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Health Coverage in the Safety Net: How California's Coverage Initiative Is Providing A Medical Home to Low-Income Uninsured Adults in Ten Counties, Interim Findings

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The concept of a medical home has recently received increased attention as a potential remedy to address system-wide problems of high health care costs and limited access. Although the concept is not new, the momentum for broad implementation of the medical home model has been building over several years. In 2001, the Institute of Medicine report *Crossing the Quality Chasm* outlined six aims for addressing the increased fragmentation of the U.S. health care system known as *domains of quality*, including patient-centered care.¹ The increasing prevalence of chronic health conditions in the U.S., the rising numbers of uninsured, and a growing shortage of primary care clinicians are other factors contributing to the push for implementation of the concept of a medical home.²

The American Academy of Pediatrics first introduced the concept of the medical home in 1967 as a model to deliver medical care to children with special needs.³ This concept was expanded in 2004 by the Future of Family Medicine Project when it recommended that every American have a personal medical home to receive primary, chronic and preventive care services.⁴ In 2007 the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians and the American Osteopathic Association released the "Joint Principles of the Patient-Centered Medical Home (PCMH)."⁵ The principles of this model include:

1. *Personal physician.* Each patient has an ongoing relationship with a personal physician trained to provide the point of first contact, and continuous and comprehensive care.
2. *Physician directed medical practice.* The personal physician leads a team of multidisciplinary health care personnel with collective responsibility for ongoing patient care.
3. *Whole person orientation.* The personal physician is responsible for providing for all the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals, including care for all stages of life.
4. *Coordinated and/or integrated care.* Care is coordinated across levels of care and the patient's community, and care is facilitated by enhanced communication, including information technologies, registries and



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- other means to assure that patients receive appropriate care.
5. *Quality and safety.* Care is provided that aims to attain optimal outcomes—using evidence-based medicine, clinical decision support-tools and information technology—ensured through quality improvement strategies with physician accountability for improvements and patient participation in decision making.
 6. *Enhanced access.* Access to care is enhanced through open scheduling and expanded hours, and other options for communication such as telephone and email.
 7. *Payment.* Reimbursement should adequately value the extent of services provided by the medical home, including clinical services, coordination of care, care management and health information systems.

Parallel to the development of the medical home model, the **chronic care model (CCM)** has been proposed as an effective means of providing primary care to patients with chronic illness. CCM focuses more on “system changes” intended to “guide quality improvement and disease management activities” for treating individuals with chronic illness.⁶ The CCM includes six essential elements:

1. Encouraging provider organization linkages with *community-based resources*.
2. Prioritizing management of chronic care within the *health care organization*.
3. Providing *self-management support* to patients and their families.
4. Restructuring of the medical practice to create practice teams leading to *delivery system design*.
5. Providing *decision support* through use of evidence-based clinical practice guidelines.

6. Use of *clinical information systems* that include reminder systems to physicians, feedback to physicians on their performance and disease registries for planning patient care.

In 2006 the American College of Physicians presented the concept of the **advanced medical home (AMH)**, which elaborated and expanded on CCM to further align CCM and PCMH concepts.⁷ The key attributes of the advanced medical home included:

1. Use of evidence-based guidelines and clinical decision support tools
2. Organization of care delivery according to CCM and the provision of core functions of CCM to provide enhanced care for all patients
3. Creation of an integrated coherent care plan in partnership with patients
4. Providing enhanced access to care through face-to-face and alternative means
5. Identification and measurement of key quality indicators for continuous improvement
6. Adoption of information technology
7. Providing feedback and guidance on the performance of the physicians and the overall practice

The evolution of the PCMH and CCM/AMH concepts indicate a convergence of elements over time, though some concepts remain unique to each model. PCMH greatly emphasizes the importance of patient participation in the clinical decision-making process and focuses on all populations within the primary care delivery system. CCM/AMH models focus on delivery of care to chronically ill populations with greater emphasis on redesigning the delivery system to enable provision of optimal care. However, the convergence of these models indicates agreement in the field that a redesign of delivery of primary and chronic care should at least include the elements jointly outlined in the PCMH and CCM/AMH models.

Existing Evidence on the Impact of Medical Home and Chronic Care Models

The implementation of the medical home concept is still in its infancy and many of its elements are yet to be implemented broadly. Only 27% of non-elderly adults in the United States indicate having the four access-related indicators of a medical home, such as a usual source of care, the ability to easily reach their doctors on the phone, the ability to easily get medical care or advice weekends and evenings, and physician visits that were on time and well organized.⁸ Less is known about the implementation of other crucial aspects of a medical home, such as level of care coordination and quality of care.

