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MaineCare Stage A Health Homes Year 1 Report: Implementation Findings and Baseline Analysis

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**MAINECARE STAGE A HEALTH HOMES
YEAR I REPORT: IMPLEMENTATION FINDINGS
AND BASELINE ANALYSIS**

MARCH 18, 2014

SUBMITTED TO THE OFFICE OF MAINECARE SERVICES

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CONTENT

Acknowledgements	1
Executive Summary	3
Introduction	8
Environmental Context and Description of Stage A Health Homes	9
Evaluation Methodology	13
Part I: Year 1 Implementation Experience Findings	17
Part II: 2011 Baseline Quality, Utilization and Cost Data	33
Summary and Conclusion	46
Appendix A: Criteria for Stage A and Stage B	47
Appendix B: HHES Reporting Functions	50
Appendix C: Interview Invitation Letters	52
Appendix D: Interview Protocol	54
Appendix E: Baseline Comparison Analysis Measures List	58

EXECUTIVE SUMMARY

In January 2013, Maine established Health Homes under federal authority pursuant to Section 2703 of the Affordable Care Act to improve care coordination for MaineCare members with chronic conditions. Stage A of the Health Homes initiative focuses on members with complex medical chronic conditions. Stage B, planned for early 2014, will focus on persons with severe and persistent mental health conditions and children with serious emotional disturbances. The Stage A demonstration builds off the State's existing Maine multi-payer Patient Centered Medical Home (PCMH) Pilot project and Maine's Medicare Advanced Primary Care Practice (MAPCP) Demonstration by providing add-on payments to primary care practices and strengthening the community care team (CCT) model to provide care management and social support services to high-need MaineCare patients.

As part of the initiative, MaineCare commissioned the Muskie School of Public Service to evaluate this new model of care. This report presents evaluation findings after the first year of Stage A implementation and provides preliminary baseline data on quality, use and cost of care for eligible MaineCare members in Health Homes (HH) relative to a comparison group that will form the basis for assessing overall impact at the close of the two years of enhanced federal match under the initiative.

The report is divided into two parts. Part I focuses on how the model has been implemented in Year 1 including the number of practices and members that are participating and how practices and Community Care Teams (CCTs) have enhanced service delivery based on program data and qualitative interviews with participating practices, CCTs and stakeholders. Part II presents baseline data from 2011, prior to the beginning of the Stage A, comparing the quality, utilization and cost of services for MaineCare members that are participating in Health Homes with members with similar HH eligible conditions that did not enroll in Health Homes. Preliminary baseline data included in this report will be updated and used in the final report to assess how quality, use and cost of MaineCare services changed over time in each of these groups, to evaluate the impact of the intervention.

Part I: YEAR I IMPLEMENTATION EXPERIENCE

Key Findings

Stage A significantly expanded Health Home capacity by adding practices and CCTs to those in the PCMH expanded pilot. By the end of the first year of implementation, 157 practices and 10 CCTs provided Health Home services, significantly increasing care coordination capacity throughout the State. HH eligible practices include the 74 practices participating in the original PCMH pilot and expanded MAPCP initiative (PCMH/HH) and 83 new practices that are HH-only practices.

Flexibility in program design resulted in variation in CCT models. CCTs differed with respect to their organizational affiliation (e.g., federally qualified health center, home health agency), size (affiliation with 2 to 39 practices serving 816 to 10,644 Health Home eligible MaineCare members) and geographic service areas (e.g., single versus multiple counties).

Stage A Health Home enrollment was initially low, but steadily increased during Year 1. Early confusion about how to refer patients through the web-based portal and initial restrictions prohibiting the enrollment of persons with co-occurring mental health problems resulted in lower than expected enrollment during early months. After DHHS revised Stage B eligibility criteria, the number of Stage A Health Home members increased significantly. As of December 2013, nearly 48,000 MaineCare members were enrolled in Health Homes.

CCT use was low at the outset of the initiative, but has significantly increased each month. In the first month, 60 HH members were enrolled in CCTs. CCT enrollment increased exponentially each month to a total of 1,392 members as of December 2013, representing 3% of total HH members. Reasons for low initial enrollment included time required to establish new referral relationships and procedures, especially when no prior working relationship existed between the HH practice and CCT. Also, there was initial uncertainty among HH practices about when to refer to the CCT and the criteria for doing so. Clarifications in the referral process by Quality Counts in late 2013 and changes to the Health Home Enrollment System (HHES) portal allowing CCT access to HH practice panel data that occurred after interviews with practices may have helped streamline the HH/CCT referral process going forward.

The new attestation function for practices and CCTs requires significant time. As a condition of receiving Health Homes monthly payments, a HH practice and CCT must attest that a HH member received a Health Home service during the prior month. This attestation function, which was new to both existing PCMH/HH and HH-only practices, was seen by many as an additional administrative burden, requiring dedicated staff to verify members on their panel on a monthly basis. However, some practices saw this requirement as an opportunity to apply a population-based approach to prospectively identify patients who could benefit from HH services. Providers' feedback on attestation in this report was prior to the fall 2013 rollout of healthcare utilization reports, or "dashboard reports," which could expedite this process.

Practices are maintaining or building infrastructure to support chronic care management. Most practices that were part of the PCMH pilot reported needing to change very little once becoming Health Homes. Their efforts focused on assignment of new staff roles or the development and use of data systems and processes to support their HH functions and patients. HH-only practices experienced a steeper learning curve and needed to enhance care coordination capacity and design new systems for monitoring gaps in patient care, tracking and following-up with patients, and extending hours of care.

Referral processes and rates of referral vary between Health Homes and CCTs. While the percent of HH practice enrollees using CCTs is increasing, there are still significant differences in rates of CCT referrals by practice and CCT. Variation in referral rates to CCTs may reflect differences in the number of practices assigned to CCTs and the organizational affiliation or relationship of the CCT to the HH practice. Generally, CCTs that were co-located or embedded within the HH practices and/or in contact via electronic health records (EHR) regularly tended to have higher referral rates from those practices. With some exceptions, CCTs with fewer practices tended to have higher referral rates as well. Despite PCMH/HH practices having worked with CCTs for a longer period of time, rates of members using CCT services are similar in PCMH/HH and HH-only practices.

The vast majority of patients referred for CCT services have behavioral health needs. Nine out of ten CCTs stated that most, if not all, of their patients referred from practices had behavioral health diagnoses, needed help with behavioral health treatment or community resources related to behavioral health, and/or had psychosocial issues in addition to having multiple chronic conditions. Some CCTs have in-house short term behavioral health counseling; two have a psychiatrist on their team while a rural CCT offers tele-psychiatric consultation services.

Health Home practices value CCT services. Health Homes acknowledged their own limitations in meeting the needs of complex patients, especially those with behavioral health needs. Health Homes saw the capacity of CCTs to visit patients in their homes or in the hospital prior to discharge as key advantages to understanding the whole person, their environment and the best strategies to meet their needs.

Using Electronic Health Records (EHRs) and other data for population health management is seen as essential. The ability for HH practices and CCTs to share a common Electronic Health Records was seen as extremely advantageous to timely communication. Other practices accessed databases which, when combined with information on the HH web portal, provided a fuller picture of a patient's service use patterns and needs.

CCT services and staffing models vary. Each CCT has slightly different staffing models and service delivery models. More than half indicated they provide home visits while others said they meet where the patient is most comfortable. Services provided also vary and may include medication reconciliation, motivational interviewing to identify patient goals, patient education, and assistance with navigating the system, such as help with housing food, and transportation, which can indirectly impact one's health. While all CCTs had at least one nurse and one social worker on staff, some also included pharmacists or pharmacy students, psychiatrists, or pediatric social workers. Given the diversity of CCT models, it may be difficult to evaluate which approach is most effective.

Practices and CCTs reported some health improvements for specific patients but it is too early to see broader impact on health outcomes. While too early to measure impact, HH practices and CCTs all had examples of how HH services made a difference to individuals, such as improvements in the management of hypertension or diabetes.

Other Challenges and Successes and Lessons for Stage B Implementation

Evaluation findings from the first year of Stage A implementation identified several areas with implications for the Stage B roll-out.

Practices and CCTs could have benefited from more up-front training. Due to the aggressive implementation schedule, many CCTs and practices indicated that they started before fully understanding the initiative or its expectations and that training about HH was insufficient. This was seen as contributing to many of the attestation and enrollment challenges. During Stage B, MaineCare should allow for more intensive up-front training to reduce some early frustration and inefficiencies reported by Stage A entities.

The web portal was identified as useful to practices but more information is needed. Most of the practices and CCTs found the web portal very helpful in providing data that was previously not available to them about their MaineCare patients. However, they also indicated that the value of the web-based portal could have been improved by including additional data elements on patients which could assist practices and CCTs in managing their care (e.g. reason for eligibility denials, practice assignments, service use data, sort functions). Even with the frustrations of a "not yet perfect" system, practices reported using patient data to conduct population-based reviews and expressed the desire to be able to do it for more of their patients. Since the time of our interviews with practices, the portal has been modified to address some of these suggested improvements.

Getting eligible patients enrolled is still a challenge. HH practices believed that more of their patients could benefit from HH services but were frustrated by the initial lack of clear guidance on eligibility criteria or, when referrals were made, why they were denied. In addition, pediatric practices felt that the Stage A diagnoses identified for children both included diagnoses that did not require HH-level of services or failed to include pediatric conditions where the child could have benefited from these services.

Financial sustainability issues remain. Both HH practices and CCTs reported that they have held back on hiring staff due to the lack of predictable and sustainable long term funding. Unlike prior PMPM payments provided to PCMH/HH practices and CCTs for the PCMH pilot and expansion for all patients on their panel, HH payments vary from month to month. In the case of hospital practices, payments do not always go directly to the practice to expand staff or care management resources. For CCTs, the financial challenge is even greater given greater uncertainty of month to month caseloads, that depend on practice referrals, and several suggested that the current MaineCare reimbursement model for CCTs is not financially sustainable. This issue is likely to continue and affect the eventual impact of both Stage A and Stage B implementation.

Part II: 2011 BASELINE QUALITY, UTILIZATION AND COST DATA

In addition to evaluating Stage A implementation, this report presents unadjusted baseline quality, utilization, and cost data for MaineCare members that enrolled in Health Homes as of August 15, 2013 who were MaineCare eligible in 2011 (42,890 members) with members with similar conditions that are not enrolled in Health Homes (80,462 members). These data are designed to help understand differences between enrollees and non-enrollees before the initiative began that we will factor into future analyses to assess change over time.

Key Findings

MaineCare members enrolled in Health Homes tend to be younger, less sick, and less likely to be dually eligible for Medicare than members with similar conditions not enrolled in Health Homes. When comparing members with both MaineCare and Medicare eligibility (dual eligible), differences in severity of illness are only significant in the dual-eligible population; non-dual HH eligible members are in fact sicker than similar members that are not enrolled. In Year 2, we will further investigate these differences and refine our study and comparison group assignment process for the final pre/post analyses.

MaineCare members enrolled in Health Homes have higher quality scores and lower utilization at baseline than members not enrolled in Health Homes. Several measures of quality of care (i.e. well child visits, developmental screening, diabetes screening and tests) were much higher at baseline for MaineCare members in Health Homes than those with similar conditions not in Health Homes. MaineCare members in Health Homes were also less likely to use many high-cost or inappropriate services than members with similar conditions in the comparison group. Members not in Health Homes were significantly more likely to have fragmented primary care, mental health emergency department (ED) visits, ambulatory care sensitive hospital admissions, readmissions within 30 days, total hospital admissions, admissions with identified alcohol and other drug services, and skilled nursing facility admissions. Many of these differences existed for both dual and non-dual eligible members, however, members in Health Homes that were non-dually eligible had significantly higher rates of non-emergent ED visits.

Quality and utilization differences at baseline may reflect differences in the practices that elected to participate in the HH initiative. Half of the HH practices participated in the PCMH and MAPCP pilots and many of the HH practices serving children participated in the First STEPS (Strengthening Together Early Preventive Services) learning collaborative under MaineCare's Improving Health Outcomes for Children CHIPRA quality demonstration grant that preceded HH and focused specifically on improving quality of care or reducing utilization in several of these areas. Higher quality and lower utilization prior to the start of the HH initiative, may reflect progress achieved through these

other initiatives. While these factors will be adjusted for in subsequent analyses, the higher quality and lower utilization of targeted potentially inappropriate services at baseline may make it harder to detect marginal quality improvements or further service reductions resulting from the HH initiative.

MaineCare members enrolled in Health Homes have lower overall costs than members not enrolled in Health Homes, but higher costs for services expected to be lowered by the HH initiative. Overall differences in total costs for the study and comparison group are almost exclusively due to long-term care and mental health services that were not identified as service costs that the HH Stage A initiative would affect.

INTRODUCTION

As part of Maine's Department of Health and Human Services Value-Based Purchasing Initiative, MaineCare's Health Homes Initiative is designed to improve care coordination for MaineCare members with chronic conditions. Established through Section 2703 of the Affordable Care Act of 2010, the MaineCare Health Homes initiative is being rolled out in stages. Stage A, for those with complex chronic conditions, began in January 2013. Stage B will begin in April 2014 and will focus on persons with severe and persistent mental health (SMI) conditions and children with serious emotional disturbances (SED). The premise of the initiative is to develop services within the medical practice and in the community to treat the "whole-person" through the integration and coordination of all primary, acute, behavioral health, and long-term services and supports.¹ Stage A of the demonstration builds off the State's existing Maine multi-payer Patient Centered Medical Home (PCMH) Pilot project and Maine's Medicare Advanced Primary Care Practice (MAPCP) Demonstration by providing add-on payments to primary care practices and strengthening the community care team (CCT) model to provide care management and social support services to high-need MaineCare patients. As part of the initiative, MaineCare commissioned the Muskie School of Public Service to conduct an evaluation of this innovative new care model during its first year of implementation which will form the basis for assessing overall impact at the close of the two years of enhanced federal match under the initiative.

The specific aims of the overall Stage A evaluation are to:

- assess the implementation within practice sites and CCTs to identify value-added services and benefits for MaineCare patients and practices;
- assess impact on the cost efficiency and quality of care provided to Health Home eligible members; and
- provide timely data to inform policymakers' decisions.²

This report presents evaluation findings after the first year of Stage A implementation and provides preliminary baseline data on use, cost and quality of care for eligible MaineCare members in Health Homes relative to a comparison group. Preliminary baseline data included in this report will be updated and used in the final report to assess the impact on cost efficiency and quality outcomes over time.

¹ Accessed 1/25/13, <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Support/Integrating-Care/Health-Homes/Health-Homes.html>

² A more detailed description of the evaluation plan is available in Fox K. Evaluation Plan for MaineCare's Health Home Initiative. Portland, ME: University of Southern Maine, Muskie School of Public Service; June, 2013

ENVIRONMENTAL CONTEXT AND DESCRIPTION OF STAGE A HEALTH HOMES

In order to evaluate the implementation of Health Homes, it is important to understand the context for the program and its relationship to other initiatives in the state. As indicated above, the MaineCare Health Homes Stage A initiative builds off Maine's PCMH Pilot, a multi-stakeholder effort to implement the PCMH model initially launched in January 2010 with 26 primary care practices across the state.³ Pilot practices committed to transforming to a PCMH model of care by implementing a set of 10 "Core Expectations"⁴ and receive medical home payments from the major payers in the state including MaineCare. Convened and led by Dirigo Health Agency's Maine Quality Forum, Maine Quality Counts, and the Maine Health Management Coalition, the ultimate goal of the PCMH Pilot was to sustain and revitalize primary care both to improve health outcomes for all Maine people and to reduce overall healthcare costs.

In 2012, the PCMH Pilot was extended and expanded to include Medicare through Maine's participation in the Medicare Multi-payer Advanced Primary Care Practice (MAPCP) demonstration program which began in January 2012 and runs through December 2014. In January 2012, the MAPCP demonstration introduced eight CCTs as a new component of the medical home model to help care for high-needs patients, and added an additional 50 practices to the PCMH Pilot in January 2013. CCTs are multi-disciplinary, community-based, practice-integrated care management teams that work closely with the PCMH Pilot practices to provide enhanced services for the most complex, high need patients in the practice.⁵

MaineCare has been an active supporter of the Maine PCMH Pilot from the outset and has participated in the MAPCP expanded pilot by providing medical home payments to both Pilot practices and Community Care Teams. Under Stage A Health Homes (HH), all practices in the initial and expanded PCMH pilot became designated Health Homes (PCMH/HH).⁶ Additional practices - referred to as Health Home-only (HH-only) practices-were invited to apply to serve as Health Homes if they agreed to meet similar expectations as the Maine PCMH pilot and to provide health home services specified in Section 2703 of the Affordable Care Act.⁷ Specifically, Stage A Health Homes were required to:

- Provide primary care to adult or pediatric patients
- Have one-full time primary care physician or nurse practitioner
- Commit to achieve PCMH Level 1 recognition by the National Committee for Quality Assurance (NCQA) by January 1, 2013⁸
- Have a fully implemented Electronic Medical Record (EMR) at the time of application

³ There were initially 26 practices in the PCMH pilot; one closed in 2012, so only 25 practices in the current Health Homes initiative were in the original pilot.

