides care coordination and intensive case management services to non-dually-eligible Medicaid beneficiaries with one or more chronic conditions, with a focus on improving outcomes and reducing unnecessary utilization. The VCCI modified its approach to focus on the top five percent of Vermont Medicaid beneficiaries with the highest utilization in state fiscal year 2012. The program is funded and operated by the state's Department of Vermont Health Access (DVHA). Because most providers are reimbursed by the state's Medicaid program through a fee-for-service model, reductions in unnecessary spending achieved by the program translate directly to savings to Vermont's Medicaid program budget.

The DVHA works with a vendor that provides extensive data analytical and decision support services for the VCCI which include: disease stratification and predictive modeling for population identification; centralized health intelligence including data analysis and statistical support; and program monitoring and evaluation of clinical and financial metrics. A proprietary data management system for VCCI documentation offers targeted decision support tools for prioritizing outreach and engagement of high-risk individuals by case managers, including clients with gaps in evidence-based care or with recent hospitalizations. Multiple hospitals statewide provide the VCCI with daily ED and inpatient admission data via secure protocols. This real-time data helps to inform and prioritize outreach to clients during ED visits and hospitalizations, when they are most receptive to services. Many VCCI staff also can access hospital and primary care practice EMRs to further supplement access to clinical information such as laboratory test results, changes in treatment plans, and specialty referrals, which enhance case management and care coordination services.

The VCCI is a hybrid model that includes a combination of state and vendor staff using the same data system. The vendor provides a team of telephonic nurses and social workers for individual and population management, as well as local and centralized data analytic staff, administrative leadership, a program pharmacist, and a part-time medical director. The state employs a team of field-based case managers and care coordinators – usually nurses or social workers – who provide individual case management to clients and population support to local primary care practices. The case managers and care coordinators operate either as field-based agents serving a region or as permanently embedded resources within provider organizations with high volumes of program clients. Locations include private primary care practices, FQHCs, and several high volume hospitals.

Clients qualify for the program if they are in the top five percent of highest utilizers or demonstrate high utilization patterns including multiple ED visits and inpatient admissions. Generally, they will have one or more chronic conditions such as asthma, congestive heart failure, depression, diabetes, coronary artery disease, chronic obstructive pulmonary disease, low back pain, mental health and substance use/abuse disorders, as well as polypharmacy. The program further targets clients determined to be "impactable" based on an analysis of clinical acuity and recent utilization patterns. This analysis is conducted by the program analytics contractor, and considers each candidate client's Chronic Disability and Payment System

(CDPS) score, their actual per-member-per-month cost to the Medicaid program, the number of chronic conditions, the number of ED and inpatient encounters, and evidence of fragmented, uncoordinated care – for example, several encounters with different providers in a short amount of time. Potential clients are also identified through direct referrals from primary care providers, ED staff, and field and embedded program staff, as well as other internal and external statewide partners.

When possible, providers arrange a “warm hand-off” of prospective clients to program staff while the client is in the provider setting. In the absence of this direct introduction, program field staff use a number of other methods to engage new clients. These alternative methods can often be more time-consuming and challenging, both in terms of making contact with potential clients and establishing a trusting relationship.

Clients successfully on-boarded into the program receive a “social needs assessment” and a “behavioral risk assessment.” Depending on the client’s specific needs, a number of other disease-specific assessments (e.g., low back pain, diabetes, chronic obstructive pulmonary disease, etc.) are performed, as well as a “transitions in care assessment” for clients exiting inpatient care.

The program provides several types of support to clients on an ongoing basis including: coaching clients on motivation, health literacy, and self-management skills; facilitating client engagement with their primary care providers and mental health agencies; developing a care plan and action plan in collaboration with the client and their providers; assessing social and other non-clinical barriers to health and coordinating client access to available state or local resources (e.g., for housing, food and fuel, transportation, drug rehabilitation services, and financial support for medications or other treatment needs); reviewing medication lists to ensure that evidence-based prescribing guidelines are followed; and providing more intensive transitional supports following inpatient admissions or ED visits. Selecting the appropriate mix of support for each client is informed by the real-time analytics provided by the program contractor, which help to identify gaps in care and other opportunities to intervene with the client. Interactions with higher-risk clients are typically performed face-to-face while interactions with lower-risk clients are more likely to be telephonic.

The VCCI is funded through the state Medicaid office. Additional grant funding to local Health Service Areas supports Medicaid beneficiaries who do not fall into the top 5 percent of highest utilizers. Services are provided by the state’s Blueprint for Health program, a statewide, multi-payer initiative to improve primary care through the creation of Patient-Centered Medical Homes and Community Health Teams.