Despite the potential advantages of the medical home model, multiple barriers continue to hinder its effective implementation. These barriers include changing the current practice culture that is dominated by urgent and episodic care, and difficulties in implementing elements such as practice redesign, care management and information technologies in small physician practices.⁹

Several studies have attempted to evaluate the impact of various components of the medical home and chronic care models; however, considerable variation exists in the method of implementation and number of elements executed, leading to difficulties in assessing impact.¹⁰ Specific elements, such as a personal physician and team-based approach, are difficult to assess due to a lack of studies examining these components of the medical home independently from the entire package of services generally provided under disease management or care coordination programs. Furthermore, available information about physicians' attitudes towards the medical home concept is limited. An existing physician survey of aspects of the medical home—such as patient feedback, electronic communications and reminder systems—indicates prevalent skepticism among physicians. The cost-effectiveness of medical home models that incorporate all elements of the medical home model is not available, though

evidence of the success of some programs has been documented.

Other studies have demonstrated savings associated with effective implementation of the medical home model. The Community Care of North Carolina (CCNC) is credited with saving approximately \$160 million annually, primarily through a 23% reduction in both emergency room visits and outpatient visits, and a reduction of 11% in pharmacy services. The program is also credited with improved quality of care, such as increased asthma control (reduced hospitalization and emergency room visits and increased influenza vaccination), and reductions of diabetes care indicators below NCQA (National Committee for Quality Assurance) thresholds.¹¹ Factors credited with the success of the CCNC program include the small scale of the pilot program, strong physician leadership throughout the program and implementation of the best practices learned during the pilot program. Similarly, the Geisinger Health System (GHS) in Pennsylvania is credited with a 20% reduction in hospital admissions and across the board savings of approximately 7% in medical costs, based on early pilot results.¹²

A meta-analysis of elements of the chronic care model (CCM) indicate a positive association between elements of CCM, including delivery system design, self-management support, decision support and clinical information systems with better patient outcomes and processes.¹³ Implementation of the CCM within a specific community health center, Clinica Campesina Family Health Services, is credited with a drop in blood sugar levels, increased percentage of patients with at least two such tests per year, increase in patients with self-management goals, and increases in eye and foot examinations.¹⁴

Qualitative observations of implementation of the chronic care model confirm that the success of self-management support is dependent on focusing on the provision of

support and encouragement rather than providing didactic patient education.¹⁵ Furthermore, a critical element in the success of self-management services is that they are integrated within or closely aligned with the medical home rather than through independent disease/care management providers who operate on a referral basis or parallel to the medical home.¹⁶ Similarly, introduction of decision support tools such as registries and evidence-based guidance is effective in changing provider behavior when registries are used to simultaneously issue reminders for overdue care, assess severity of illness combined with recommendations for treatment changes and generate summary reports for visits.¹⁷

A Framework for Implementing the Medical Home Model in California

Health Care Coverage Initiative (HCCI)

The HCCI demonstration project was implemented under California's Section 1115 waiver (No. 11-W-00193/9). Senate Bill 1448¹⁸ was enacted to provide a statutory framework for HCCI and on March 29, 2007, Governor Schwarzenegger announced that \$540 million would be awarded to ten counties selected from the seventeen proposals submitted.¹⁹ The programs are to provide an expansion of health care coverage to eligible, low-income uninsured adults who are not otherwise eligible for public programs such as Medi-Cal. The programs receive financial support for three years, without assurance of funding after the demonstration period ends. HCCI provides \$180 million in federal funds in years three, four and five of the waiver (September 1, 2007 to August 31, 2010) for the development and implementation of the project.

A fundamental feature of the HCCI program is the assignment of individuals to a medical home. A major goal of the programs is to improve access, quality of care and overall health of low-income uninsured individuals by shifting from the more costly episodic care to a more coordinated care provided by a medical home.

Numerous differences exist in implementation of the HCCI program among participating counties. These differences are partly due to variations in existing infrastructure within systems of care for their respective indigent populations prior to introducing the HCCI program. Some participating counties had relatively organized indigent programs based on existing provider networks which delivered a more extended scope of services and employed existing health information technology. Others were developing and reforming their existing systems, and planning for infrastructure and quality of care improvements. Still, other participating counties began with limited infrastructure, disparate networks without previous contractual relationships and limited or outdated health information technologies.