⁴ Accessed 1/10/14: http://www.mainequalitycounts.org/image_upload/Maine%20PCMH%20Pilot%20Practice_Core%20Expectations_Phase%202-12.pdf

⁵ http://www.mainequalitycounts.org/image_upload/PCMH%20Halfway%20report.pdf Accessed 1/10/14

⁶ As a requirement of PCMH pilot participation, all PCMH Phase I and Phase II practices applied to participate in Stage A of MaineCare Health Home initiative as well as Medicare MAPCP pilot.

⁷ For this report, we refer to practices participating in Maine's PCMH pilot (both phases) as "PCMH/HH" practices and the practices that applied to be Health Homes and are not in the pilot as "Health Home Only" or "HH Only" practices. When we refer to "Health Home" initiative or "Health Homes" without further delineation, we are referencing ALL practices in Stage A; we also shorten this to "HH."

⁸ Practices were initially expected to have NCQA PCMH Level 1 recognition by January 1, 2013, but to encourage greater participation this date was extended to June, 2013 and then to December, 2013.

- Commit to achieving the 10 Core Expectations of the Maine PCMH model⁹
- Commit to providing Health Home services including: 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, use of health information technology (HIT), prevention and treatment of mental illness and substance abuse disorders, and coordination of and access to preventive services, chronic disease management, and long-term care supports¹⁰

As part of its application, each Health Home was required to identify either one of the existing eight MAPCP CCTs to serve as its partner to manage high-needs patients or an entity capable of meeting CCT criteria by August 15, 2012.¹¹ CCTs were expected to serve high-cost patients (estimated at approximately 5% of all Health Home eligible patients within a practice) to reduce avoidable costs, such as emergency department over-use and potentially avoidable hospital admissions. For a CCT to be qualified, the entity was required to have a current Medicare Part B Provider and agree to provide CCT services to PCMH/HH practices and/or HH-only practices, with at least one approved Health Home located within one hour or less travel distance from the CCT.

How were MaineCare Members Enrolled in Health Homes?

To identify and enroll eligible MaineCare members into Health Homes, DHHS used a two-pronged approach. Initially, MaineCare incurred calendar year (CY) 2012 claims (paid by April 30, 2013) were analyzed to identify members who met Stage A diagnostic criteria and did not meet the Stage B serious mental illness (SMI) or Serious Emotional Disturbance (SED) criteria or were not receiving Targeted Case Management (TCM) services. Letters were sent to members attributed¹² to Health Home practices informing them of their eligibility for Health Home services. If members did not opt-out within 28 days, they were automatically assigned to the practice and included on that practice's member panel in the Home Health Enrollment System (HHES). Initially member letters were sent out in waves on a bi-weekly basis in December 2012 and early January 2013. Claims analyses were re-run and additional letters were sent to members in June and July of 2013 after MaineCare clarified Stage A and B eligibility requirements.¹³ In addition to using diagnoses on claims, MaineCare also contracted with the Muskie School of Public Service to build the HHES web-based portal which allows providers to request additional members not otherwise identified in claims because of recent diagnoses or whose conditions are not easily identified through claims (e.g. tobacco use, BMI>85%) be enrolled in HH. If found to be eligible by MaineCare, members referred by their providers also receive letters informing them of the HH program and allowing them to opt-out if they do not wish to participate.

How are Health Home practices and CCTs paid?

In contrast to the original PCMH pilot and the MAPCP expansion which provided per member per month (PMPM) payments for Primary Care Case Management (PCCM)-enrolled MaineCare members, as well as Medicare, and commercially insured patients on a practice's panel, the MaineCare

⁹ Accessed 1/10/14: http://www.mainequalitycounts.org/image_upload/Maine%20PCMH%20Pilot%20Practice_Core%20Expectations_Phase%202_02-12.pdf

¹⁰ Accessed 1/25/13: http://www.maine.gov/dhhs/oms/pdfs_doc/vbp/HH_PCMHPilot%20Eligibility_%20Criteria_UPDAT-ED_042012.pdf. MaineCare initially issued an RFP for applications in June 30, 2012. The application process was reopened again in Nov-Dec 2013 and May 2013 to allow for new practices to apply based on extensions in required dates for NCQA recognition.

¹¹ Two additional CCTs began providing services as of January 2013.

¹² Members were assigned to a HH site based on their PCP enrollment with a provider who practiced the majority of their time at the site or a plurality of service use algorithm for members that are not enrolled in PCCM.

¹³ For the December and January mailings, MaineCare originally identified Stage B eligibility based on diagnosis or service use. In June, this was refined to be both a clinical and functional criteria based on specific service use only.

Health Homes Stage A initiative, per federal requirements, pays for MaineCare members who meet specific eligibility criteria (e.g. those who have two or more chronic conditions; or one chronic condition and at risk for another). See Appendix A for a full list of Stage A conditions Maine included for HH eligibility. Individuals with SMI and children with SED were excluded from Stage A as they will be included in Stage B. To comply with federal rules and be eligible for enhanced federal matching rates (90/10 federal to state dollar ratio), MaineCare modified the payment structure for all practices and CCTs participating in Stage A. Specifically Health Home practices receive \$12 PMPM¹⁴ and CCTs receive \$129.50 PMPM for all HH eligible members enrolled and attested to by the HH practice or the CCT in DHHS's newly created HHES web-based portal (Table 1 and Appendix B). To receive payments under Stage A, HH practices and CCTs are required to use the HHES to manage member eligibility and enrollment and attest to providing 'minimum billable activity' on a monthly basis.¹⁵

For PCMH practices and CCTs participating in the MAPCP pilot, HH payments shifted from a relatively predictable capitated monthly payment (based on total MaineCare members on the practice panel), to one that could change from month to month depending on the number of patients eligible and receiving services in any given month. Prior to implementation of Health Homes, PCMH pilot and MAPCP expansion practices received \$3.50 PMPM payments for all MaineCare members on their panel¹⁶ and associated CCTs received \$2.95 PMPM from Center for Medicare & Medicaid Service (CMS)/Medicare, and \$3 PMPM from MaineCare. PCMH/HH practices and CCTs in the MAPCP demonstration also receive payments from Medicare for each Medicare beneficiary assigned to their practice (in addition to usual fee-for-service paid claims, i.e. \$6.95 PMPM for practices and \$2.95 PMPM for CCTs) to pay for care coordination, improved access, patient education, and community based support, and other patient support services. Although dually-eligible members are eligible for Stage A, since Medicaid is the payer of last resort, PCMH Health Home practices and CCTs participating in the MAPCP demonstration do not receive Health Home payments from MaineCare for dually eligible patients (patients insured by both Medicare and MaineCare) as they are already receiving Medicare payments for these patients. CCTs do, however, receive payments from MaineCare for duals who are enrolled in HH-only practices.

¹⁴ This takes the place of the PCCM payment.

¹⁵ Minimum billable activity was initially defined in the State Plan as monitoring/scanning for gaps in care and/or patient engagement and outreach activities. In the HHES, attestation indicates that "the practice has performed a minimum billable activity as required by Section 91 of the MaineCare Benefit Manual in order to receive a monthly payment for individuals checked. Acceptable minimum billable activities include 1) patient engagement and/or outreach activities, 2) monitoring the patient for treatment gaps, or 3) provision of another required Health Home service as outlined in Section 91 and summarized in the HHES Reference Guide."

¹⁶ This payment was in addition to the \$3.50 PMPM payments for participation in MaineCare's Primary Care Case Management (PCCM) program except for hospital-based practices that did not receive any PCMH payment (consistent with PCCM policy).

Table I. Payment Criteria for Health Homes and Community Care Teams - Per Member Per Month (PMPM)

Payment to Health Home or CCT	Member Eligibility	Type of Practice	MaineCare PMPM Payment	Medicare PMPM Payment	Population That Payment is Based Upon
Health Home Practices	Dual	PCMH Health Home	\$0	\$6.95	All Medicare patients
	Dual	Health Home-only	\$12	N/A	HH eligible patients with attestation
	PCCM	PCMH Health Home and Health Home-only	\$12 ¹	N/A	HH eligible patients with attestation
CCTs	MaineCare, PCCM	PCMH Health Home and Health Home-only	\$129.50 ²	N/A	HH eligible referred patients with attestation
	Dual	Health Home-only	\$129.50	N/A	HH eligible referred patients with attestation
	Dual	PCMH Health Home	\$0	\$2.95	All Medicare patients

*N/A - Medicare payment does not apply since practice is not in the MAPCP demonstration and/or the patient is not dual eligible.

¹ Prior to Health Homes, PCMH Pilot practices received \$3.50 for all MaineCare members, which was beyond existing PCCM payments.

² Prior to Health Homes, CCTs received \$3.00 PMPM for all MaineCare members.

Early Implementation Program Modifications

During the first year of implementing Stage A, several modifications were made to respond to issues and concerns identified by practices, CCTs or program staff in the course of implementation. While some of these will be discussed in more detail in the findings section, key changes included:

Modified Timeline for Practices to Achieve NCQA level recognition. Primary care practices interested in becoming a Stage A Health Home were required to submit an application by June 30, 2012 and were to have NCQA recognition by the start date of January 1, 2013. Due to concerns raised by new HH practices about meeting this requirement, deadlines for achieving NCQA were extended twice in year one, first to June 30, 2013 and later to December 31, 2013. Each time the Department extended the NCQA deadline, they re-opened the Health Home application process to allow any additional practices that might thereby be eligible to apply. Ten additional Health Home practices were accepted to participate in the Health Homes initiative as a result of these additional application periods.¹⁷

Exclusion of Persons Enrolled in Targeted Case Management. Stage A Health Homes was implemented January 1, 2013 after months of negotiation with CMS regarding MaineCare’s State Plan Amendment (SPA), which was finally approved on January 23, 2013, retrospective to January 1st. Due to CMS concerns that receipt of Targeted Case Management (TCM) services were duplicative

¹⁷ Several of these practices are pending NCQA-PCMH recognition which was required for January 2014.

of services provided through Health Homes, MaineCare members receiving TCM could not enroll in Health Homes Stage A and continue to receive TCM services. The TCM criteria caused confusion within practices when providers referred patients for HH enrollment because the practices do not necessarily know which of their patients receive TCM services.

Eligibility Clarifications related to Persons with Mental Health Conditions. MaineCare is implementing its Health Home Initiative in two phases. Stage A, which is targeted to eligible patients with chronic health problems, and Stage B, which is targeted to serve individuals with severe and persistent mental health (SMI) conditions and children with serious emotional disturbances (SED), and is expected to begin in April 2014. In implementing Stage A, practices found that using a diagnosis-driven eligibility standard to identify members with chronic conditions, while excluding members with mental health diagnoses who would be served under Stage B excluded many patients who could benefit from Stage A services. In addition, CCTs that had been providing services to MaineCare members with mental health diagnoses through the PCMH pilot could no longer be paid for these patients.

To address this issue, as of June 3, 2013, MaineCare modified the eligibility criteria for Stage B to be functionally and clinically-driven instead of diagnosis-driven alone so that adults who have SMI diagnoses and children with SED are not automatically excluded from Stage A. The new Stage B eligibility criteria focus on the use of mental health services that require both clinical and functional assessment of need to qualify for the service (Appendix A). These services include community support services for adults, and in-home supports or targeted case management for children. This clinical and functional driven criteria for mental health conditions (rather than diagnosis-driven criteria) allowed additional qualified members to participate in Stage A Health Homes.

EVALUATION METHODOLOGY

We used a mixed methods study design for this evaluation, combining qualitative information from participating practices, Community Care Teams (CCTs), and stakeholders about their experience implementing this new model of care. We used quantitative enrollment data to assess early implementation and analyses of claims data to assess the initiative's impact on quality, utilization and cost. A more detailed description of our methods can be found in the Evaluation Plan for MaineCare's Health Home Initiative.¹⁸

Implementation Experience

To assess the implementation experience of the Health Homes initiative in Year 1, we used two data sources:

- data from the HHES that includes all Medicaid members enrolled in Health Homes and CCTs, and
- structured qualitative interviews with a random sample of participating Health Home practices served by each CCT (20 out of 149 participating practices including¹⁹ PCMH Health Homes and 7 Health Home only practices) and all 10 participating CCTs.

We analyzed HHES data to assess monthly trends in enrollment, attestation, payment, and referral

¹⁸ Fox K. Evaluation Plan for MaineCare's Health Home Initiative. Portland, ME: University of Southern Maine, Muskie School of Public Service; June, 2013.

¹⁹ The number of Health Home practices was 149 as of May 22, 2013 when we used the current list of practices to identify practices to participate in interviews. The number of Health Home practices has since increased to 157 practices as of December 2013.

rates for Health Homes overall, by CCT, and by type of practice (PCMH/HH and HH-only). This data provides information that reflects the experience of all Health Home practices and participants. We also conducted structured interviews with all 10 participating CCTs and a random sample of participating practices served by each CCT. Interviews were conducted in August through October 2013 to solicit participant experience in the first nine months. We used a systematic random sampling method to select practices to be interviewed based on their CCT assignment as of May 2013. For CCTs with five or fewer practices, we selected one practice to be interviewed. For all other CCTs, we selected four practices. We excluded practices with panels of less than 50 Health Home members and included two pediatric practices to assess differences in implementing the model for adults and children. In total 33 practices (18 PCMH/HH and 15 HH Only practices) and 10 CCTs received an email invitation to participate in a structured interview. (See Appendix C for text of interview invitation letters sent via email.) Three follow-up calls were made to encourage participation. In total, all 10 CCTs as well as 20 practices agreed to participate.

Table 2 compares characteristics of sites interviewed with the original sample and with the total number of Health Home practices and by those that are PCMH/HH and HH-only. The sample represented 22 percent of total Health Home practices. Of the practices sampled, 60 percent were interviewed. Panel sizes of the practices interviewed ranged from 55 to 551 Health Home members. Practices agreeing to be interviewed were more likely to be PCMH/HH than HH-only practices compared to the original sample.

Table 2. Practice characteristics of sampled and participating Health Home practices

	Sample		Practices Interviewed		Total HH Practices	
	#	% of total HH practices	#	% of sample	#	% of Total HH Practices
Total count of practices	33	22%	20	60%	149 ¹	100%
<i>PCMH/HH practices</i>	18	54.5%	13	65%	75	50.3%
<i>HH-only practices</i>	15	45.5%	7	35%	74	49.7%
Total min panel number	55		55		7	
Total max panel number	551		551		914	

Data source: MaineCare Health Home Enrollment System (HHES) as of May 22, 2013

¹ The number of Health Home practices was 149 as of May 22, 2013 when we used the current list of practices to identify practices to participate in interviews. The number of Health Home practices has since increased to 157 practices as of December 21, 2013.

Interview protocols were developed to assess the first year experience of HH practices and CCTs with respect to:

- changes required to improve care for high-need MaineCare patients,
- referral and coordination processes between practices and their assigned CCT,
- challenges and strategies for implementing expanded care coordination, care management and other needed services,
- training needs,
- perceived impact of the additional services on clients and quality of care, and
- lessons learned.

See Appendix D for a complete list of interview questions. Most interviews lasted approximately one hour and were conducted onsite, with the exception of a few practices that were interviewed by phone. In addition to these qualitative interviews, the evaluation team reviewed documents relevant to the Health Home Initiative, including Maine's State Plan Amendment request, applications seeking approval as Health Homes and CCTs, quarterly reports submitted by the CCTs to Maine Quality Counts, program meeting minutes and monthly enrollment reports for Health Home practices and CCTs. Evaluation team members also participated in program design meetings with DHHS and CCT steering committee meetings.

Baseline Quality, Cost and Efficiency Method

To measure the cost efficiency and quality outcomes of Stage A, we are using a pre-post study design, comparing the experience of MaineCare members in Health Homes with members with similar conditions not enrolled in a Health Home as identified by claims²⁰ before and after implementation. The unit of analysis for this study is the member; all use, cost and quality indicators are calculated at the patient level. Patients with missing information for key variables and denied claims were excluded from the analyses.

Measures include member characteristics, quality of care measures specified in the MaineCare SPA for Stage A that can be captured through claims, utilization, and per member per month costs (see Appendix E for a complete list of measures). Baseline data are presented as raw unadjusted rates to assess group differences that will inform adjustment factors to include in subsequent pre/post analyses.

The study period is CY 2013 through 2014. In consultation with DHHS and Maine Quality Counts, we chose 2011 as the baseline year. As indicated above, the PCMH/HH practices and most of the CCTs had begun providing services to MaineCare patients in 2012 as part of the MAPCP pilot. As a transitional year, it was decided that 2012 was neither in the intervention period or pre-intervention baseline. Baseline data presented in this report are based on MaineCare claims and eligibility data from CY 2011 (with 2009 and 2010 claims for HEDIS quality measures that require a "look back" period).