In state fiscal year 2011, members with one of 11 chronic conditions who participated in the VCCI demonstrated significant improvements in adherence to evidence-based care when compared with members with the same conditions who did not receive VCCI interventions. The program also documented a reduction in ED visits of 10 percent from baseline, as well as a 14 percent decline in inpatient admissions.

When the VCCI transitioned in state FY 2012 to focus on the five percent of the Medicaid population with the highest utilization, the vendor entered into a 100 percent risk-based contract for program savings. The vendor risk is based on provision of data analytics and decision support tools to guide population selection and care interventions (including employment of nurses and social workers for telephonic support) to ensure clinical improvement and cost savings. The vendor has guaranteed savings of $2.5 million for state FY 2012 and 2013.

The VCCI achieved financial savings of approximately $11.5 million (after program expenses) over anticipated costs in state FY 2012. The 2012 evaluation data demonstrate improvement on 6 of 12 clinical measures for Medicaid beneficiaries in the top five percent of utilization who participated in VCCI when compared to beneficiaries in the top five percent who did not receive VCCI services. In addition, when compared with the top five percent of beneficiaries in state FY 2011, the VCCI demonstrated an 8 percent reduction in inpatient utilization, a 4 percent decline in ED utilization and an 11 percent decrease in 30-day readmission rates in state FY 2012.

For more information about the Vermont Chronic Care Initiative, please contact Eileen Girling at Eileen.Girling@state.vt.us.

Exhibit 1: VCCI Results for Top Five Percent of Medicaid Population with Highest Utilization

	Inpatient Admissions	30-Day Readmissions	ED Visits
State FY11 Rate	517.75	87.02	1521.35
State FY12 Rate	476.02	77.41	1460.92
% Change SFY11 to SFY12	-8.06%	-11.04%	-3.97%