Health information technology availability ranged from full-fledged electronic systems for enrollment, medical records, referral, patient tracking and prescribing to basic communication methods, including paper and pencil enrollment and referrals via fax transmission. HCCI program operations began on September 1, 2007, though counties at early stages of development of their networks and infrastructure required a longer lead time to begin enrollment and delivery of services. Those with existing systems and plans were able to use HCCI funds to implement their HCCI program relatively rapidly with some modifications.

The Framework for Examining the Medical Home within HCCI and Interim Findings

Under the HCCI demonstration project, selected California counties are required to assign individuals to a medical home defined as:

“... a single provider or facility that maintains all of an eligible person’s medical information and that is a licensed provider of health care services, and that provides primary medical care and prevention services.”²⁰

This broad definition does not specify most of the concepts outlined in the PCMH or CCM/AMH models. However, it allows for great flexibility in implementation of the model within the existing safety net systems in each county. As stated, implementation options can range from loosely defined usual source of care to more distinctly defined PCMH or CCM/AMH models. Furthermore, counties had the option to target specific chronically ill subgroups and determine the scope of services provided under their respective programs. These variations have led to further differences in county-specific implementation of the medical home models under the HCCI program.

Exhibit 1 uses the framework of PCMH and CCM/AMH models to determine which elements of these models have been implemented in California in the HCCI counties. This framework incorporates selected elements of both models that have been implemented fully or to some degree in HCCI county programs.

At the time of this publication and based on the criteria outlined in contracts between HCCI counties and DHCS, participating counties have fulfilled the statutory requirements of their contract by assigning enrollees to licensed physicians who provide primary and preventive care and who maintain the patients' medical records. In the first year and a half of the program, participating counties have also successfully implemented multiple aspects of the PCMH and CCM/AMH models for at least a portion of their program enrollees, if not all.

Personal Physician

All counties have assigned patients to medical homes. In some instances the assignment is at the clinic level, allowing the clinic to assign patients to a specific physician. Some counties can verify that a personal physician is assigned within a clinic. Adherence to the medical home is enforced in three out of ten counties and encouraged in others.

Physician-Directed Team-Based Approach

All counties report utilizing the physician-directed team-based approach in delivery of care. Counties have augmented teams lacking essential team members such as nurse disease/case managers and health educators in various ways. These members may be housed in a single clinic or travel between assigned clinics. In some cases, these team members are not physically present in clinics or physician offices. The members of the teams collaborate in patient care activities to varying degrees; some disease/case managers deliver their services without initial input from the primary care physician while others plan and deliver patient care in close collaboration with the physician.

Whole Person Orientation and Care Coordination/Integration

The medical homes in all counties coordinate the care provided to their patients by arranging for referrals, follow-up and other service needs of their patients. The degree to which service use is coordinated is partly dependent on the extent of services covered under the county's HCCI program. When services are not covered by the county, care coordination may be limited to referrals. In most cases, providers receive some form of feedback about use of services such as inpatient care, emergency room visits or specialist visits. The sources of this feedback range from specialists faxing results back to primary care physicians; to clinic or private-practice providers accessing hospital records remotely; and to notes provided by emergency department physicians in electronic records.

All counties provide disease and case management services to all or some of their HCCI enrollees. In many cases, elements of disease and case management services are blended where the same nurses or social workers may provide both types of service as needed. In nine counties, individuals with more severe (high risk) chronic conditions are identified and receive disease and case management services. These individuals require additional oversight, assistance and self-care instruction in managing their disease.

Exhibit 1

Elements of the Medical Home and Chronic Care Models Implemented in HCCI Counties, Interim Findings