For baseline analyses, the Health Home study group (n=42,890) included anyone enrolled in the Health Home enrollment system between January 1, 2013 and August 15, 2013 and who were currently a Health Home member as of August 15, 2013,²¹ as a result of being identified as having a Stage A diagnoses on claims and who also had "full" MaineCare coverage²² in CY2011. Members enrolled in the HHES based only on provider identified diagnoses were not included in the study group. MAPCP members with dual eligibility for both Medicare and Medicaid, who were able to be assigned to HH practices for Stage A were included in the study group.

²⁰ Members enrolled in Health Homes through a provider referral are included in descriptive analyses of the population served in the HHES, but are excluded from comparison group analyses (N=21,492) since there was no data available to identify those likely to be provider referred in comparison practices.

²¹ MaineCare members in the Health Home enrollment system who were terminated prior to August 15, 2013 were excluded from the study group because we were unable to reflect current members who were accurately assigned to Health Home practices. These excluded members were also excluded from the comparison group.

²² MaineCare members must have "full" MaineCare coverage to qualify for Health Homes. If an individual has a MaineCare "Adults and Children Services", they likely have full MaineCare coverage and may be eligible for Health Homes if they also meet the chronic conditions criteria. For baseline, Adult Non-Categorical members were included as well although they have a more limited benefit. Since the Adult non-Categorical waiver ended December 31, 2013, they will be excluded from the pre/post analyses. Other coverage codes, such as Pharmacy Only or Medicare secondary coverage (QMB) does not constitute full MaineCare coverage. Individuals with this type of coverage are not eligible for Health Homes.

The comparison group (n=80,462) included all MaineCare members who were not identified in the HHES in 2013, but who were identified through the CY 2012 claims analysis as meeting revised Stage A diagnostic eligibility criteria and not having received Targeted Case Management (TCM) and who had full MaineCare coverage at any time in CY 2011. Members listed as “pending enrollment” in the HHES as of August 15, 2013 were excluded from the comparison group.

For more details on the quantitative methods and specific measures included, please see the Evaluation Plan for MaineCare’s Health Home Initiative.²³

Study Limitations

This report includes information on the implementation of Health Homes Stage A from interviews with Health Home practices and CCTs. A sample of practices was selected for interviewing, and therefore findings from the interviews may not represent all Health Home practices. The evaluation tried to interview all members of the Health Home team during interviews, but all members were not always available for the interview. The baseline analysis is based on HHES data as of August 15, 2013. Additional data will be used in the subsequent analysis which will provide a more comprehensive picture of measures at baseline. In addition, baseline data in this report are unadjusted, and therefore are subject to change in subsequent analyses when adjusted for differences in patient demographics and health risk. Thus, this baseline data should only be seen as a general benchmark for determining how the study population compares with other patients prior to the intervention.

²³ Fox K. Evaluation Plan for MaineCare’s Health Home Initiative. Portland, ME: University of Southern Maine, Muskie School of Public Service; June, 2013.

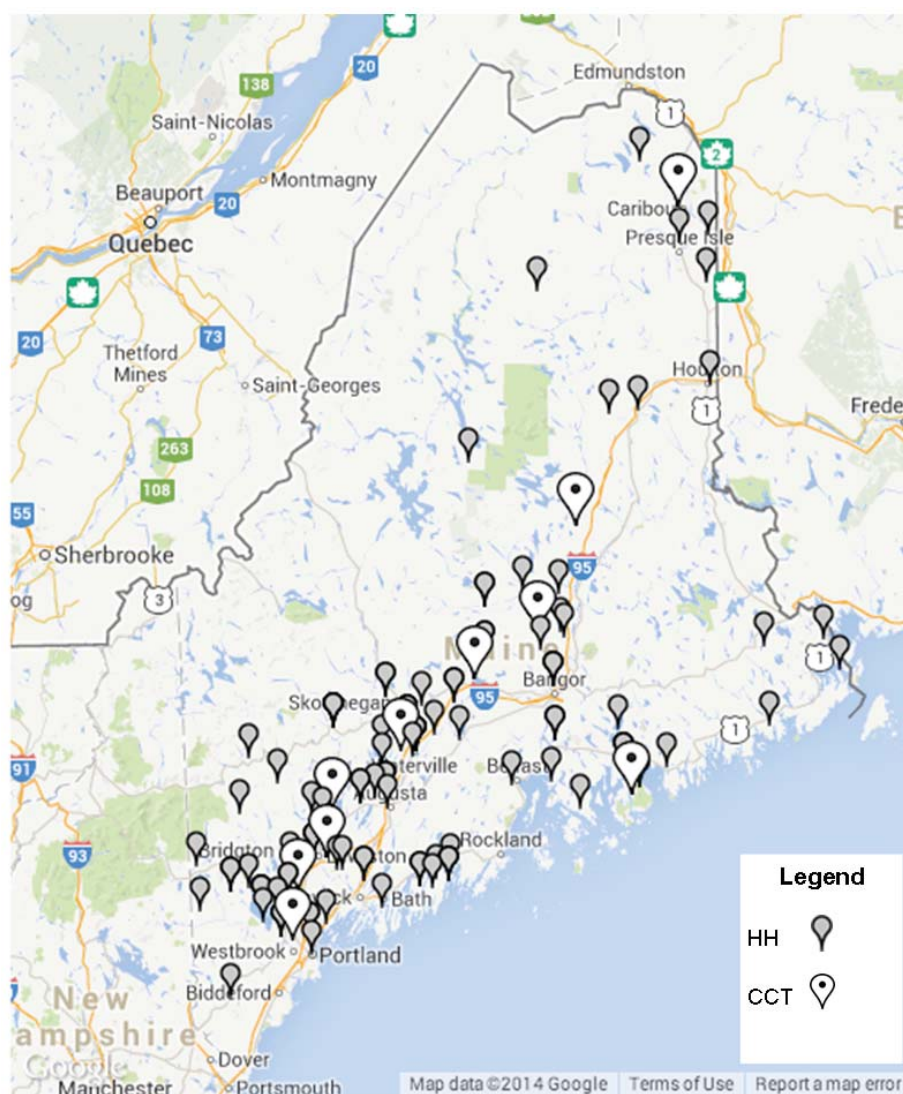
PART I: YEAR 1 IMPLEMENTATION EXPERIENCE FINDINGS

Stage A significantly expanded Health Home capacity by adding practices and CCTs to those in the PCMH expanded pilot.

In 2013, a total of 157²⁴ primary care practices applied and were deemed eligible to be a Health Home practice, 74 of which were PCMH/MAPCP practices and 83 that were not part of the original PCMH pilot or expansion that are referred to throughout the remainder of this report as Health Home-only practices. This number includes 10 HH-only practices that applied and were found eligible as a result of re-opening the application period. All eight CCTs in the MAPCP demonstration became HH CCTs and two additional CCTs applied and were deemed eligible.

Figure 1 shows the distribution of HH practices and CCTs across the state.

Figure 1. Map of Community Care Teams and Health Home Practices



²⁴ Number of practices is based on web portal enrollment data as of 12/21/13.

Flexibility in program design results in variation in CCT models

Stage A allowed considerable flexibility in what type of agencies could apply to be CCTs and how many practices the CCT needed to serve. As a result, as shown in Table 3, there is wide variation in the type of organizations providing CCT services and the number of practices and associated Health Home eligible members assigned to each. CCT agencies approved for Stage A include three home health agencies, two federally-qualified healthcare centers, one mental health provider, one primary care provider, and three hospitals that are a part of health systems. The number of practices assigned to a CCT ranged from 2 practices to 39 practices, with the total number of MaineCare HH members served by those practices ranging from 816 to 10,644 (Table 3). Geographically, CCTs are generally equally dispersed across the state, but the geographic distance between CCTs and their associated practices is wide-ranging, with some CCTs serving practices across several counties in the state (Figure 1). CCTs also varied in their associations with their assigned practices, with some housed within the same parent organization (e.g. FQHC or health system) and having staff embedded in the practice, while others had to establish new working relationships with practices with which they were not previously affiliated.

Table 3. Characteristics of Community Care Teams

CCT Name	Type of Organization	Number of HH Practices Associated with the CCT	Total Number of Health Home Members	Total Number of CCT Members	Percent of CCT Members Attested	Percent of Health Home Members in CCTs
Androscoggin Home Health Services, Inc.	Home Health Agency	30	10,644	437	100%	4%
Aroostook Mental Health Services, Inc.	Mental Health Provider	11	3,042	155	61%	5%
Community Health & Nursing Services	Home Health Agency	5	1,764	25	88%	1%
DFD Russell Medical Center	FQHC	4	1,158	55	100%	5%
Eastern Maine Homecare DBA Bangor Area Visiting Nurses	Home Health Agency	39	9,106	212	100%	2%
Maine Medical Center	Hospital	20	5,380	99	44%	2%
Maine General Medical Center	Hospital	14	5,845	33	100%	1%
Mount Desert Island Hospital	Hospital	15	2,661	112	85%	4%
Newport Family Practice	Primary Care Provider	2	816	59	95%	7%
Penobscot Community Health Center	FQHC	17	7,388	138	100%	2%

Data Source: MaineCare Health Home Enrollment System (HHES) as of December 21, 2013

In interviews, many practices indicated they had little prior experience with their CCT before becoming a Health Home. PCMH/HH practices had some interaction with their CCT through the MAPCP pilot, but HH-only practices had no experience with this new resource. Both practices and CCTs reported a higher level of coordination when a CCT was part of the practice or the broader health system. Coordination also tended to be better when CCTs were housed in community organizations to which practices had regularly referred for home health or mental health services. But many CCTs had little prior relationship with the practices and spent early months visiting practices, getting to know staff and educating them about the services they provide and how to use the CCT. Most CCTs indicated that outreach to practices, particularly those with whom they had no existing relationship, was one of their biggest challenges.

In cases where the CCT and practice are not co-located, most CCTs established a liaison for each Health Home practice to serve as the first CCT point of contact for the practices. Some CCT staff had office hours or drop-in space at the practice. Where it is reported to be working well, the CCT point of contact is either co-located, or at the practice on a regular schedule, and/or in contact via electronic health record (EHR) regularly. A few HH-only practices expressed frustration by the slow start-up of CCT services. Even though these practices had patients who could benefit from CCT services, practices did not refer because there was no established relationship or protocol for doing so.

Stage A Health Home Enrollment was initially low, but steadily increased during Year 1

MaineCare had estimated that approximately 42,000 of MaineCare members were potentially Health Home eligible based on qualifying diagnoses identified through a 2012 claims analysis. This number does not include members who may qualify through conditions that are unlikely to be identified in claims data, such as elevated BMI or tobacco use. As of January 21, 2013, 23,000 members were enrolled through auto-assignment or by referrals from practices. Of the total members who received letters through the auto-assignment process, one percent elected to opt-out of the program.²⁵ As MaineCare completed sending member opt-out letters, enrollment numbers jumped in February to over 35,000 and stayed relatively constant through June 2013 (Figure 2) when another auto-assignment occurred. Although the HHES web-based portal was designed to allow practices to refer HH members for enrollment who were not identified through claims (e.g., patients who smoke, have a BMI of 25 or over, or have substance use disorders), only 9% of HH enrollees were identified solely by providers. The vast majority of HH members were identified through claims auto-assignment alone or in combination with a provider diagnosis (92%).²⁶

Interviews with HH practices identified several reasons for the slow start up including:

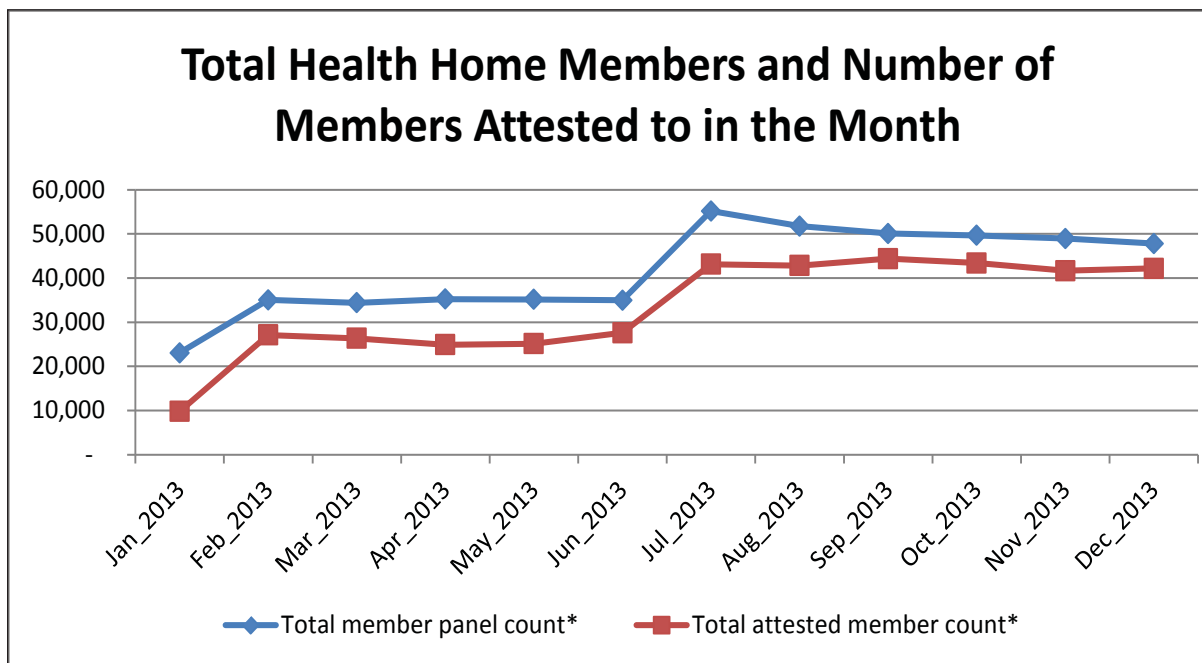
- Lack of familiarity by some practices with the HHES system and how to enroll members or document that services were provided.
- Frequent eligibility denials for patients referred by practices who had co-occurring mental health problems which made them ineligible for Stage A until eligibility criteria were changed in June 2013. Practices were frustrated that the reason for a denial was not provided in these situations in the interest of maintaining the confidentiality of the patient's mental health status.
- In July, after DHHS redefined Stage B criteria allowing for auto-assignment of some of the original Stage A members withheld for Stage B, the number of Health Home members increased by 20,000

²⁵ In practice interviews, some practices and CCTs indicated that some patients did not understand the opt-in/opt-out letters, and were concerned about their MaineCare status, even though letters indicated that participation was voluntary.

²⁶ MaineCare Health Home Enrollment System (HHES), December 2013.

members where it peaked at 55,000 total enrollees. As of December 2013, enrollment was just under 48,000.

Figure 2



Data Source: MaineCare Health Home Enrollment System (HHES)

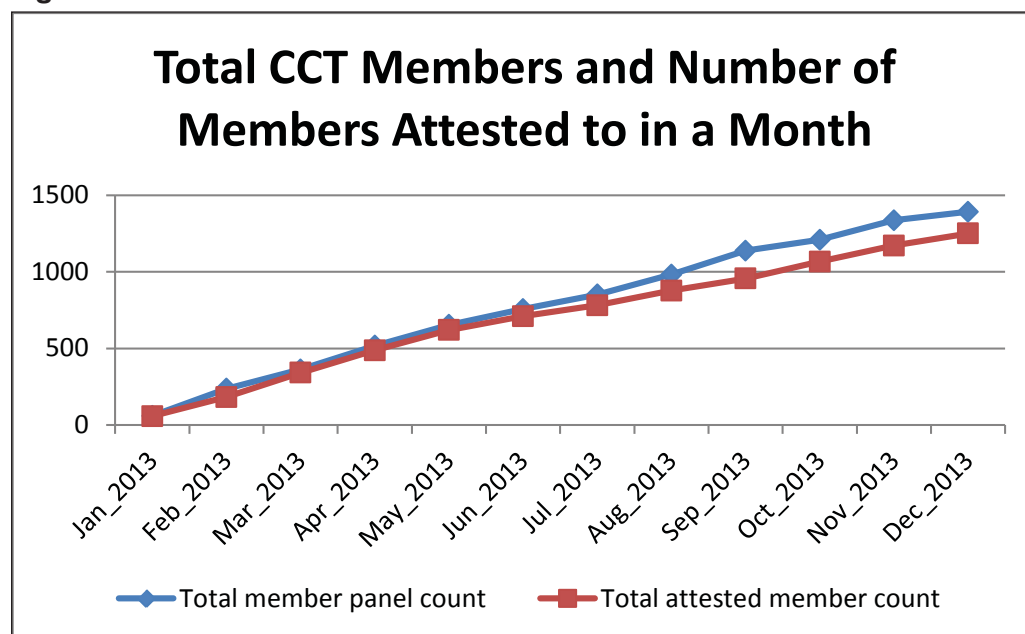
* Based on the member panel on midnight of the 21st of the month.