Exhibit 2: VCCI Results on Clinical Outcomes in state fiscal year 2011

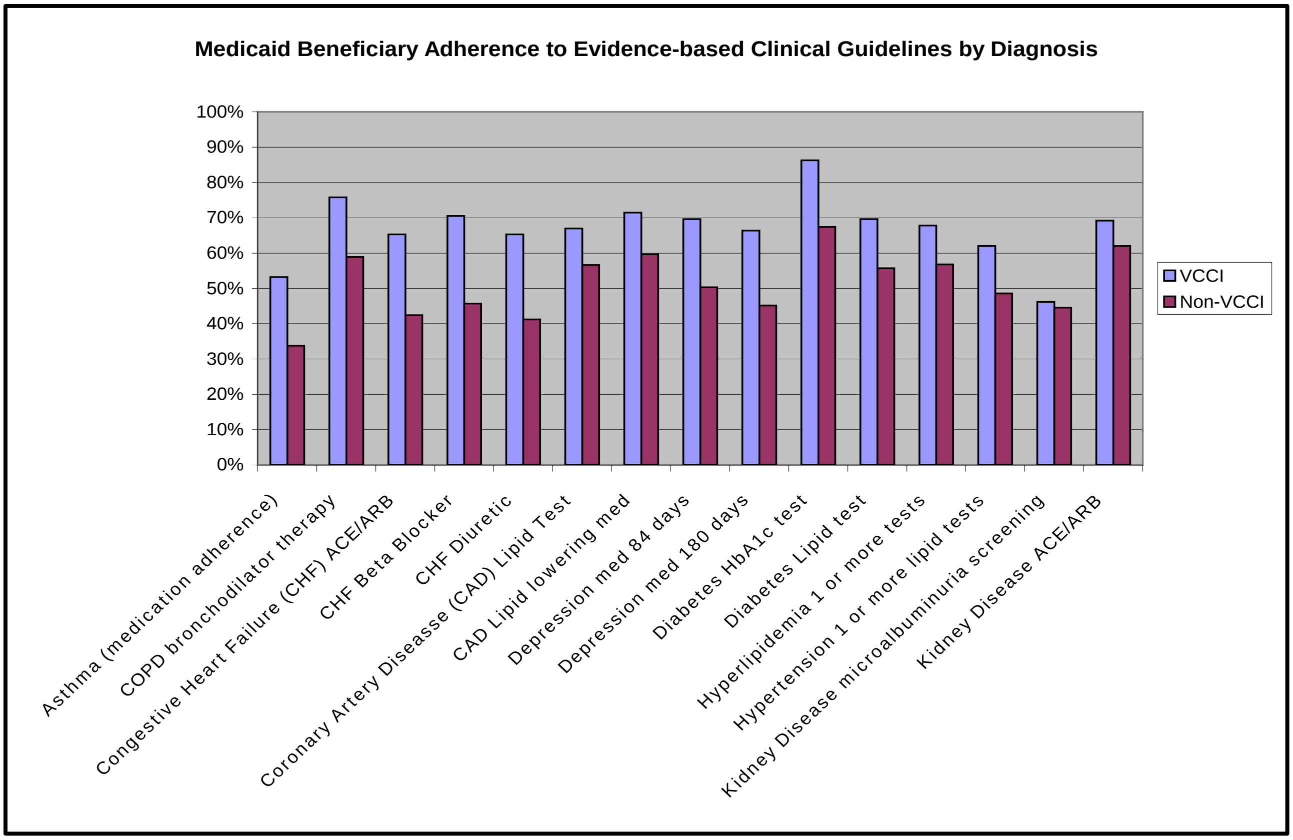
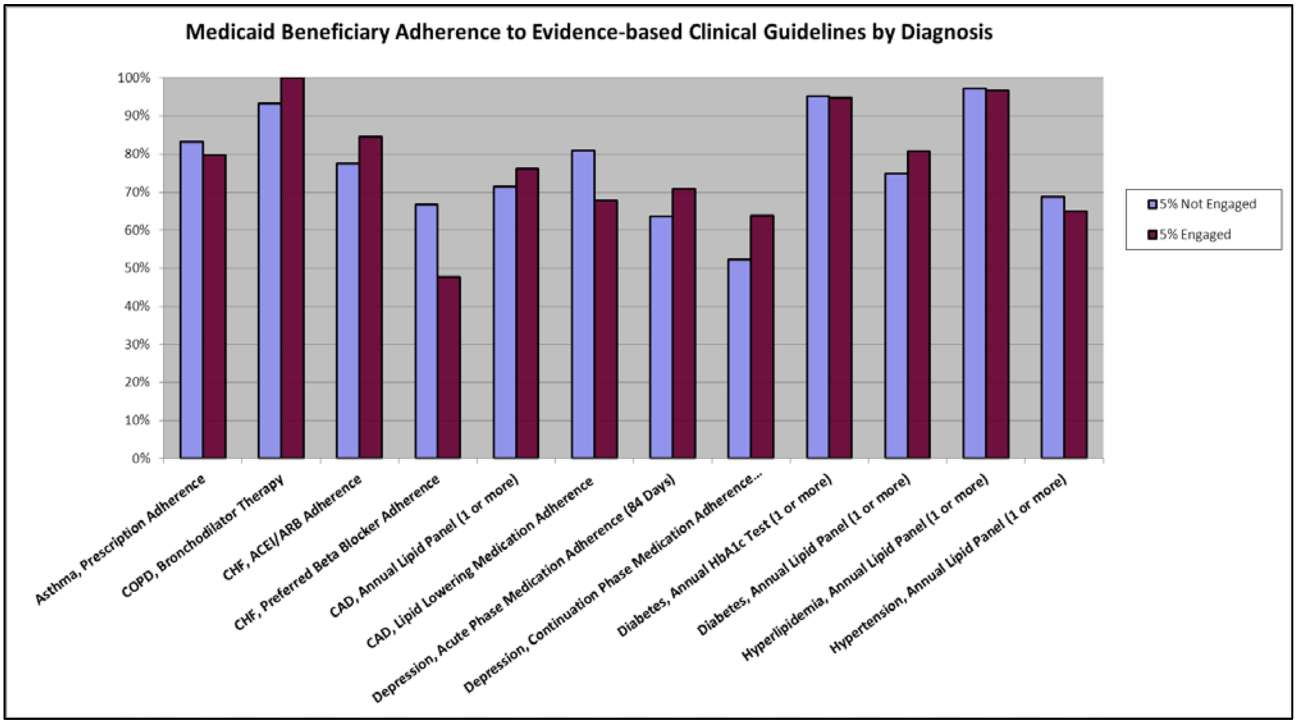


Exhibit 3: VCCI Results on Clinical Outcomes in state fiscal year 2012



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[xix] Rhode Island has obtained a Health Home SPA for a target population of children with a diagnosis of serious mental illness or severe emotional disturbance, or two chronic conditions. Chronic conditions includes mental health conditions, Down Syndrome, developmental disabilities, intellectual disabilities, seizure disorder, asthma, and diabetes. Available at http://www.chcs.org/usr_doc/Rhode_Island_1_-_CEDARR_Family_Center_Health_Homes.pdf

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[xxi] Missouri is making payments directly to the providers for managed care enrollees to avoid the delay of renegotiating managed care contracts. The SPA does not change managed care rates. Oregon is paying the entire care management fee to the managed care plans and does not require the plans to pass the entire fee onto the providers. However, any money retained by the plans must be used to carry out functions related to the state's Health Home program. New York is amending their managed care contracts to address the potential payment duplication of managed care capitation and Health Home payments. A small portion of the New York payment may be retained by managed care plans to support administration of the program. Managed care plans are expected to pay the same rates to contracted Health Homes as the state. National Academy for State Health Policy. Developing and Implementing the Section 2703 Health Home State Option: State Strategies to Address Key Issues. July 2012.

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