	County 1	County 2	County 3	County 4	County 5	County 6	County 7	County 8	County 9	County 10
Personal Physician: Clinic-Based (C), Private Physician-Based (P)	C	C	C	C P	C P	C P	C	C	C	C
Assignment to PCP within clinic is verifiable: Yes (Y), No (N)	Y	Y	N	Y	Y	Y	Y	Y	N	N
Number of medical homes assigned (includes clinics and private providers)	16	140	23	11	196	27	14	14	25	106
Adherence to assigned medical home enforced: Yes (Y), No (N)	N	N	N	N	N	Y	Y	Y	N	N
Physician-Directed Team-Based Approach										
Multidisciplinary team: on site (O/S), shared (S), virtual (V)	O/S S	O/S V	O/S S	O/S S	O/S V	O/S S	O/S	O/S V	O/S	O/S
Team communication methods: in-person meetings (I/P), conference calls (CC), other (O)	I/P CC O	I/P CC O	I/P CC	I/P CC O	I/P CC	I/P O	I/P CC	I/P CC O	I/P CC O	I/P
Whole Person Orientation and Care Coordination/Integration										
Medical home arranges for referral (R), Follow-up (F), and other care w/other providers (O)	R F O	R F O	R F O	R F O	R	R F O	R F O	R F O	R F O	R F
Follow-up with PCP post-utilization of other services										
Specialist visit: Yes (Y), No (N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Emergency room visit: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Inpatient stay: Yes (Y), No (N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Disease (DM), case management (CM)	DM	DM CM	DM CM	DM CM	DM CM	DM CM	CM	DM	DM	DM CM
Risk stratification of chronically ill population: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
High utilizer management through DM/CM, other (O), none (N)	DM	CM DM	DM CM	DM CM O	DM CM	CM DM O	CM	N	DM	DM

Exhibit 1

Elements of the Medical Home and Chronic Care Models Implemented in HCCI Counties, Interim Findings (continued)

	County 1	County 2	County 3	County 4	County 5	County 6	County 7	County 8	County 9	County 10
Clinical decision support tools										
Type of disease registries: diabetes (1), congestive heart failure (2), hypertension (3), hyperlipidemia (4), asthma (5), other (6)	1 3 4	1 5 6	1	1 3 6	1 2 3 5	1	1	1	1	1 2 5
Availability of disease registries to providers in network: all (A), some (S), none (N)	A	A S	S	S	S	S	S	A	A	S
Electronic patient information: (EMR) or similar, other (O) such as electronic summary sheet or care records, none (N)	O	O	O	O EMR	EM	Ⓟ EMR	O EMR	O EMR	O	O
Electronic records availability to providers: all (A), some (S), none (N)	S	S	S	A	S	S	S	A	S	A
Electronic referral/tracking: all (A), some (S), none (N)	S	S	N	S	A	A	S	S	S	A
Electronic prescribing: all (A), some (S), none (N)	S	S	N	S	N	N	S	A	N	N
Access to Care										
Open access scheduling										
Walk-in: Yes (Y), No (N)	Y	Y	N	Y	N	Y	Y	Y	Y	Y
Same or next day appointment by phone for primary non-urgent care: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Extended hours: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
24/7 nurse advice line: on site (O/S), system wide (S), none (N)	N	S	N	S	S	S	N	N	N	S
Urgent care: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Phone, email, or other communication modes with PCP: Yes (Y), No (N)	Y	Y	N	Y	N	Y	Y	Y	Y	Y
Provider Payment										
Enhanced primary care provider payment: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Payment method: global fee-for-service (G), personnel (P), other (O)	G	O	G	G O P	G	G	G	O	G	G P
Incentives: quality indicators (Q), other (O), none (N)	N	N	N	Q O	O	N	N	N	N	N
Enhanced specialist payment: Yes (Y), No (N)	Y	Y	N	Y	Y	N	N	N	Y	Y

Counties employ different criteria for selection of high-risk individuals depending on the characteristics of their enrollees. Nine counties also identify individuals with high rates of service use who may not be chronically ill or have conditions that are not targeted by the specific HCCI program such as mental illness and substance abuse problems. These individuals also receive disease and case management services to provide more appropriate ambulatory care and prevent inappropriate use of emergency rooms or other services.

Self-Management Support for Chronic Conditions

All counties provide some form of educational materials and provide various resources to patients under their self-management support services. In seven counties, the educational materials are developed or selected by the county. In others, educational materials are selected or developed by different clinics and are not uniformly available to all enrollees. Patient education is provided in a variety of settings, including in-person individual or group meetings and/or phone contacts. Most counties use a variety of these approaches depending on the intensity of the intervention and whether on-site staff provides such care. All counties provide some form of self-management resources to patients. Programs with a specific focus on chronically ill populations and disease management services develop care treatment plans and other similar tools to aid patients in managing their conditions. Some counties also provide equipment to help patients.