CCT use was also initially low and significantly increased each month

As with enrollment in HH practices, initial CCT enrollment was low, though this was to be expected (Figure 3). While the state estimated that HH practices would ultimately refer up to 5% of HH eligible members for CCT services, they recognized that CCTs would unlikely have that much enrollment in January 2013 given that practices were still enrolling patients, and members had to be enrolled in the HH practices before they could be referred to a CCT. Further, CCTs had not served that high of a ratio of patients yet under the MAPCP and PCMH initiatives. Sixty members actually were enrolled in CCTs during the first month. CCT enrollment increased exponentially each month to a total of 1,392 members as of December 2013, representing 3% of total HH members. CCTs and practices indicated the slow start for CCT enrollment may have been due to several other factors including:

- Program start-up issues (2 of the CCTs had just opened their doors in January 2013)
- Some CCTs were assigned many additional practices beyond those indicated in their applications
- Lack of referrals from the HH practices particularly when the CCT had no prior relationship with them
- Practices did not always have clear criteria for assessing when a patient could benefit from a CCT referral
- Practices not understanding that they needed to refer patients to the CCT.

Figure 3



Data Source: MaineCare Health Home Enrollment System (HHES) as of December 21, 2013

* Based on the member panel on midnight of the 21st of the month.

The new attestation function for practices and CCTs requires significant time

As a condition of payment, practices and CCTs are required to attest on a monthly basis that HH services were delivered. Of members enrolled in a Health Home, attestation rates were lower initially but increased over time (Figure 2). In January, 43% of members were attested to as having received Health Home services by Health Home practices but by December 2013, this had increased to 88% of members attested to having received Health Home services. PCMH/HH practices had slightly higher average attestation rates (93% of members on their panel) compared to HH-only practices (82%) (data not shown).²⁷

Based on interviews with practices, increased attestation rates may reflect providers increased familiarity with the HHES system and the attestation process, particularly after the first few months. Many practices and CCTs discussed the challenges related to the attestation process including the extensive time required to verify members on their panel and the lack of clear guidance on what constitutes “minimum billable activity”. Both HH-only and PCMH/HH practices reported needing to dedicate staff to do monthly attestations in the portal. Larger practices indicated that given the number of eligible patients, it was hard for staff to conduct monthly comprehensive record reviews for all HH members which they believed were required. MaineCare provided clarifications via frequently asked questions (FAQ) documents in provider communications as well as on the HHES portal; additional clarifications provided by MaineCare in early summer 2013 on what constitutes minimum billable activity and documentation required for attestation may have contributed to higher attestation rates.²⁸

²⁷ December 21, 2013 data from the MaineCare Health Home Enrollment System (HHES).

²⁸ In June 2013, MaineCare released a FAQ document along with a memo, “Attesting for ‘Minimum Billable Activity’ as a Health Home with MaineCare,” for Health Home practices and CCTs. These documents, made available in the HHES portal, clarified attestation for the practices. The memo explained that minimum billable activity is: monitoring and scanning for gaps in care, and/or patient engagement and outreach activities. MaineCare further explained that this did not require practices to 1) review each patient record every month to identify gaps in care, 2) perform a patient “touch” each month: letters, phone calls, visits, etc, nor 3) deliver services that are already paid for by MaineCare (i.e., an office visit).

PART I: Year 1 Implementation Experience Findings

Additional modifications to the HHES system in October 2013 that allowed practices to see MaineCare health care utilization data for their HH patients may also have contributed to higher attestation rates by allowing practices to more easily scan for gaps in care and identify specific service use concerns to satisfy minimum billable activity requirements.²⁹

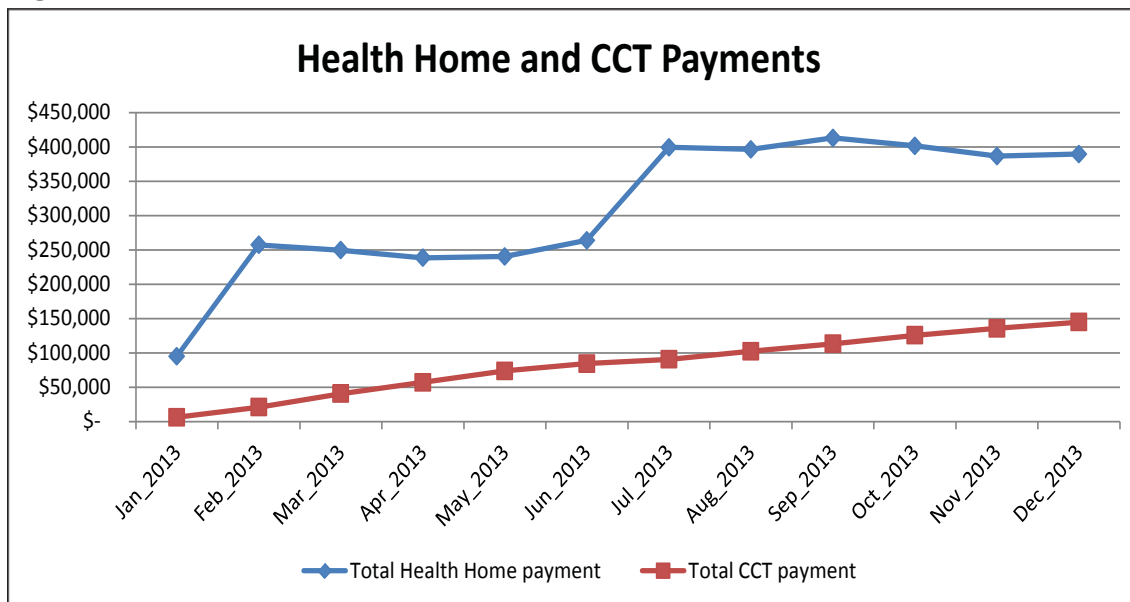
CCTs have had much higher attestation rates than Health Home practices from the outset, which may be due to CCTs serving a much smaller number of patients who are also more likely to require regular contact. On average, CCTs have attested to approximately 90 percent of their members monthly, which has remained relatively constant over time.

For some, attestation was viewed as an additional administrative burden, particularly in those practices with large HH caseloads. However, a few practices found the process to be an opportunity to review patient records to proactively plan and manage patient care.

While some practices indicated that reviewing records case-by-case provides valuable information about their patients, monthly reviews are time intensive. While some practices with access to service use data on their patients were able to reduce the time involved by switching from chart-by-chart reviews to population-based methods for attestations, others continue to do manual chart reviews. Providers' feedback on attestation in this report was prior to the fall of 2013 rollout of healthcare utilization reports, or "dashboard reports", which could expedite this process.

Related to attestations, payments to Health Home practices and CCTs have increased relative to the increasing number of members served on the Health Home and CCT panels. By December 2013, the additional payments to Health Home practices for additional HH services was \$389,488 and the total payment to CCTs was \$144,781 per month (Figure 4).

Figure 4



Data Source: MaineCare Health Home Enrollment System (HHES)

²⁹ These new features of the HHES that allowed for providers to review utilization data were not yet implemented at the time of our evaluation interviews with practices.

Practices are maintaining or building infrastructure to support chronic care management

Most practices that had participated in the PCMH pilot reported needing to change very little once becoming Health Homes. In fact, several PCMH/HH practices were confused about the different programs since they had already been building the infrastructure to be a patient-centered medical home, including a focus on improving care of patients with or at risk of specific chronic conditions and having high costs and use. Changes for PCMH/HH practices largely related to re-defining roles or hiring additional staff positions to fill new requirements such as attesting to patients monthly and coordinating with CCTs as a resource for their patients. For example, some practices expanded nurses' roles to scan for gaps in care across their patient population, assigned patient service representatives to do chart reviews, or designated a triage nurse to be the nurse care manager or manager of the Health Home project. PCMH/HH practices were more likely to develop and use data systems and/or changes in workflow to support their HH patients. For example, many PCMH/HH practices developed reports in their EMRs to track HH patients or conducted systemized chart reviews to provide documentation for attestation. Others designed standard pre-visit planning forms and processes for patient care management and tracking including alerts on emergency room visits or hospital admissions or to identify patients who need CCT services. One PCMH/HH described an innovative way to make sure they contacted a hard-to-reach patient:

"We have an almost resort-like location here and our patient population can be either super rich or super poor. We had a patient with all kinds of problems... and we could never get in touch with him. We realized we have to look at the tide charts because if it is low tide, he's out digging for clams... we need to call him after half tide or at full tide. The nurse now has tide charts on her computer so she knows when to contact people who do this type of work for a living."

HH-only practices generally reported a steeper learning curve and the need to simultaneously enhance capacity and design new systems for monitoring gaps in patient care, tracking and following-up with patients, and providing extended hours of care. Some HH-only practices indicated having to build a new awareness of community resources that could support patients, while others noted improving workflows through new administrative processes. Most of HH-only practices interviewed also indicated they had expanded their hours since joining the initiative.

HH-only practices reported hiring new staff and/or changing staffing roles to accommodate changes needed to become a Health Home practice. The following describes one HH-only practice's improved care coordination to ensure patients make appointments:

"We replaced our medical assistants with RNs who are doing triage and are much more efficient with identifying patients who have gaps in care. Part of seeing the population health "big picture" was realizing our discharge process needs work. Typically if a patient has three no-show appointments, they are sent a warning letter, and after the next no-show, the patient is discharged from the practice. After seeing our Health Home population as a group, we realized this happens too fast. There are other things at play- that we realized we should be helping the patient/ patient family with- to allow them to make appointments. Using the care team, care coordination allows them to get to these families well before three no-shows. The practice is now intervening in some cases as soon as the first no-show, and in all cases by the second no-show."

Referral processes and rates of referral vary between Health Homes and CCTs

Health Home practices were asked how or when they knew to refer patients for CCT services. A few practices had a paper referral form that they submitted to their CCT; most were more informal in their “hand off” of patients. Several practices reported that they knew to refer to the CCT “when the patient had exhausted all the resources within the practice and were not showing improvement.” For the CCTs that are co-located within the practices, regular meetings with HH practice staff are used to identify potential CCT patients. Many practices expressed the need to communicate with patients about how the CCT can help them. Some indicated that patients with whom they have built a trusting relationship are sometimes reluctant to work with another service provider. Even co-located practices talked about the need for better transitions and warm hand-offs. Practices that see CCT staff in their offices noted the importance of having providers interact with the CCT staff to build their trust because “if the provider doesn’t feel the CCT is part of the team, how can we expect the patient to?”

Interviews with HH and CCT practices for this report were conducted prior to the development of standardized core elements for the referral process released by Quality Counts in December 2013, that may have helped clarify HH/CCT referral roles and responsibilities. In addition, in Feb 2014 CCTs were allowed access to assigned HH practice patient panel and utilization data in the HHES enrollment portal, which also may have improved identification of high-risk patients that might benefit from CCT services.

As shown in Table 4, the percent of HH practice enrollees using CCTs has increased between June and December 2013 particularly in PCMH/HH practices. However, there are still significant differences in rates of CCT use by CCT. This may reflect differences in the number of practices assigned to CCTs and the organizational affiliation or relationship of the CCT to practices. Those that were co-located or embedded within their system (e.g., Newport Family Practice and DFD Russell Medical Center) or that had previous working relationships with practices in their communities (e.g., Androscoggin Home Health Services, Mount Desert Hospital) appear to have higher referral rates from practices. With the exception of Androscoggin HHS, these CCTs also serve far fewer practices than other CCTs. Despite PCMH/HH practices having worked with CCTs for a longer period of time, rates of members using CCT services are similar in PCMH/HH and HH-only practices.

Table 4. Rates of CCT use by CCT and PCMH/HH and Health Home-only assigned practices

CCT Name	PCMH/HH or Health Home Only	June 2013		December 2013	
		Number of Practices	Average Percent of Members Utilizing CCTs	Number of Practices	Average Percent of Members Utilizing CCTs
Overall	All	162	2%	157	3%
	PCMH/HH	75	2%	74	3%
	HH only	87	3%	83	3%
Androscoggin Home Health Services, Inc.	PCMH/HH	8	3%	8	4%
	HH only	23	4%	22	4%
Aroostook Mental Health Services, Inc.	PCMH/HH	2	1%	2	4%
	HH only	12	0%	9	5%
Community Health & Nursing Services	PCMH/HH	4	1%	4	1%
	HH only	1	0%	1	3%
DFD Russell Medical Center	PCMH/HH	4	6%	3	5%
	HH only	1	0%	1	5%
Eastern Maine Homecare DBA Bangor Area Visiting Nurses	PCMH/HH	24	1%	24	3%
	HH only	15	0%	15	1%
Maine Medical Center	PCMH/HH	9	1%	9	2%
	HH only	11	1%	11	1%
Maine General Medical Center	PCMH/HH	9	1%	9	0%
	HH only	5	0%	5	1%
Mount Desert Island Hospital	PCMH/HH	9	3%	9	4%
	HH only	6	7%	6	5%
Newport Family Practice Pa	PCMH/HH	2	5%	2	7%
	HH only	0	0%	0	0%
Penobscot Community Health Center	PCMH/HH	4	0%	4	2%
	HH only	13	0%	13	1%

* Data as of June 21, 2013 and December 21, 2013
 Data Source: MaineCare Health Home Enrollment System (HHES)

As shown in Table 5, patients were referred to CCTs most commonly for having three or more conditions and/or failing to meet treatment goals (33%) or high social service needs that interfered with care (28%). A smaller percentage was identified by MaineCare as being high-risk or high-cost (17%) or had visited an emergency room three or more times in the last six months or five or more times in the last year (15%).

Table 5. Maine CCT member referral reasons, January – December 2013

CCT referrals	
Average percent of reasons for referral to CCT	
A. Hospital Admissions: 3+ in 6 mo. or 5+ in yr.	2%
B. ED Utilization: 3+ in 6 mo. or 5+ in yr.	15%
C. Identified by MaineCare as high-risk or high-cost	17%
D. 3+ chronic conditions and/or failure to meet treatment goals	33%
E. Polypharmacy: 15+ chronic medicines and/or multiple high risk medications	4%
F. High social service needs interfering with care	28%

Data Source: MaineCare Health Home Enrollment System (HHES)

The vast majority of patients referred for CCT services have behavioral health needs

Nine out of ten CCTs stated that most, if not all, of their patients referred from practices had behavioral health diagnoses, needed help with behavioral health treatment or community resources related to behavioral health, and/or had psychosocial issues in addition to having multiple chronic conditions. An example from a CCT illustrates that patients’ chronic conditions often overlay with social and/or behavioral health issues:

One patient from a newly formed Health Home was referred to the CCT; the Health Home told the CCT about her at their initial “meet and greet” before the portal was established. This patient had diabetes, asthma and high BMI, and had been to the ER 56 times in the previous year. The Health Home wanted the CCT to find out what was happening, and by the time got they her in the portal (3 months later), she had been in the ER 12 more times. Through the CCT’s home visits with the patient they found out that the patient had no support system, was anxious and worried at night, and that would precipitate most of her ER visits. She considered the workers in the ER her friends and support system. The CCT connected her with a women’s advocacy support group for social connections. The patient wanted to work on getting to a healthy weight and the CCT referred her to some exercise programs in the community. She had gastric bypass surgery and since the CCT referral, her one and only ER visit was for post-surgery pain. With the support of the CCT, she has stopped constantly calling her PCP and using the ER. One of the best tools they used was a scheduled phone call with the PCP office every Friday, leaving it to the patient if she needed to call or not. She very rarely calls. The CCT thinks she will sustain her successes.

Each CCT meets the needs of a patient with behavioral health needs differently, based on the severity of the patient and CCT resources. Some have in-house short term behavioral health therapies (such as counseling) available and refer out for more intense and/or longer lasting needs. Two CCTs retain a psychiatrist on their team for regular consults of CCT patients. One rural CCT offers tele-psychiatric services for two hours, two days a week; this doctor is also available to the CCT for recommendations and consultations.

Health Home practices value CCT services

Both PCMH/HH and HH-only practices that were familiar with the CCTs agreed that the services CCTs provide -- particularly home visits, mental health and social work support -- were very useful in informing treatment plan modifications (e.g., simplifying medication regimens) and addressing other underlying barriers to adherence. Several Health Home practices discussed the importance of their patients' receiving home visits from the CCT, and the value it added to treating the "whole patient." As staff at one CCT noted, the job of the Health Home practice is defined by what each practice's staff "can do within the four walls of the practice." For CCTs, their job is to do what can be done at home and in the community to help the patient manage their own care personally, as well as teach patients how to get better results from better interactions with community resources and the medical community:

One CCT worked with a Health Home patient who needed some simple fixes that a doctor or practice would never be able to pinpoint. On the CCT's first home visit, the patient's husband told the nurse that she never leaves her room. While talking to the patient, the CCT nurse noted she is on oxygen and asked where her oxygen was. The patient said she could only use it in her bedroom because she did not have a long enough cord to leave the room and stay connected to the oxygen. The CCT immediately got her a cord long enough so she could move around her house. CCT staff noted this is one example of something a practice would never see and may never ask about, but has a huge impact on the patients' emotional well-being.