Quality improvement

All counties examine quality of care delivered to their HCCI enrollees and engage in some form of quality assurance and improvement activities. Eight counties use HEDIS (Healthcare Effectiveness Data and Information Set) quality measures and four employ other measures of quality in addition to HEDIS. Two of the eight counties use claims or encounter data alone, but all others use a combination of claims/encounter data and

chart review to examine physician adherence to their quality measures. In addition to quality measures, counties examine physicians' practice patterns such as adherence to formularies, utilization trends and billing patterns primarily using claims/encounter data. Chart reviews are used less frequently than claims/encounter data. All counties also measure patient satisfaction through surveys or plan to do so. In some counties, surveys are conducted centrally and in others surveys are conducted by clinics independently. The focus of the surveys may be broader than the HCCI population; however, the results are usually used in feedback to providers. Patient complaints are also used to provide feedback to providers by the majority of the counties.

Seven counties use multiple modes of communication to disseminate evidence-based guidelines to physicians, including in-person meetings, email or mail and on their Web sites. The remaining counties use a single method of dissemination. Five counties utilize some form of clinical decision support software or have purchased the software and are in the process of making it available to providers. In addition, the medical director in each county provides direct feedback to providers on their adherence to guidelines.

Clinical decision support tools include disease registries in all counties, with five counties utilizing more than one disease registry for their HCCI population. The disease registries are available system-wide in four counties. In others, registries may be available at specific clinics or clinic sites within the county system or contracted by the county. Five counties have developed an electronic medical record or a lifetime clinical record. Some counties have developed other forms of summary electronic records. Still others may depend on systems available in provider clinics. These records are available system-wide to all providers in three counties and available to some providers in other counties.

Nine counties have some form of electronic referral/tracking system and in three counties

they are available to all providers. Electronic prescribing is available to all providers in one county and to some providers in four counties.

Access to care

All counties extend access to their HCCI population through urgent care and extended hours. Many providers also have walk-in capability or offer same day appointments for non-urgent care. However, the latter is limited to availability of open appointments in three counties rather than guaranteed ability to get the same day appointment. Five counties provide a 24/7 nurse advice line. In eight counties, patients can communicate with physicians beyond the visit mostly through leaving messages with the clinic/physician staff. A few providers can be reached by patients through email.

Provider payment

Nine counties pay primary care providers at enhanced rates. Eight of these counties pay providers a global fee. Two of the nine counties also utilize providers that are employees in their systems. Also, two of the counties that pay primary care providers enhanced fees provide some form of incentive to providers to encourage high quality standards and/or to encourage provider acceptance of HCCI patients. Of the nine counties that pay primary care providers enhanced fees, six provide enhanced specialty payments to encourage specialist participation.

HCCI Counties Plan to Further Enhance Medical Home Implementation

All HCCI counties plan to further enhance the medical home model. The majority of the changes fall into three major categories: Health Information Technology (HIT), quality improvement, and enhanced access. Multiple counties have plans for implementation of enhancements to their HIT, ranging from creating electronic health and medical records, modifying e-referrals to two-way communication between primary care physicians and other providers, standardizing chronic disease registries that are available system-wide, and providing clinical decision

support software. Quality improvement plans range from increasing feedback to providers through patient satisfaction surveys and chart reviews, closing the feedback loop with specialists, improving patient care and closer scrutiny of disease and care management services. Access enhancement plans include improving the ability of enrollees to get same-day appointments, increasing availability of extended hours and increasing the size of the provider networks.

Recommendations for Further Enhancements of Medical Home Implementation in HCCI Counties

HCCI counties have taken different approaches to implementation of the medical home. Some counties have focused more closely on chronically ill populations with greater emphasis on quality of care, while others have focused on integration of a larger population of enrollees with greater emphasis on enhanced access. The analysis of medical home implementation in the HCCI program highlights aspects of the medical home that would benefit from further enhancements as HCCI participating counties continue to refine their medical home models:

1. Ensure assignment to a personal physician who can lead a team of providers.
2. Examine the level of adherence to a medical home to ensure continuity of care. This is important when patients' medical records are not available electronically and system-wide.
3. Explore the possibility of providing and/or increasing disease and case management services through on-site or shared personnel in county facilities, private practices and contracted clinics.
4. Examine team communication methods to ensure two-way communication between physicians and other team members. This will enable physicians to better plan and direct care in collaboration with the rest of the team.

5. Improve care coordination processes by ensuring feedback to the physician team leader following use of specialty care, emergency room visits, hospitalizations and other forms of services.
6. Identify high-risk and high service utilizers to focus more intensive care coordination and self-management support services on these high-need patients. This can also improve overall quality of care, patient outcomes, and maximize cost-effectiveness.
7. Examine the quality of patient education materials and standardize them system-wide to ensure all patients can benefit from them.
8. Increase and standardize the availability of essential self-management support tools, such as patient logs, customized treatment plans, spirometers, glucose monitors and other needed equipment.
9. Expand availability of system-wide clinical decision support tools and data such as disease registries and other health information technology, particularly among medical homes.
10. Explore and identify innovative ways to extend direct patient access to providers.
11. Consider incentives to improve implementation of aspects of the medical home that require financial resources and significant investment of time by providers.

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	San Diego	Contra Costa	Ventura	San Mateo	Orange	Santa Clara	Kern	San Francisco	Alameda	Los Angeles
Personal physician: clinic-based (C), private physician-based (P)	C	C	C	C, P	C, P	C, P	C	C	C	C
Assignment to PCP within clinic is verifiable: Yes (Y), No (N)	Y	Y	N	Y	Y	Y	Y	Y	N	N
Number of medical homes assigned (includes clinics and private providers)	16	140	23	11	196	27	14	14	25	106
Adherence to assigned medical home enforced: Yes (Y), No (N)	N	N	N	N	N	Y	Y	Y	N	N
Physician-directed team-based approach										
Multidisciplinary team: on site (O/S), shared (S), virtual (V)	O/S, S	O/S, V	O/S, S	O/S, S	O/S, V	O/S, S	O/S	O/S, V	O/S	O/S
Team communication methods: in-person meetings (I/P), conference calls (CC), other (O)	I/P, CC, O	I/P, CC, O	I/P, CC	IP, CC, O	I/P, CC	I/P, O	I/P, CC	I/P, CC, O	I/P, CC, O	I/P
Whole person orientation and care coordination/integration										
Medical home arranges for referral (R), follow-up (F), and other (O) care w/other providers	R, F, O	R, F, O	R, F, O	R, F, O	R	R, F, O	R, F, O	R, F, O	R, F, O	R, F
Follow-up with PCP post-utilization of other services										
Specialist visit: Yes (Y), No (N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Emergency room visit: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Inpatient stay: Yes (Y), No (N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Disease (DM), case management (CM)	DM	CM, DM	DM, CM	DM, CM	DM, CM	DM, CM	CM	DM	DM	DM, CM
Risk stratification of chronically ill population: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
High utilizer management through DM/CM, other (O), none (N)	DM	CM, DM	DM, CM	DM/CM, O	DM, CM	CM, DM, O	CM	N	DM	DM
Self-management support for chronic conditions										
Educational materials: disease guidelines/descriptions, nutrition guides, etc.: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Resources: patient logs, customized treatment plans, equipment (e.g. scales, monitors): Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mode of DM/CM communication: in-person (I/P), phone (T), group (G), none (N)	I/P, T, G	I/P, T, G	I/P, T, G	I/P, T, G	T	IP, T, G	I/P, T	I/P, T, G	I/P, T, G	I/P, G, T
Quality improvement										
Feedback to providers										
Quality of care measures: HEDIS, other (O), none (N)	HEDIS	HEDIS, O	N	HEDIS, O	HEDIS	O	HEDIS, O	HEDIS	HEDIS	HEDIS, O

	San Diego	Contra Costa	Ventura	San Mateo	Orange	Santa Clara	Kern	San Francisco	Alameda	Los Angeles
Phone, email, or other communication modes with PCP: Yes (Y), No (N)	Y	Y	N	Y	N	Y	Y	Y	Y	Y
Provider payment										
Enhanced primary care provider payment: Yes (Y), No (N)	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Payment method: global fee-for-service (G), personnel (P), other (O)	G	O	G	G, P, O	G	G	G	O	G	G, P
Incentives: quality indicators (Q), other (O), none (N)	N	N	N	Q, O	O	N	N	N	N	N
Enhanced specialist payment: Yes (Y), No (N)	Y	Y	N	Y	Y	N	N	N	Y	Y

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: Alameda County

The Health Care Coverage Initiative (HCCI) program for Alameda County is called Alameda County Excellence (ACE) and focuses on individuals with diabetes, hypertension, asthma or congestive heart failure. ACE members are served by the Alameda County Medical Center (ACMC), which includes Highland hospital, three ambulatory care clinics and eight Federally Qualified Health Centers (FQHCs) of the Alameda Health Consortium.