Using EHRs and other data for population health management is seen as essential

The use of Electronic Health Records (EHR) to share information between the CCT and the practices was repeatedly mentioned by both CCTs and the Health Homes as an important factor in facilitating referrals and communication between CCT and practices regarding patient care. CCTs that have worked with assigned practices both with and without access to the EHR indicated that access to the EHR allowed direct sharing of case notes and communication about the patient in a much timelier manner. Some CCTs were working through practices with HealthInfoNet, Maine's Health Information Exchange, to receive real-time alerts about patients who had gone to the emergency room:

"We are looking at the data more. So that means we are reaching out to more patients that haven't been in, that maybe are out of control... patients we didn't have a handle on before. We are tapping into resources more, and helping patients link up to these resources."

In addition to referring patients who exhausted practice resources, many Health Homes are using data to determine which patients should get referred to the CCT, and which patients need and are not getting Health Home services. Several practices have developed in-house data reports that, for example, show patients by diagnosis that allow Health Home staff to identify gaps in care or areas where outreach may be needed. For example, staff might run a report on all Health Home patients who have asthma and cross check to see who has been in for a flu shot:

"The biggest change to me is the amount of data: I don't think we've ever had so much (data) to interpret in my whole life! But that has created an increased awareness- you know, you always think you are doing a great job, but you look at your numbers and realize that you see you missed some people ... who needed flu shots or missed appointments."

CCT Services and Staffing Models Vary

As indicated above, many CCTs provide home visits for their patients. In our interviews with CCTs, half mentioned that they regularly visited patients in their homes, although others said they meet the patients where they were most comfortable, such as at a community center, in provider offices or in the hospital. Based on quarterly data reports submitted by the CCTs to Maine Quality Counts, about two-thirds of all patient visits are by phone, one quarter are provided in the home, and about a tenth of visits are at the CCT site or Health Home practice. Other contact with Health Home members may be in community settings or by correspondence, such as email. Services provided can include medication reconciliation, using motivational interviewing to identify patient goals, providing patient education, and assistance with navigating the system, such as help with housing food, and transportation, which can indirectly impact one's health.

Many of the CCTs indicated that staff have been trained in motivational interviewing³⁰ so they can properly engage each patient “where they are” and to identify their readiness to make changes in their lives to improve their health and use of services. Through motivational interviewing, CCT staff found that the language they use with patients can make a big difference. While patients may not be able to relate to language about adherence, (e.g., improving COPD symptoms), they may relate to working to overcome social or other barriers to adherence (e.g., help with getting transportation, or eating healthy foods). Most CCTs also reported working with patients to help them “navigate the system,” either within care system or the social services available at the state and community level, including transportation and housing. CCT staff also consult with their patients’ providers and offer coaching to their patients on how to be their own health advocate and how to get what they need from their providers.

Through motivational interviewing and other CCT services (e.g., medication reconciliation), a central CCT strategy is to help empower the patient and set goals to encourage patient self-management. CCT staff also identified the importance of engaging family members, caregivers or other key players in the patient’s life, if the patient is willing. Many CCTs gave examples of educating the family or caregiver on how to assist the patient in taking their medications properly. CCTs also use health coaches to provide health education on disease management, to start weight loss programs, or other self-management and health promotion interventions. Two of the CCTs noted that their Patient Advisory Council or having patients on their CCT Advisory Team is an effective way to encourage patient engagement and an avenue for the CCT to receive regular, formal feedback from the patient perspective.

CCT staffing models vary. Every CCT reported having at least one nurse on staff, and all 10 CCTs indicated they have at least one social worker on their CCT team. CCTs reported variations in the work flow and use of nurses and social workers- some are hired as care managers or care coordinators; often the social workers address the psychosocial and mental health needs of patients. CCTs reported using both nurses and social workers as the first point of contact or “triage” for patients who are referred for CCT services. Five CCTs have a pharmacist or pharmacy students on their team. Half of the CCTs mentioned behavioral health specifically when discussing their team structure; two of them have psychiatrists on their team for consult purposes, one specifically hired a licensed clinical

³⁰ The approach of motivational interviewing attempts to increase the client’s awareness of the potential problems caused, consequences experienced, and risks faced as a result of the behavior in question. Alternately, motivational interviewers help clients envision a better future, and become increasingly motivated to achieve it. Either way, the strategy seeks to help clients think differently about their behavior and ultimately to consider what might be gained through change. Cummings, S.M.; Cooper, R.L., & Cassie, K.M (2009). “Motivational interviewing to affect behavioral change in older adults”. *Research on Social Work Practice* 19 (2): 195–204. Hanson, M; Gutheil, I. A. (2004). *Motivational strategies* 49

social worker to address the “psychosocial” needs of their patients, one has their social worker regularly engage with a mental health case manager on patients, and one includes a behavioral health specialist on its team. One CCT mentioned their pediatric social worker, who focuses on helping not just the child but working with the whole family. Given the diversity and newness of each CCT model, it is difficult to evaluate at this time which approach has proven most effective thus far.

Protocols for when to “graduate” patients from the CCT also vary, but most CCTs said they release patients from their care when the patient has reached all or most of his/her goals, which varies by patient. All CCTs discussed how each patient is different and will have different goals specific to their diagnoses, behaviors as well as both their ability and desire to make changes. As one Care Management Director said, “When you’ve seen one CCT patient, you’ve seen one CCT patient.” Two CCTs have discharge policies and/or graduation protocols that are set across the spectrum of patients such as when they no longer use the ER as much or no longer need intensive services. Others graduate patients when they feel they are able to maintain a steady state with HH practice support. Several CCTs also said they discharge patients if they are not engaged, miss appointments, or are not ready to go any further with CCT services.

Practices and CCTs have reported some health improvements for specific patients but it is too early to see broader impact on health outcomes

At the time of our interviews, most CCTs and practices (including both PCMH/HH and HH- only) said that it was too early to see changes in health outcomes resulting from Stage A across all patients served. Every practice and CCT, however, reported individual patient improvements and shared stories of how the Health Home/CCT model was working well. A few practices or CCTs reported improvement in hypertension and diabetes quality measures, such as improvements in patients receiving eye exams (increasing from 51% to 54% within that practice) or decreases in blood sugar levels (HbA1c). Two CCTs also had developed their own tracking system for individual patients and had seen reduced emergency department and hospital admissions.

Many practices and CCTs gave anecdotal examples of how the expanded services had improved the health and wellbeing of individual patients:

A Health Home and CCT were working together with a patient with a mental health diagnosis. This patient lived independently with assistance from support staff in her home. She was a frequent visitor to the ER. The CCT staff reviewed her chart and mapped out when she visited ER- and found it was primarily late afternoons and weekends. The CCT staff called her case manager and found out these ER visits occurred when the patient did not have staff with her, and she would get anxious and call an ambulance. The CCT set up a team meeting with the case manager, CCT staff, Health Home provider, and patient to do some motivational interviewing that helped the patient see this pattern, and offered some strategies for how to deal with anxiety when she was home alone. The patient now calls the CCT office or Health Home provider office when she is feeling anxious and they can talk her through it. The weekend on-call staff know her and know how to help. She no longer uses the ER.

Another CCT developed customized information sheets for a patient who had high emergency department usage. These information sheets listed steps to take before going to the ER (e.g. calling his case manager or the Health Home provider's office). The patient then went through this checklist every time to determine if going to the ER was the best option, before calling an ambulance. This dramatically reduced his ER visits.

One patient with diabetes was non-compliant with keeping appointments and testing his blood sugar. He was a regular visitor to the ER when his blood sugar got out of control. When he began to work with the CCT, they motivated him to call or come to the Health Home practice instead of going to the ER, and to check his glucose levels regularly. He has not used the ER since he was referred to CCT.

A patient with diabetes was taking the wrong dose of insulin, but no one knew this was happening. Upon this patient's referral for CCT services, the CCT nurse worked with her and her pharmacist to determine the correct dosage. The nurse and the pharmacist went over the instructions again with the patient. The CCT kept in close contact with the patient and her pharmacist to ensure that she was continuing to take the correct dosage.

Other Implementation Challenges and Successes

Practices and CCTs interviewed described a number of challenges in implementing Stage A that could inform roll-out of Stage B or other related initiatives. Some of these challenges were the result of an aggressive implementation timeline. Outlined below are the key challenges and successes that were identified as well as potential recommendations for other organizations that might implement this model in the future.

Practices and CCTs could have benefited from more up-front training

Due to the aggressive implementation schedule, many CCTs and practices indicated that they started before fully understanding the initiative or its expectations and that early training about HH was insufficient. This was seen as contributing to many of the attestation and enrollment challenges discussed above. Several practices felt it would have been helpful to have had more guidance from MaineCare about what makes someone eligible for Stage A, what criteria to use for referring patients to CCTs, and what constitutes “minimally billable services”. Many HH practices and CCTs noted that the State was learning at the same time they were having to implement the model and guide participating CCTs and practices. More upfront investment in training CCTs and practices on the Health Home model and best practices for integrating that model into ongoing operations could have alleviated many of the start-up problems experienced under Stage A.

Those who participated in the Health Home trainings, including the session on the web portal, found them helpful. Most of the PCMH/HH practices and some CCTs found the trainings provided by Maine Quality Counts (e.g. quarterly learning sessions, webinars, and training by the Vermont CCT expert on strategic planning) helpful. Several HH practices and CCTs also invested in training internally to their staff including trainings on EMRs, motivational interviewing, diabetes education, and other community services available (e.g., Sweetser, AAAs, Beacon project), and differences between CCT and case management services.

The web portal was identified as useful to practices but more information is needed

Most of the practices and CCTs were familiar with the web portal and indicated that it was helpful in providing data to the practice. Almost every practice discussed the fact that they were glad to have additional information on their MaineCare patients that they hadn't had previously, helping them to look at this population in a different way than they had before. However, many practices and CCTs mentioned that the web portal was inadequate because it did not supply sufficient information about the patient that could assist the practice in managing their care. For example, the web portal did not include data on why the patient is eligible for HH services in claims or reason for eligibility denials for provider-referred patients, practice assignments, or service use data. (Because of the state's plans for Stage B Health Homes for Behavioral Health, many patients were deemed ineligible for Stage A if the patient had Stage B behavioral health diagnoses, and due to HIPAA rules this information could not be shared with practices.) Others noted that patients were sometimes listed who were not on the practice's panel. The reverse was also true. Patients identified by practices as eligible based on diagnoses, were not on their list. One practice noted that it would have been helpful to have a sort function in the portal.

To augment the portal, many practices have tried to pull data from their EMRs to create their own reports, which has also been challenging. Many practices reported devoting significant time and energy cross checking information in their systems with the data available in the web portal. CCTs also mentioned not having enough information about a member after referral, and not having access to data in the portal about patients to help identify potential patients who could benefit from CCT services.

Even with the frustrations of a “not yet perfect” system, practices report using patient data in ways they never have before and expressed the desire to be able to do it for more of their patients. Specifically practices noted that the portal offered an opportunity to conduct population-based reviews and go beyond their typical focus only on the individuals who come into the office for appointments. To address some of these concerns, the portal has added utilization data and the ability to sort and export all data shown, which were implemented in October 2013.

Getting eligible patients enrolled is still a challenge

Even after Stage B eligibility clarifications, practices still were not clear when a patient is or is not eligible for Stage A and have found eligibility denials of provider referred patients frustrating. Several practices indicated that many of the patients they had referred through the portal were found to be ineligible. Without information on the reason for the denials and multiple competing priorities in the practice, several practices reported that adding patients to the portal had not been a high priority. However, several practices felt that patients who could benefit from HH and CCT services were not able to get them due to eligibility restrictions. In particular, pediatric practices felt that the Stage A diagnoses identified for children both included diagnoses that did not require HH-level of services or failed to include pediatric conditions where the child could have benefited from these services. Pediatric practices also noted that in the case of children, care coordination challenges are often related to family or parental issues that are not captured in the patients’ eligibility criteria, as noted below by a nurse in a pediatric practice.

“One thing this is hard... from the pediatric perspective- for us, a lot of times it’s about the family, and not the child’s particular diagnosis. A family may have huge gaps- the parents may have behavioral health issues themselves- they are not bringing kids to appointments because they themselves have needs that are not being met. So it’s hard- some of the patients we’d love to see qualified and get additional help- some of our most challenging cases stem from the parents’ behavior. The child is non-compliant with their asthma meds because of the parents’ behavior, not their own behavior. Many of these children don’t qualify for Health Home services. Most of our at-risk patients come from at-risk families because of their parents. But their parents are not our patients.”

Financial sustainability issues remain

Both practices and CCTs report that they have held back on hiring staff for the HH initiative due to the lack of predictable and sustainable long term funding. Unlike prior PMPM payments provided to PCMH/HH practices for the PCMH pilot and expansion, HH payments vary from month to month due to the CMS requirement that Health Homes and CCTs get paid for patients serviced, not for all patients on the practice panel. In the case of hospital practices, payments do not always go directly to the practice to expand staff or care management resources.

For CCTs, the financial challenge is even greater. Home visits, while extremely useful in identifying patient needs, are time-consuming and costly. The wide geographic areas that CCTs cover and associated travel costs only add to the financial challenges. One CCT noted that they have had to reduce staff time due to changes in how CCTs are now reimbursed by MaineCare – resulting in payments that are 10% of what was originally estimated by the CCT. The uncertainty of month to month caseloads makes it difficult to plan for or build infrastructure to support the model. With no clear estimates of expected monthly payments, CCTs found it difficult to plan ahead or hire/retain staff. This contrasts with the MAPCP demonstration which provides monthly payments based on total Medicare patients on a practice’s and associated CCTs panel. At least one CCT raised concerns that the current MaineCare reimbursement model for CCTs is not financially sustainable.

PART II: 2011 BASELINE QUALITY, UTILIZATION AND COST DATA

The following tables summarize member characteristics, quality of care, utilization and costs of MaineCare members enrolled in Health Homes and members with similar conditions who are not enrolled in Health Homes in 2011. They help to identify differences in study and comparison members at baseline in order to inform subsequent analyses to assess change over time for the final evaluation report.

In interpreting these data, it is important to note that baseline data for the study group only include HH members enrolled through August 2013 who also received MaineCare services in 2011. In the final report, study group rates are subject to change as we include additional HH members that may be enrolled later in 2013 and 2014, who also received MaineCare services in 2011. Baseline data for study and comparison groups are also presented as raw unadjusted rates to assess between group differences that will inform adjustment methods to be used for the pre/post analyses. For the final report, we will present adjusted rates controlling for changes in the patient population (age, gender, and risk level).

Baseline rates presented below are for the total HH study and comparison group populations and by Medicaid-only and those who are dually eligible for Medicare and MaineCare.³¹ As shown in Table 6, MaineCare members enrolled in Health Homes and comparison members at baseline were very similar in terms of number and type of chronic conditions and urban/rural residence. However, comparison group members were significantly more likely to be older, male and insured by Medicare than members in Health Homes. While both groups had relatively high severity of illness scores due to their conditions, the comparison group had significantly higher patient severity of illness scores than members in Health Homes as measured by the Adjusted Clinical Group® (ACG®) risk adjustment system.³² The higher proportion of dually eligible individuals in the comparison group could also affect differences in cost, utilization and quality baseline data, which is why we also present separate tables for the dual and non-dual eligible MaineCare members.

³¹ We separately analyzed dually-eligible MaineCare members (duals) to assist in interpreting baseline findings and determining if differences identified were real or an artifact of methodological differences in capturing Medicaid services used by those that are dually-eligible for MaineCare and Medicare, which is the primary payer for most services. To assess service use and costs for dual-eligibles, we used cross-over claims for the portion which only reflect costs assumed by MaineCare as the secondary payer, thus it is useful to analyze these two groups separately. Also, since dually-eligible members are not eligible for the PCCM program, these members are assigned to practices differently than the non-dual population, i.e. based on the primary care practice where they received the majority of their visits.

³² ACGs were developed by the Johns Hopkins Bloomberg School of Hygiene and Public Health. These “unscaled” weights are calculated by the developers so that 1.00 is the average weight for the national population used in ACG development.

Table 6. Maine Health Home study group and comparison group at 2011 baseline

	HH Study Group (n=42,890)	Comparison Group (n=80,462)
Location*		
Urban core/suburban	29.9%	30.3%
Suburban	15.4%	13.3%
Large town	16.7%	18.1%
Small town and rural	38.0%	38.4%
Age, Gender, and Risk		
Average age	35.57	41.03*
Age Groups*		
Under age 18	24.7%	19.0%
Age 18-64	66.2%	63.7%
Age 65+	9.1%	17.3%
Percent female	59.6%	57.9%*
Percent Medicare	21.6%	33.1%*
Patient risk—average ACG unscaled weight ¹	2.01	2.27*
Top 5 Chronic Conditions		
Depression	30.3%	31.5%
Hypertension	23.6%	29.0%
Hyperlipidemia	23.4%	26.1%
Anxiety	22.4%	22.3%
Asthma	19.3%	18.9%
Average number of chronic conditions per person	3	3

Data Source: MaineCare claims

*Comparison group is significantly different than Pilot (p<.05) based on chi-square or t-test.

¹The Adjusted Clinical Group ® (ACG ®) was used for risk adjustment. The average unscaled weight was calculated by the ACG developers based on national data.