Personal Physician

There are 25 medical homes in the county consisting of four sites within the Alameda County Medical Center and 21 clinic sites in the community. Medical home assignment is based on patient choice and provider availability. Individuals choose their medical home or may be assigned to specific physicians or teams depending on the clinic. The patients may see different physicians each visit due to scheduling conflicts. ACE educates patients at enrollment about the use of the medical home and its services, but does not enforce whether patients visit their assigned medical home.

Physician-Directed Team-Based Approach

The county has a team of medical and social work professionals that utilize the chronic care model for specific health conditions. Primary care is available along with chronic care for patients with specific disease conditions. All of the clinics are performing panel management functions and all clinical settings are using variations of the team-based primary care model. The Alameda County Public Health Department was awarded a \$10,000 National Association of County and City Health Officials (NACCHO) grant to support efforts to recruit, hire and retain culturally competent medical assistants in the community clinics in Alameda County to improve the service delivery for clients with chronic disease.

Clinic teams vary by site. Every clinic has physicians, nurses and a nutritionist, but has the choice of including a specific panel manager, case manager and/or medical assistant with additional responsibilities. Teams communicate through one or more of the following mechanisms: morning huddles, designated panel manager time with clinicians, e-mail, phone and/or impromptu conversations. The county plans to conduct a complete assessment of the implementation of these mechanisms this summer.

Whole Person Orientation and Care Coordination/Integration

Alameda County established a clinical design committee (*Clinical Implementation Committee*) comprised of medical directors from each of the subcontractors to develop and implement the chronic care model. The committee met monthly during the design phase and now meets quarterly to discuss, implement and evaluate ACE activities and track adherence to the chronic care model.

Alameda County clinics conduct panel management activities at each site. The panel management targets patients for chronic care management activities with the following characteristics: 1) patients who haven't had a visit in six to 12 months; 2) patients who have key indicators above recommended levels (such as blood pressure, LDL cholesterol or hemoglobin A1c); 3) patients with preventive care tasks that are overdue (Pap or mammogram for example); and 4) patients with abnormal or overdue lab tests.



The panel services are tailored to each program and include chronic disease registries; making appointments and sending reminders for regular and ancillary visits and preventive care; arranging and tracking referrals and ensuring clients successfully follow-up on referrals; messenger activities including refills or appointment scheduling; and regular communication with other panel managers, supervisors and clinicians involved in panel management. Currently clinics do not receive notification of emergency room visits.

Panel managers stratify patients based on the severity of their conditions. High utilizers are also identified and managed by panel managers. It is not currently known how many clinics conduct these activities.

Self-Management Support for Chronic Conditions

Nurses and panel managers deliver patient self-management support, including patient education and individual goal setting, in person or via telephone. They also coach patients in medication reconciliation, lifestyle/behavior changes and glucose self-monitoring skills. The County Health Care Services Agency mailed brochures to patients with specific conditions to educate them about ACE services. Additionally, clinics have health education classes, such as diabetes self-management, available in English and Spanish. A support group was started after clients expressed the desire to continue to share stories and support each other at one of the clinics.

Quality Improvement

ACE has established quality assurance mechanisms conducted under the leadership of the *Clinical Implementation Committee* consisting of medical directors from clinics and staff affiliated with ACMC. The committee is designed to ensure dissemination of best practices, including clinical performance measures and evidence-based clinical guidelines. These guidelines are disseminated primarily through in-person meetings but also through email correspondence. Additionally, ACE employs a full-time nurse as the *ACE Quality Improvement Coordinator* to ensure coordination, training and quality improvement (QI) for all clinics. She performs chart review to assure QI

indicators are met using the measures agreed upon by the ACE clinical implementation group. Quality of care and provider performance is also measured using claims data and HEDIS (Healthcare Effectiveness Data and Information Set) measures. The medical director reviews practice patterns and shares the information during staff meetings and electronically. Clinical decision support software is not currently available.

All clinics and providers have undergone training on the chronic care model. The county held two half-day trainings on panel management and health coaching for clinic staff at all clinics in mid March 2008. Technical assistance is provided to all clinics on implementing the chronic care model and conducting panel management activities. A Quality Improvement Leader's Workgroup was held May 14th and 15th, 2009. Staff from each clinic participating in ACE attended.