As shown in Table 6a, non-dual study and comparison groups are also significantly different in terms of age, gender and health risk as measured by ACG. As in the overall HH study group, non-dual study group members are more likely to be female and younger than the comparison group, but are more likely to be sicker than the comparison group. Dual eligible members in the study group are significantly younger than the comparison group but as in the overall HH population, are less sick than their counterparts in the comparison group. There were no statistically significant differences in gender between study and comparison group for the duals. Given these differences between the groups at baseline we may modify the statistical techniques used for the pre/post analyses to both propensity match members in each group as well as including propensity scores as part of our risk adjustment methodology, to sufficiently control for group differences.

Table 6a. Maine Health Home study group and comparison group member characteristics, dual and non-dual eligible members, 2011 baseline

	Health Home Study Group	Comparison Group	Health Home Study Group	Comparison Group
	non-duals	non-duals	duals	duals
	n=33,619	n=53,802	n=9,271	n=26,660
Location*				
Urban core/suburban	30.8%	28.3%	26.6%	34.5%
Suburban	15.9%	14.3%	13.6%	11.1%
Large town	16.9%	18.5%	16.0%	17.1%
Small town and rural	36.4%	38.9%	43.9%	37.3%
Age, Gender, and Risk				
Average age	29.1	29.7*	58.9	63.9*
Percent female	59.4%	56.4%*	60.4%	61.0%
Patient risk – average ACG unscaled weight ¹	1.7	1.6*	3.31	3.64*
Top Chronic Conditions²				
Depression	12%	12%	7%	7%
Anxiety	10%	10%	4%	4%
Behavior	7%	8%	1%	1%
Hypertension	6%	6%	10%	10%
Hyperlipidemia	7%	6%	10%	9%
Asthma	7%	6%	6%	5%
Diabetes	3%	3%	6%	5%
Average number of chronic conditions per person	2	2	5	6

Data Source: MaineCare claims

*Comparison group is significantly different than Pilot (p<.05) based on chi-square or t-test.

¹The Adjusted Clinical Group[®] (ACG[®]) was used for risk adjustment. The average unscaled weight was calculated by the ACG developers based on national data.

²Top chronic conditions are listed in order of highest to lowest for non-dual members.

Table 7 shows quality of care measures specified in the MaineCare State Plan Amendment that can be drawn from claims for the study and comparison groups. There are several significant differences in quality of care between the two groups. Members in Health Homes were significantly more likely to have received most recommended diabetic screenings and tests, well-child visits and developmental screenings than the comparison group at baseline. Elderly MaineCare members in Health Homes were also significantly more likely to be on at least one or more high risk medication than those in the comparison group.

Table 7. Comparison of quality indicators for Health Home study and comparison groups, 2011 baseline

Measure	Health Home Study Group (n=42,890)	Comparison Group (n=80,462)
Chronic care		
Diabetes		
HbA1c testing 5-17 years ³		
Percent of members	90.7% (n=108)	74.6%* (n=185)
Average number of tests	2.7 (n=108)	2.5 (n=185)
HbA1c testing 18-75 years ¹		
Percent of members	81.1% (n=4,069)	79.4%* (n=7,734)
Average number of tests	2.0 (n=4,069)	1.9* (n=7,734)
LDL-C screening ¹	73.5% (n=4,158)	68.5%* (n=7,906)
Medical attention for nephropathy ¹	77.9% (n=4,160)	75.2%* (n=7,904)
Eye exam ¹	51.0% (n=4,165)	48.8%* (n=7,906)
Cardio vascular disease - lipid test ¹	76.8% (n=504)	77.4% (n=869)
COPD – spirometry testing ¹	24.0% (n=1,221)	22.1% (n=2,427)
Mental health/substance abuse		
Follow up after hospitalization for mental illness ¹	90.1% (n=208)	85.9% (n=609)
Initiation of alcohol and other drug dependence treatment	38.6% (n=2,325)	40.9% (n=4,616)
Engagement of alcohol and other drug dependence treatment	22.3% (n=2,325)	23.4% (n=4,616)
Preventive care		
Well-child visits		
1 st 15 months of life ¹	99.1% (n=227)	99.0% (n=195)

PART II: 2011 Baseline Quality, Utilization and Cost Data

Measure	Health Home Study Group (n=42,890)	Comparison Group (n=80,462)
15 months – 3 years ²	94.9% (n=313)	92.4% (n=394)
3-6 years ¹	76.0% (n=1,872)	67.7%* (n=2,478)
7-11 years ¹	60.6% (n=3,353)	51.2%* (n=4,729)
12-20 years ¹	48.3% (n=5,571)	40.2%* (n=9,908)
Developmental screenings in 1 st 3 years of life ²		
Age 1	5.6% (n=231)	1.6%* (n=193)
Age 2	7.2% (n=474)	1.7% (n=473)
Age 3	7.6% (n=789)	2.3%* (n=844)
Use of appropriate meds for people with asthma/pediatric measure, medication therapy ³	93.9% (n=231)	92.9% (n=310)
Non evidence-based antipsychotic prescribing ⁴	38.53% (n=3,379)	40.1% (n=6,733)
Use of high risk meds in the elderly ¹		
At least one high-risk medication	25.2% (n=3,373)	20.5%* (n=11,197)
At least two different high-risk medications	17.6% (n=3,373)	14.1%* (n=11,197)

Data Source: MaineCare claims

¹Measures based on HEDIS® definitions

²CHIPRA measure

³IHOC measure

⁴Based on MEDNET project measure

* Comparison group is significantly different than Pilot (p<.05) based on t-test.

Table 7a shows quality of care measures for non-dual and dual HH study and comparison groups. As with the overall population there are several significant differences in quality care in both groups, with those in the HH study group largely having better quality of care measures at baseline. Similar to the overall measures, the only measure on which the dual HH study group had significantly poorer quality was for use of high risk medications in the elderly (i.e. they were more likely to be on at least one or at least two high-risk medications). For the duals, HH study group members were significantly less likely to have engagement of alcohol and other drug dependence than the comparison group, which could be associated with the comparison groups higher clinical risk scores. These between group differences may disappear when rates are risk-adjusted for the pre/post analysis.

Higher quality of care measures among both the dual and non-dual HH study group members may reflect that HH participating practices were more likely to have been addressing quality of care prior to the HH initiative than practices that did not elect to participate. For example, many pediatric HH practices serving children participated in the First STEPS (Strengthening Together Early Preventive Services) learning collaborative under MaineCare's Improving Health Outcomes for Children CHIPRA

quality demonstration grant that began in 2010. These learning initiatives focused specifically on improving preventive care during well-child visits which may have contributed to higher quality on these measures. Similarly, many of the PCMH/HH practices have been focused on diabetes care from the onset of the Pilot in 2009, which may explain higher quality for study group members on HbA1c testing, LDL-C screening, and eye exams for diabetics.

Table 7a. Comparison of quality indicators for Health Home study and comparison groups, duals and non-dual eligible members, 2011 baseline

	Health Home Study Group	Comparison Group	Health Home Study Group	Comparison Group
	non-duals	non-duals	duals	duals
	n=33,619	n=53,802	n=9,271	n=26,660
Chronic care				
Diabetes				
HbA1c testing 5-17 years ³				
Percent of members	90.7% (n=108)	74.6%* (n=185)	NA	NA
Average number of tests	2.7 (n=108)	2.5 (n=185)	NA	NA
HbA1c testing 18-75 years ¹				
Percent of members	83.2% (n=2,131)	81.4% (n=3,228)	78.7% (n=1,938)	77.9% (n=4,506)
Average number of tests	2.0 (n=2,131)	1.9* (n=3,228)	1.9 (n=1,938)	1.9 (n=4,506)
LDL-C screening ¹	73.1% (n=2,221)	66.3%* (n=3,399)	74.0% (n=1,937)	70.2%* (n=4,507)
Medical attention for nephropathy ¹	74.1% (n=2,222)	71.9% (n=3,397)	82.4% (n=1,938)	77.7%* (n=4,507)
Eye exam ¹	46.8% (n=2,227)	43.6%* (3,399)	55.9% (n=1,938)	52.7%* (n=4,507)
Cardio vascular disease - lipid test ¹	78.4% (n=231)	78.7% (n=315)	75.5% (n=273)	76.7% (n=554)
COPD – spirometry testing ¹	27.6% (n=398)	32.6% (n=460)	22.2% (n=823)	19.6% (n=1,967)
Mental health/substance abuse				
Follow up after hospitalization for mental illness ¹	89.4% (n=165)	84.6% (n=431)	84.6% (n=431)	89.0% (n=178)
Initiation of alcohol and other drug dependence treatment	41.0% (n=1,836)	43.3% (n=3372)	43.3% (n=3372)	34.6% (n=1,244)
Engagement of alcohol and other drug dependence treatment	25.1% (n=1,836)	25.9% (n=3,372)	25.9% (n=3,372)	16.5%* (n=1,244)
Preventive care				
Well-child visits				
1 st 15 months of life ¹	99.1% (n=227)	99.0% (n=195)	NA	NA

PART II: 2011 Baseline Quality, Utilization and Cost Data

	Health Home Study Group	Comparison Group	Health Home Study Group	Comparison Group
	non-duals	non-duals	duals	duals
15 months – 3 years ²	94.9% (n=313)	92.4% (n=394)	NA	NA
3-6 years ¹	76.0% (n=1,872)	67.7%* (n=2,477)	NA	NA
7-11 years ¹	60.6% (n=3,353)	51.2%* (n=4,729)	NA	NA
12-20 years ¹	48.4% (n=5,534)	40.3%* (n=9,822)	29.7% (n=37)	27.9% (n=86)
Developmental screenings in 1 st 3 years of life ²				
Age 1	5.6% (n=231)	1.6%* (n=193)	NA	NA
Age 2	7.2% (n=474)	1.7%* (n=473)	NA	NA
Age 3	7.6% (n=787)	2.3%* (n=844)	NA	NA
Use of appropriate meds for people with asthma/pediatric measure, medication therapy ³	93.9% (n=231)	92.9% (n=310)	NA	NA
Non evidence-based antipsychotic prescribing ⁴	41.4% (n=2,106)	42.4% (n=3,483)	33.9% (n=1,273)	37.6%* (n=3,250)
Use of high risk meds in the elderly ¹				
At least one high-risk medication	28.1% (n=64)	17.7% (n=158)	25.1% (n=3,309)	20.6%* (n=11,039)
At least two different high-risk medications	18.8% (n=64)	12.7% (n=158)	17.6% (n=3,309)	14.2%* (n=11,039)

Data Source: MaineCare claims

¹ Measures based on HEDIS® definitions.

² CHIPRA measure

³ IHOC measure

⁴ Based on MEDNET project measure

* Comparison group is significantly different than Pilot (p<.05) based on chi-square and t-test.

NA: Not Applicable

Service utilization at baseline also varied considerably between the Health Home study and comparison groups overall, with those not in Health Homes significantly more likely to have fragmented primary care, mental health ED visits, ambulatory care sensitive hospital admissions, readmissions within 30 days, total hospital admissions, and admissions with identified alcohol and other drug services, and skilled nursing facility admissions (Table 8). Health Home study members were significantly more likely to have imaging studies for low back pain. These differences at baseline, as with quality measures above, may suggest that the practices participating in Health Homes, which include PCMH practices that have been working to improve appropriate utilization of services for many years, may be higher performing practices than those that did not choose to participate.

Table 8. Comparison of service use for Health Home study and comparison groups, 2011 baseline

Measure – Service use	Health Home Study Group (n=42,890)	Comparison Group (n=80,462)
	unadjusted	unadjusted
Primary care		
Percent members with fragmented primary care ¹	25.7%	27.1%*
Emergency room		
Non-emergent ED visits (per 1,000 member months) ²	40.6	39.9
Mental health ED visits (per 1,000 member months)	4.4	5.7*
Total ED visits (per 1,000 member months) ⁴	86.0	88.1
Hospital		
ACS ³ hospital admission rate (per 100,000)	189.4	291.6*
Plan all cause readmission rate within 30 days (per 1,000 member months) ⁴	50.26	61.28*
Total hospital PMPM admissions (per 1,000 member months) ⁴	12.18	16.89*
Total hospital admissions patient days (per 1,000 member months) ⁴	51.7	202.3
Identification of alcohol and other drug services PMPM admissions (per 1,000 member months)	2.86	3.79*
Identification of alcohol and other drug services admissions patient days (per 1,000 member months)	15.5	31.6
Other		
Use of imaging studies for low back pain ⁴	17.3%	13.2%*
Skilled nursing facility admission rate ⁵ (per 1,000 member months)	0.76	2.35*

Data Source: MaineCare claims

¹ Based on Liu fragmented care index (FCI) methodology

² Based on diagnoses identified in the Maine ED study.

³ACS = ambulatory care sensitive, using AHRQ ACS algorithm.

⁴ Measures based on HEDIS® definitions

⁵ Less than 100 days in a facility.

*Comparison group differs significantly different from Pilot (p<.05) based on chi-square and t-test

Many of these utilization differences occurred in both the non-dual and dual eligible HH study and comparison groups (Table 8a). Duals and non-duals in the HH study group were both significantly less likely to have fragmented primary care, mental health ED visits, total hospital admissions, admissions with alcohol or other drug and skilled nursing admissions. In contrast, the significantly higher ACS admissions found overall, were primarily driven by the dual population, where the comparison group ACS admission rates were nearly five times higher than in duals in the HH study group at baseline. Among non-duals the HH study group had significantly higher rates of non-emergent ED visits, while among duals in the HH study group the rates of non-emergent ED visits was significantly lower than in the comparison group.

Table 8a. Comparison of service use for Health Home study and comparison groups, dual and non-dual eligible members, 2011 baseline

	Health Home Study Group	Comparison Group	Health Home Study Group	Comparison Group
	non-duals	non-duals	duals	duals
	n=33,619	n=53,802	n=9,271	n=26,660
	unadjusted	unadjusted	unadjusted	unadjusted
Primary care				
Percent members with fragmented primary care ¹	26.41%	27.42%*	23.27%	26.56%*
Emergency room				
Non-emergent ED visits (per 1,000 member months) ²	42.10	40.45*	35.00	38.89*
Mental health ED visits (per 1,000 member months)	4.50	5.81*	4.01	5.45*
Total ED visits (per 1,000 member months) ⁴	87.60	87.23	80.12	89.97*
Hospital				
ACS ³ hospital admission rate (per 100,000)	96.38	115.78	405.33	534.30*
Plan all cause readmission rate within 30 days (per 1,000 member months) ⁴	42.99	48.15	64.89	74.36
Total hospital PMPM admissions (per 1,000 member months) ⁴	9.70	10.66*	21.18	29.47*
Total hospital admissions patient days (per 1,000 member months) ⁴	39.8	65.7*	94.7	478.0
Identification of alcohol and other drug services PMPM admissions (per 1,000 member months)	2.90	3.79*	2.68	3.80*
Identification of alcohol and other drug services admissions patient days (per 1,000 member months)	15.3	37.2	16.3	20.4
Other				
Use of imaging studies for low back pain ⁴	17.6%	12.2%*	15.2%	17.9%
Skilled nursing facility admission rate ⁵ (per 1,000 member months)	0.11	0.22*	3.13	6.63*

Data Source: MaineCare claims

¹ Based on Liu fragmented care index (FCI) methodology

² Based on diagnoses identified in the Maine ED study

³ ACS = ambulatory care sensitive, using AHRQ ACS algorithm.

⁴ Measures based on HEDIS® definitions

⁵ Less than 100 days in a facility

*Comparison group differs significantly different from Pilot (p<.05) based on chi-square and t-test.

Reflecting some of these differences in utilization at baseline, total per member per month costs for members enrolled in Health Homes are significantly lower than for those not enrolled in Health Homes (Table 9). Within specific service categories, such as primary care, outpatient care, lab/radiology, and prescriptions, per member per month costs were higher at baseline for HH enrollees than members who did not enroll. Overall differences in total costs for the study and comparison group are almost exclusively due to long-term care services, which may indicate that members in long term care are less likely to be enrolled in Health Homes.

Table 9. Comparison of costs for Health Home study & comparison groups, total costs, 2011 Baseline

Measure – Costs	HH Study Group (n=42,890)	Comparison Group (n=80,462)
	unadjusted	unadjusted
Dental: Dental Services including dentist and hygienists	\$8.87	\$8.05*
Durable Medical Equipment	\$8.06	\$10.27*
Inpatient General: Inpatient at a general acute hospitals	\$90.56	\$101.60
Inpatient Mental Health: Inpatient at a Psychiatric Hospital (IMD)	\$5.11	\$5.65
Lab/Radiology: Outpatient Lab & Imaging Services	\$5.87	\$5.41*
Long Term Care: MaineCare long term care services including: Nursing Home, Non-Mental Health Residential Care, Private Duty Nursing, Personal Care, Non-Mental Health Home Base Care Waiver Services, Hospice, Home Health, ICF/MR, Adult Family Care Homes and Day Hab	\$241.10	\$488.80*
Mental Health: School Health Centers, Behavioral Health Services, Rehabilitative and Community Support Services, Targeted Case Management, Mental Health Residential Care Services,	\$62.68	\$74.78*
Outpatient General: Outpatient at a general acute hospital	\$125.60	\$121.00*
Outpatient Mental health: Outpatient at a Psychiatric Hospital (IMD)	\$4.27	\$2.95*
Other: Other services not already listed paid by MaineCare including: School Health Centers, Ambulance, Dialysis, Early Intervention, Family Planning, Occupational & Physical and Speech Therapy (including services provided in schools and at Nursing Facilities), Chiropractic Services, Optometry, Audiology, Transportation and Podiatry	\$32.60	\$36.92*
Primary Care: Primary care providers including: Physician, Physician Assistant, Nurse Practitioner, Nurse Midwife, Federally Qualified Health Centers, Rural Health Centers, Indian Health Services	\$42.14	\$31.82*
Specialty Care: Physician Specialist Care	\$34.17	\$33.08
Prescriptions	\$94.18	\$83.16*
Total Costs	\$755.20	\$1,003.50*

Data Source: MaineCare claims

*Comparison group differs significantly different from Pilot (p<.05) based on t-test

PART II: 2011 Baseline Quality, Utilization and Cost Data

Within subcategories of services that Health Homes are intended to reduce costs, such as non-emergent ED visits and total ED costs, imaging, lab tests, procedures and surgeries and prescriptions, baseline costs were significantly higher among Health Home enrollees in the study group than those who were not enrolled in the comparison group (Table 9a).

Table 9a. Comparison of costs for Health Home study & comparison groups, selected costs, 2011 Baseline

Measure – Costs	HH Study Group (n=42,890)	Comparison Group (n=80,462)
	unadjusted	unadjusted
Emergency room		
Non-emergent ED visit costs	\$14.21	\$12.57*
Mental health ED visit costs	\$2.20	\$2.36
Total ED costs PMPM	\$35.40	\$33.07*
Hospital		
ACS ¹ hospital admission costs PMPM	\$3.42	\$4.76
Total hospital readmissions within 30 days PMPM ²	\$6.59	\$6.64
Identification of alcohol and other drug services admissions PMPM	\$15.09	\$17.08
Total hospital admissions costs PMPM	\$71.95	\$83.14*
Imaging		
Advanced (high cost) imaging PMPM	\$11.03	\$10.77
Total imaging costs PMPM	\$27.05	\$24.56*
Procedures and surgeries		
Total procedures and surgeries costs PMPM	\$45.05	\$43.86
Other		
Laboratory tests cost PMPM	\$33.51	\$30.48*
Pharmacy		
Prescriptions	\$94.12	\$82.95*
Generic	\$10.95	\$10.19*

Data Source: MaineCare claims

¹ACS = ambulatory care sensitive, using AHRQ ACS algorithm.

²Population over age 18

*Comparison group differs significantly different from Pilot (p<.05) based on t-test.

PART II: 2011 Baseline Quality, Utilization and Cost Data

As shown in Table 9b, much of the difference in total costs of HH study group members and comparison members are driven by the dual eligible population. While total costs are significantly higher for non-duals in the comparison group, the absolute dollar difference is much smaller. The differences in costs for dual members in both the study and comparison group is largely for long-term care.

Table 9b. Comparison of costs for Health Home study and comparison groups, dual and non-dual eligible members, total costs, 2011 baseline

	Health Home Study Group	Comparison Group	Health Home Study Group	Comparison Group
	non-duals	non-duals	duals	duals
	n=33,619	n=53,802	n=9,271	n=26,660
	unadjusted	unadjusted	unadjusted	unadjusted
Dental	\$10.19	\$10.13	\$4.05	\$3.84
Durable Medical Equipment	\$6.79	\$7.73	\$12.70	\$15.38*
Inpatient General	\$107.80	\$135.70*	\$28.15	\$32.78
Inpatient Mental Health	\$6.49	\$8.26	\$0.09	\$0.39
Lab/Radiology	\$7.08	\$7.43	\$1.48	\$1.34
Long Term Care	\$74.09	\$115.30*	\$846.60	\$1,242.80*
Mental Health	\$71.13	\$94.54*	\$32.06	\$34.89
Outpatient General	\$148.70	\$158.10*	\$41.82	\$46.02
Outpatient Mental health	\$5.09	\$4.06*	\$1.27	\$0.71
Other	\$27.75	\$31.00*	\$50.19	\$48.85
Primary Care	\$46.44	\$37.77*	\$26.54	\$19.79*
Specialty Care	\$37.54	\$37.25	\$21.93	\$24.68*
Prescriptions	\$112.70	\$110.80	\$27.13	\$27.32
Total Costs	\$661.70	\$758.10*	\$1,094.00	\$1,498.70*

Data Source: MaineCare claims

*Comparison group differs significantly different from Pilot ($p < .05$) based on t-test.

Table 9c. Comparison of costs for Health Home study and comparison groups, dual and non-dual eligible members, selected costs, 2011 baseline

	Health Home Study Group	Comparison Group	Health Home Study Group	Comparison Group
	non-duals	non-duals	duals	duals
	n=33,619	n=53,802	n=9,271	n=26,660
	unadjusted	unadjusted	unadjusted	unadjusted
Emergency room				
Non-emergent ED visit costs	\$17.21	\$16.97	\$3.32	\$3.68
Mental health ED visit costs	\$2.66	\$3.29*	\$0.52	\$0.49
Total ED costs PMPM	\$42.82	\$44.65*	\$8.51	\$9.72*
Hospital				
ACS ¹ hospital admission costs PMPM	\$3.37	\$5.51	\$3.62	\$3.24
Total hospital readmissions within 30 days PMPM ²	\$7.92	\$9.00	\$1.75	\$1.88
Identification of alcohol and other drug services admissions PMPM	\$18.33	\$23.30*	\$3.36	\$4.52
Total hospital admissions costs PMPM	\$85.53	\$110.00*	\$22.69	\$28.85*
Imaging				
Advanced (high cost) imaging PMPM	\$12.82	\$13.67*	\$4.54	\$4.91
Total imaging costs PMPM	\$32.02	\$32.05	\$9.03	\$9.44
Procedures and surgeries				
Total procedures and surgeries costs PMPM	\$51.00	\$51.72	\$23.47	\$27.98*
Other				
Laboratory tests cost PMPM	\$40.90	\$42.10	\$6.72	\$7.03
Pharmacy				
Prescriptions	\$112.70	\$110.80	\$26.89	\$26.67
Generic	\$12.27	\$11.85*	\$6.18	\$6.85*

Data Source: MaineCare claims

¹ ACS = ambulatory care sensitive, using AHRQ ACS algorithm.

² Population over age 18

*Comparison group differs significantly different from Pilot (p<.05) based on t-test.

SUMMARY AND CONCLUSION

After one year of implementation, the MaineCare Health Homes Stage A initiative has significantly expanded the number of primary care practices and CCTs providing chronic care management to MaineCare patients. After some initial start-up challenges, the program has seen steady enrollment increases in both the HH practices and in CCTs.

Within PCMH/HH practices, the HH initiative was largely seen as an extension of the work already begun in the PCMH pilot and expansion. The value-added was more pronounced in HH-only practices that had not previously had access to CCTs. Those that use them highly valued the CCTs, particularly for the in-home assessments, which provided critical information for care planning.

The movement to Health Homes offers an opportunity for more population-based care. When time and resources are available, the monthly roster of HH patients assists practices in taking proactive steps to reach out to patients who may not otherwise be seen. While still too early to assess how these services have impacted quality of care and costs, providers and CCTs have reported many case examples of MaineCare patients who have benefited from these services and who have in many cases reduced their use of the emergency department.

The flexibility in program design resulted in significant variation in CCT models including practice to CCT ratios, geographic distribution, staffing, and core services provided. While this has allowed for considerable innovation, the diversity in design will prove challenging to assess which models or approaches are most effective.

Baseline data presented in this report indicate that prior to the start of the HH initiative, MaineCare members who are now enrolled in HH were different in several ways from comparison members with similar diagnoses who did not enroll in Health Homes. In particular, members who have not enrolled are more likely to be older, dually eligible for Medicare, and sicker. While these factors will be adjusted for in subsequent analyses, the higher quality and lower utilization of targeted potentially inappropriate services at baseline may make it harder to detect marginal quality improvements or further service reductions resulting from the HH initiative.

APPENDIX A: CRITERIA FOR STAGE A AND STAGE B

Stage A: Presenting conditions that put a member at risk for a second chronic condition

Members with any of the following chronic conditions are considered, by definition, to be at risk for another condition because of robust evidence in the medical literature that having one of these conditions is strongly associated with high risk of developing a second chronic condition. Members with *one or more* of the following conditions therefore qualify for Health Homes:

- Cardiac and circulatory abnormalities
- Chronic Obstructive Pulmonary Disease (COPD)
- Developmental Disorders (Intellectual Disabilities and Autism Spectrum Disorders)
- Diabetes
- Heart Disease
- Hyperlipidemia
- Hypertension
- Overweight or Obesity
- Substance Use Disorder
- Tobacco Use
- Mental Health³³, excluding members who, within the 12 months prior to Health Home assignment, have received any of the following MaineCare services³⁴:
 - a) Children:
 - i) Section 65
 - (1) Children’s Home and Community Based Treatment
 - (2) Multi-systemic Therapy
 - (3) Functional Family Therapy
 - (4) Children’s Behavioral Health Day Treatment
 - (5) Children’s Assertive Community Treatment (ACT)
 - ii) Section 13 Targeted Case Management services for children with behavioral health disorders³⁵
 - iii) Section 97 Appendix D:
 - (1) Child Mental Health- Level I
 - (2) Child Mental Health – Level II
 - (3) Intensive Mental Health for Infants and/or Toddlers
 - (4) Crisis Stabilization Residential Services
 - (5) Therapeutic Foster Care

³³ New criteria effective June 3, 2013

³⁴ Based on MaineCare claims for services received during calendar year 2012 and paid by 4/30/2012.

³⁵ TCM required 3 or more months in CY2012

- (6) Therapeutic Foster Care- Multidimensional
- (7) Temporary High Intensity Service

b) Adults:

i) Section 17 Community Integration Services

- (1) 17.04-2 Community Rehabilitation Services
- (2) 17.04-3 Intensive Case Management
- (3) 17.04-4 Assertive Community Treatment
- (4) 17.04-5 Daily Living Support Services
- (5) 17.04-6 Skills Development Services
- (6) 17.04-7 Day Supports Services
- (7) 17.04-8 Specialized Group Services

ii) Section 97:

- (1) Appendix E
- (2) Appendix F: for Persons with Severe and Prolonged Mental Illness ONLY

Stage A Other Qualifying Conditions

A member with one of the following chronic conditions alone is not automatically considered, by definition, to be at risk for a second chronic condition. Members must therefore have either 1) two of the conditions below OR 2) one of the conditions below AND be determined by their provider to be at risk for one of the conditions listed above due to patient-specific clinical, environmental, and/or psycho-social factors to qualify for Health Home Services in Stage A:

- Acquired Brain Injury (ABI)
- Asthma
- Seizure disorder

Presenting conditions and any risk factors must be documented in the claims data and/or in the patient's EMR.

Stage A Qualifying Service Use

For selected conditions, use of certain services is also considered for Health Home eligibility:

- Developmental Disability defined by use of MR Waiver Service Use (§ 26) or ICFMR Service Use (§40)
- Acquired Brain Injury (ABI) defined by use of Rehabilitative Service Use (§ 102)
- Diabetes defined by use of Insulin

Stage B Qualifying Conditions (Estimated start date: April 2014)

Adults with Serious Mental Illness (SMI) and children with Serious Emotional Disturbance (SED) are

not eligible for services under Stage A of the Health Homes Initiative, but may be eligible for Stage B based on use of one or more of the following services:

a) Children:

i) Section 65

- (1) Children’s Home and Community Based Treatment
- (2) Multi-systemic Therapy
- (3) Functional Family Therapy
- (4) Children’s Behavioral Health Day Treatment
- (5) Children’s Assertive Community Treatment (ACT)

ii) Section 13 Targeted Case Management services for children with behavioral health disorders³⁶

iii) Section 97 Appendix D:

- (1) Child Mental Health- Level I
- (2) Child Mental Health – Level II
- (3) Intensive Mental Health for Infants and/or Toddlers
- (4) Crisis Stabilization Residential Services
- (5) Therapeutic Foster Care
- (6) Therapeutic Foster Care- Multidimensional
- (7) Temporary High Intensity Service

b) Adults:

i) Section 17 Community Integration Services

- (1) 17.04-2 Community Rehabilitation Services
- (2) 17.04-3 Intensive Case Management
- (3) 17.04-4 Assertive Community Treatment
- (4) 17.04-5 Daily Living Support Services
- (5) 17.04-6 Skills Development Services
- (6) 17.04-7 Day Supports Services
- (7) 17.04-8 Specialized Group Services

ii) Section 97:

- (1) Appendix E
- (2) Appendix F: for Persons with Severe and Prolonged Mental Illness ONLY

³⁶ TCM required 3 or more months in CY2012

APPENDIX B: HHES REPORTING FUNCTIONS

In October 2013, the capacity of the HHES was expanded to include reasons for CCT referral, a full year of claims paid in the past twelve months for each member, and ten different quality measures. These measures are:

- # hospitalizations in last quarter
- # hospitalizations in last year
- ED visits last quarter
- ED visits last year
- Patients with over \$10K paid MaineCare claims
- Patients with 11+ meds
- Patients with no PCP visits in the last year
- Patients with no HbA1c last quarter (diabetes patients)
- Patients with no LDL last year (diabetes patients)
- Patients with no LDL last year (CVD patients)

Practices are able to sort by the measures as well as claims. There is a download button feature in the portal that allows practices to move the data directly into Excel for their own reporting needs. (There is no report generated in the portal, so practices download information into Excel to make/manipulate their own reports.)

HHES Monthly Reports

Muskie provides daily and monthly reports on Health Home activity on the HHES portal for Health Home and CCTs practices to download. These reports are:

- Member Panel Report: lists all members on a practice's panel, with name, DOB and MaineCare ID
- CCT Payment Summary: includes # patients on member panel, # attested to, # PCMH site duals (not included for CCT payment from MaineCare), hospital based or not, final monthly CCT payment
- Health Home Payment Summary: # patients on member panel, # patients attested to, # PCMH site duals (not included for HH payment from MaineCare), hospital based or not, final monthly Health Home payment
- CCT Panel Source Summary- includes panel member count, then breaks out by: # by claims condition, # by provider reported condition, # both
- CCT Attestation Summary- includes list of members on their panel as of the end of the 20th day of the month, member ID, birthdate, and if the member was attested to for that month
- Health Home Attestation Summary- list of members on their panel as of the end of the 20th day of the month, member ID, birthdate, and if the member was attested to for that month
- Unattested Patients, Health Home and CCT: lists every patient that is on the member panel but was not attested to that month
- HH, CCT Payment Detail: lists every patient eligible for payment, # of those patients who are PCMH site duals

- CCT Referral Reasons: includes measures for patients referred to and treated by each CCT- # of referrals based on each measure, # of patients for each measure. These six measures (below) were added to the portal in May 2013.
 - Hospital Admissions: 3+ in 6 mo. or 5+ in yr.
 - ED Utilization: 3+ in 6 mo. or 5+ in yr.
 - ID'ed by MaineCare as high-risk or high-cost
 - 3+ chronic conditions and/or failure to meet treatment goals
 - Polypharmacy: 15+ chronic medicines and/or multiple high risk medications
 - High social service needs interfering with care

APPENDIX C: INTERVIEW INVITATION LETTERS

Dear <Practice Administrator>,

The Muskie School of Public Service is conducting an evaluation of MaineCare's Stage A Health Home Initiative on behalf of the Office of MaineCare Services, Department of Health and Human Services. The purpose of the evaluation is to inform the Department about how Health Homes (HH) have been implemented in different practices and Community Care Teams (CCTs) and how it has affected care provided to MaineCare members. We also want to learn about challenges faced during implementation that may influence expansion plans and the resources needed to assure their success.

As part of this evaluation, we are inviting your practice to participate in an interview about your experience in implementing MaineCare's Stage A Health Homes Initiative. We are interested in learning more about changes made within your practice to become Health Homes as well as challenges encountered.

Specifically, we will focus on:

- What infrastructure, clinical practice, care coordination, or other changes your practice made to implement Health Home services.
- How processes of care have changed for patients with chronic conditions in your practice.
- What working relationships you have established with the Community Care Team (CCT) to coordinate services.
- What you see as your biggest successes and challenges.

The interview will take about 60 minutes and will be conducted in person with members of your practice team who are most knowledgeable about your Health Home implementation experience. If we are unable to schedule an in-person interview we may arrange to conduct it by phone.

Your participation is voluntary. If you choose not to participate, it will not affect your current or future relations with MaineCare. This is an opportunity for you to provide feedback on your experience with the program so that improvements can be made going forward. Your responses will be kept confidential. Only aggregate summary information from the interviews will be included in the final report to MaineCare without reference to any names of interview participants.

We hope you will participate in this important evaluation. If you would like to participate, please reply to this email or call {NAME OF INTERVIEWER AT #} with the name of the person we should contact to set up an interview (including their name, email and/or phone number) by July 31, 2013. A member of the evaluation team will follow up with the contact person from your practice to finalize interview arrangements.

If you have any other questions regarding this evaluation, you can contact the Project Director, Kimberly Fox, at kfox@usm.maine.edu or 207-780-4950.

We look forward to hearing from you.

Sincerely,

ADD NAMES OF INTERVIEW TEAM

Muskie School of Public Service

Dear <CCT Lead Person>,

The Muskie School of Public Service is conducting an evaluation of MaineCare's Stage A Health Home Initiative on behalf of the Office of MaineCare Services, Department of Health and Human Services. The purpose of the evaluation is to inform the Department about how Health Homes (HH) have been implemented in different practices and associated Community Care Teams (CCT) and how it has affected care provided to MaineCare members. We also want to learn about challenges faced during implementation that may influence expansion plans and the resources needed to assure their success.

As part of the evaluation, we are writing to invite your CCT to participate in an interview about your experience in implementing MaineCare's Stage A Health Homes initiative. We are interested in learning more about the services provided by your CCT, how you coordinate with HH practices as well as challenges encountered. Specifically, we will focus on:

- How Health Home patients are identified and referred to the CCT and whether this differs by HH practice and how.
- What services your Community Care Team provides and how they are integrated/coordinated with the Health Home practices.
- What you see as your biggest successes and challenges.

The interview will take about 60 minutes and will be conducted in person with members of your CCT leadership team. If we are unable to schedule an in-person interview we may arrange to conduct the interview by phone.

Your participation is voluntary. If you choose not to participate, it will not affect your current or future relations with MaineCare. This is an opportunity for you to provide feedback on your experience with the program, so that improvements can be made going forward. Your responses will be kept confidential. Only aggregated summary information from the interviews will be included in the final report to MaineCare without reference to any names of interview participants.

We hope you will participate in this important evaluation. If you would like to participate, please reply to this email or call {NAME OF INTERVIEWER AT #) with the name of the person we should contact to set up an interview (including their name, email and/or phone number) by July 31, 2013. A member of the evaluation team will follow up with the contact person from your practice to finalize interview arrangements.

If you have any other questions regarding this evaluation, you can contact the Project Director, Kimberley Fox, at kfox@usm.maine.edu or 207-780-4950.

We look forward to hearing from you.

Sincerely,

ADD NAMES OF INTERVIEW TEAM
Muskie School of Public Service

APPENDIX D: INTERVIEW PROTOCOL

Introduction

Hello, I'm [Name], and this is my colleague [Name] from the Muskie School of Public Service. We first want to thank you for participating in this interview about Health Home implementation. We are working on behalf of MaineCare to learn about how Health Homes have been implemented in different practices and Community Care Teams and how it has affected care provided to MaineCare members. We also want to learn about challenges faced during implementation that may influence expansion plans and the resources needed to assure their success.

The interview will take about an hour and your participation is voluntary. Your responses will be kept confidential. Only aggregate summary information from the interviews will be included in the final report to MaineCare without reference to any names of interview participants.

We would like to tape record our conversation for note taking purposes. Is it all right if we tape record our conversation? (If yes, hit record. If no, do not record conversation). Do you have any questions before we begin?

Can you please go around and state your name and role?

INTERVIEW QUESTIONS PCMH/HH

1. As a practice that was already participating in the Patient Centered Medical Home pilot, what changes have you made to meet Health Home requirements (e.g. adding staff or redefining staff responsibilities, extending hours of service/ changing scheduling procedures to allow for same day access, more frequent team meetings, inclusion of behavioral health providers on team, coordinating care with CCTs, adding other services)
2. How has care provided to Health home eligible patients in your practice changed since becoming a HH? What additional services do they receive within your practice?
3. Did you have experience with the CCT prior to becoming a Health Home (2013)? If yes, how has your experience with the CCT changed since becoming a HH?
4. How do you determine which patients require additional Health Home services within the practice and which to refer for additional help through the CCT?
5. How do you coordinate care with your CCT? How is the CCT integrated into the HH care team and communication process?
6. How has being a HH changed your practice's:
 - a) Engagement of patients and families in their care?
 - b) Connection with other community resources (beyond CCTs)?
 - d) Use of EHRs or other methods of communicating via Health Information technology?
7. How do you think PCMH HH services provided within the practice and with CCT additional support have improved health outcomes for health home eligible patients? (ask for examples)? How have these services contributed to cost effective care? (ask for examples)
8. What changes have you made that have made the biggest impact in improving care?

9. What were the major challenges you encountered as you implemented care for Health Home patients? How did they differ from challenges in implementing PCMH if at all? How did you deal with these challenges? What has worked well?
10. What type of trainings have you provided within your practice to implement changes to the practice required to be a Health Home? What type of trainings have you participated in as a Health Home? How useful were these trainings? What type of additional training do you wish you had?
11. What else would you like to tell us about your experience as a Health Home?

INTERVIEW QUESTIONS Health Home ONLY

1. What motivated your practice to become a Health Home practice? What did you hope to achieve?
2. What changes have you made within the practice in order to be a Health Home (e.g. adding staff or redefining staff responsibilities, inclusion of behavioral health providers on team, coordinating care with CCTs, extending hours of service/ changing scheduling procedures to allow for same day access, more frequent team meetings, adding other services)?
3. How has care provided to Health Home eligible patients in your practice changed since becoming a HH? What additional services do they receive within your practice?
4. How do you determine which patients require additional Health Home services within the practice and which to refer for additional help through the CCT?
5. How do you coordinate care with your CCT? How is the CCT integrated into the HH care team and communication process?
6. How has being a HH changed your practice's:
 - a) Engagement of patients and families in their care?
 - b) Connection with other community resources (beyond CCTs)?
 - c) Use of EHRs or other methods of communicating via Health Information technology?
7. How do you think additional HH services provided within the practice and with CCT additional support have improved health outcomes for health home eligible patients? (ask for examples) How have these services contributed to cost effective care? (ask for examples)
8. What changes have you made that have made the biggest impact in improving care?
9. What were the major challenges you encountered as you implemented care for Health Home patients? How did you deal with these challenges? What has worked well?
10. What type of trainings have you provided within your practice to implement changes to the practice required to be a Health Home? What type of trainings have you participated in as a Health Home? How useful were these trainings? What type of additional training do you wish you had?
11. What else would you like to tell us about your experiences as a Health Home?

COMMUNITY CARE TEAM INTERVIEW QUESTIONS

Background

1. What motivated your organization to become a MaineCare Health Homes CCT? What did you hope to achieve?

CCT Team

2. Can you tell us about how your CCT was formed?

Probe:

- Who provided the leadership?

3. Describe who is on your CCT team.

Probes:

- How is the team organized?
- How many are on the team?
- Who is your CCT Clinical Leader? (nurse, social worker etc);

Relationship with HHs

4. How did you establish relationships with the Health Home practices associated with your CCT?

Probes:

- How many Health Home practices are associated with your CCT? Has this changed since you first became a CCT?
 - How many of the Health Home practices that are associated with your CCT are you actively working with?
 - For those practices with which you have a good working relationship, what factors contribute to this coordination and good working relationship?
5. How do you communicate/coordinate on an ongoing basis with Health Home practices about the HH patients referred to you?

Probes:

- a) How often do you meet with the Health Home(s) staff within the practices you are assigned to?
- b) Do you have access to EHRs and add notes?

6. How do HH practices refer HH eligible members to your CCT?

Probes:

- a) Does it differ by HH practice and how?

Types of Patients and Services

7. What types of patients do you generally work with?
 - How do you help patients referred to you manage their chronic diseases/conditions?
 - Where and when do you provide services?
8. Please describe the types of services that the CCT provides directly.

Families, Patient and Community Engagement

9. How do you engage patients and families in their care?
10. What do you do to encourage patients' self-management and health promotion? (ask for examples)
 - a) Health coaching (smoking, nutrition)
 - b) Chronic disease self-management (asthma, diabetes)
 - c) Peer support
 - d) Advance directives
11. Describe the types of community, social support and recovery services you provide?
12. How do you know when a patient is ready to 'graduate' from the CCT? What are the primary reasons they graduate?

General –

13. How do you think CCT services have helped improve health outcomes for health home patients? Are there some populations where you have been more successful than for others? Why do you think this is?
14. What were the major challenges you encountered? How did you deal with these challenges? What has worked well? What issues have not been fully resolved?
15. What type of trainings have you provided within your CCT? What type of trainings have you participated in as a CCT? How useful were these trainings? What type of additional training do you wish you had?
16. What else would you like to tell us about your experience as a Community Care Team?

APPENDIX E: BASELINE COMPARISON ANALYSIS MEASURES LIST

Figure I. Quality indicators calculated using claims data

Measure	Operational definition	Source of measure
Chronic care		
Diabetes - glucose control	Percentage of patients with diabetes with at least one HbA1c test within previous 12 months	SPA (ages 18-75 one HEDIS measure; ages 5-17 IHOC measure) PCMH
Diabetes – lipid control	Percentage of patients with diabetes with lipid testing (LDL) recorded within previous 12 months	SPA - HEDIS PCMH – HEDIS
Diabetes - nephropathy screening	Percentage of patients with diabetes with nephropathy screening or evidence of nephropathy documented within previous 12 months	SPA - HEDIS PCMH - HEDIS
Diabetes – dilated retinal (eye) exam	Percentage of patients with diabetes with dilated retinal eye exam within appropriate period	SPA - HEDIS PCMH - HEDIS
CVD – lipid control	Percentage of patients with CVD with complete lipid profile recorded within previous 12 months	SPA (cholesterol management HEDIS) PCMH- HEDIS
Use of spirometry testing COPD	Adults with a new (within the measurement year) diagnosis or newly active COPD who received Spirometry testing to confirm the diagnosis. Spirometry testing must occur 730 days (2 years) prior to or 180 days after the diagnosing event. Age 42 and older.	SPA - HEDIS
Mental health/substance abuse		
Follow up after hospitalization for mental illness	Percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 7 days of discharge.	SPA – claims NCQA measure – NQF #0576 CMS HH CORE MEASURE – HEDIS
Initiation and engagement of alcohol and other drug dependence treatment	Percentage of adolescents and adults members with a new episode of alcohol or other drug (AOD) dependence who received the following: • Initiation of AOD treatment. • Engagement of AOD treatment.	SPA and CMS HH CORE MEASURE - HEDIS– claims NCQA measure – NQF #0004
Preventive care		
Well-child visits – 1 st 15 months of life	Average number of visits and percentage of members who turned 15 months of age during the measurement year that had at least one well-child visit and percentage for each number of well-child visits for these children.	SPA – HEDIS
Well child visits – 15 mo – 3 yrs	Percentage of children who received who received 0, 1, 2, or 3 well-child care visits with a PCP from the 15 months of age to their 3rd year birth date.	SPA – Maine CHIPRA claims measure
Well-child visits – 3 -6 yrs, 7-11 yrs	Percentage of members who were three to eleven years of age who received one or more well-child visits with a PCP during the measurement year	SPA – HEDIS
Adolescent well care visit (12-20)	Percentage of members who were 12-20 years of age and who had at least one comprehensive well-care visit with a PCP or OB/GYN during the measurement year	SPA _HEDIS

Measure	Operational definition	Source of measure
Developmental screenings in 1 st 3 yrs of life	The percentage of children screened for risk of developmental, behavioral and social delays using a standardized screening tool in the first three years of life. This is a measure of screening in the first three years of life that includes three, age-specific indicators assessing whether children are screened by 12 months of age, by 24 months of age and by 36 months of age.	SPA – Maine CHIPRA claims measure
Use of appropriate meds for people with asthma/ped measure, med therapy	Percentage of patients 2-75 who were identified as having persistent asthma and were appropriately prescribed controller medication (report separately for patients 2-<19 yo, 19-75 yo, and total)	SPA – IHOC claims measure
Non evidence-based antipsychotic prescribing	Numerator: Members on Antipsychotic with no or weak indication for use. Denominator: Members with selected mental health conditions as identified by claims.	SPA – claims measure based on MEDNET project with Rutgers
Use of high risk meds in the elderly	The percentage of patients 65 years of age and older who received at least one high-risk medication. The percentage of patients 65 years of age and older who received at least two different high-risk medications.	SPA - HEDIS

Figure 2. Cost and efficiency indicators calculated using claims data

Measure	Operational Definition	Source of measure
Outpatient, primary and specialty care		
Primary Care	Primary care providers including: Physician, Physician Assistant, Nurse Practitioner, Nurse Midwife, Federally Qualified Health Centers, Rural Health Centers, Indian Health Services	MaineCare utilization review measure
Percent members with fragmented primary care (based on Liu fragmented care index (FCI) methodology)	This measure uses Liu’s fragmented care index (FCI) is based on Bice and Boserman’s continuity of care index (CCI) that considers the number of different providers visited, the proportion of attended visits to each provider and the total number of visits. The CCI runs from “0” continuous care to “1” fragmented care.	SPA
Specialty Care	Physician Specialist Care	MaineCare utilization review measure
General Acute Outpatient	Outpatient at a general acute hospital	MaineCare utilization review measure
Psychiatric Outpatient	Outpatient at a Psychiatric Hospital (IMD)	MaineCare utilization review measure

Measure	Operational Definition	Source of measure
Emergency department		
Non-emergent ED visits (based on diagnoses from Maine ED study)	Maine ED study developed list of 14 diagnoses identified as preventable. The criteria for selection of the included conditions were: 1) matching diagnostic codes of conditions seen frequently both in hospital emergency departments and in primary care settings; 2) eliminating any diagnoses that, when seen in an emergency department, result in the patient being admitted more than 5 percent of the time; 3) a review of the list of diagnoses generated through this process by clinicians with emergency department experience and selection by the clinicians of a sub-set of conditions that, based on their clinical judgment, met the criterion of usually being an avoidable ED visit. Commercial and Medicaid claims used as source for identification of ICD-9 codes.	SPA
Mental Health ED visits	Mental Health ED visits	HEDIS
Total ED visits and costs	SPA - Number of ED visits per 1000 member months	SPA (ED visits per 1000 MM – source HEDIS) PCMH
Hospital		
Ambulatory Care Sensitive hospital admissions, patient days, and costs	Ambulatory care sensitive conditions: age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for admission to the hospital.	SPA PCMH – AHRQ ACS algorithm
Total hospital readmissions within 30 days	SPA and CMS - For members 18 years of age and older, the number of acute inpatient stays during the measurement year that were followed by an acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission.	SPA and CMS HH CORE MEASURE - HEDIS (source NCQA – NQF #1768) PCMH – 3M Preventable Readmission grouping software
Total hospital admissions, patient days, and costs	SPA - general hospital/acute care (IPU) and inpatient alcohol and other drug services (IAD)	SPA – HEDIS (IPU and IAD) PCMH
General Acute Inpatient	Inpatient at a general acute hospitals	MaineCare utilization review measure
Psychiatric Inpatient	Inpatient at a Psychiatric Hospital (IMD)	MaineCare utilization review measure

MaineCare Stage A Health Homes Year 1 Report: Implementation Findings and Baseline Analysis

Measure	Operational Definition	Source of measure
Imaging/Procedures/Surgeries/Lab		
Laboratory/ Radiology	Lab & Imaging Services	MaineCare utilization review measure
Advanced (high cost) imaging, and total imaging costs	Advanced (high cost) imaging, and total imaging costs	PCMH
Procedures and surgery costs	Procedures and surgery costs	PCMH
Lab tests	Lab tests	PCMH
Use of imaging studies for low back pain	The percentage of members with a primary diagnosis of low back pain who had an imaging study within 28 days of the diagnosis.	SPA – source HEDIS
Long term care		
Skilled nursing facility admission rate per 1000 member months, all SNF admissions	Less than 100 days in a facility.	SPA – claims and other admin data
Long Term Care	MaineCare long term care services including: Nursing Home, Non-Mental Health Residential Care, Private Duty Nursing, Personal Care, Non-Mental Health Home Base Care Waiver Services, Hospice, Home Health, ICF/MR, Adult Family Care Homes and Day Hab	MaineCare utilization review measure
Pharmacy		
Prescriptions and generic	Prescriptions and generic	PCMH
Pharmacy	Pharmacy	MaineCare utilization review measure
Other		
Durable Medical	Durable Medical Equipment	MaineCare utilization review measure
Dental	Dental Services including dentist and hygienists	MaineCare utilization review measure
Mental Health	School Health Centers, Behavioral Health Services, Rehabilitative and Community Support Services, Targeted Case Management, Mental Health Residential Care Services,	MaineCare utilization review measure
Other	Other services not already listed paid by MaineCare including: School Health Centers, Ambulance, Dialysis, Early Intervention, Family Planning, Occupational & Physical and Speech Therapy (including services provided in schools and at Nursing Facilities), Chiropractic Services, Optometry, Audiology, Transportation and Podiatry	MaineCare utilization review measure