All clinics conduct client satisfaction surveys, and the results are reviewed by senior leaders, managers and Quality Improvement staff to implement agreed upon strategies for improvement. The results are not shared with the county. Community clinics also review complaints from patients, including HCCI enrollees. Complaints are also logged and tracked by the medical center and many are reviewed by ACMC departmental quality review committees.

The contracted public hospitals and clinics use diabetes registries, but the entire system is transitioning to *i2iTracks*, a population health management software system, to create standardization across the network. Some clinics have other medical and electronic records systems available for providers, although specific details are not known at this time. The county plans to obtain this information during its assessment of chronic care and panel management mechanisms planned for this summer.

Some providers have access to *e-referrals*, however, the current system does not adequately allow two-way electronic communication between ACMC and primary care medical homes. Improvements are under development in this area. There is no *e-prescribing* system at this time.

Access to Care

ACE offers after-hours and urgent care services at some clinics and the medical center. Two clinics, Highland and West Oakland, offer walk-in capacity. Other clinics may do so depending on availability. Emergency room (ER) staff also created an *Asthma Lounge* where patients can go with acute asthma symptoms to receive treatment and avoid the ER. Clinics may offer open access scheduling and availability of alternative modes of communication, though the extent of implementation of these approaches is unknown. There is no dedicated 24/7 clinical advice phone line.

Provider Payment

ACE providers receive an additional \$206 per visit for primary care. ACMC receives an additional \$206 per visit for primary care, an additional \$500 per ER visit, an additional \$500 per specialty care, and an additional \$1,000 per inpatient day; however, all funding is capped. The county does not employ any specific incentives.

Future Plans

ACE intends to continue to move toward standardizing care across the indigent care system in the county and to further extend quality improvement processes where they had not existed before. Specific plans include:

- Complete the transition to *i2iTracks* to enable standardization across the network.
- Complete the registry for patients with diabetes.
- Complete two-way electronic communication between ACMC and primary care medical homes to improve *e-referral system*.
- The county intends to work with clinics to develop and implement a mechanism for arranging and tracking referrals and ensuring patient follow up (via panel management).
- The county uses *One-e-App* for eligibility and enrollment. Updating this for ACE enrollees is difficult and expensive, and adjustments are still being made to report on more data elements in program year two.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: Contra Costa County

The Contra Costa Health Plan (CCHP) is the provider of the county's indigent care program (Basic Health Care – BHC) and uses the existing provider network to provide care to Health Care Coverage Initiative (HCCI) program enrollees. The current program employs managed care principals to provide care to the eligible enrollee population in Contra Costa County.

Personal Physician

The provider network consists of 14 physicians at four community clinics and 146 physicians at eight clinics within the Contra Costa Regional Medical Center (CCRMC) network. While several of the 624 physicians are specialists, approximately 140 in the network provide primary care. Individuals are assigned to primary care providers (PCPs) located at CCRMC or they can be assigned to one of the community clinics. A patient's assignment to a specific physician within the community clinics can be verified.

The county educates HCCI patients at enrollment about the use of the medical home and its services. After inpatient or emergency room (ER) services, enrollees are redirected back to the medical home; but for routine and urgent care, enrollees are able to receive care by any physician within the CCRMC clinic system without incurring financial risk. If an enrollee receives medical care outside of this provider network without prior approval, the services will not be covered or paid for.

Physician-Directed Team-Based Approach

The community clinic medical homes consist of PCPs, nurses, and other support staff. The disease management (DM) and case management (CM) staff are employees of CCHP and not in-house at the clinics. The CCRMC clinics have physicians, nurses and care

coordinators onsite to assist CCRMC physicians and community clinic medical homes.

DM/CM staff and PCPs communicate in writing via e-mail and telephonically. For patients who are hospitalized, the care team meets in person during hospital rounds. The PCP does not participate in the rounds as patients receiving inpatient care are treated by a *hospitalist*, and not by the PCP.

Whole Person Orientation and Care Coordination/Integration

Primary care physicians refer patients to specialists through standard CCHP network protocols and referral systems. As CCHP was an existing health plan, HCCI was able to utilize referral systems, utilization review processes and other tools that were previously implemented.

The medical home facilitates all referrals and follow-up care. Within CCRMC, after an HCCI patient has referral, ER or inpatient care, the medical home is informed of what was provided and/or recommended. This is also the case at the community clinic medical homes for care referred to CCRMC specialty clinics and labs. However, this does not always occur after an ER visit or inpatient service.

DM and CM services are provided to channel patients from the ER to the medical home in community clinics and within the CCRMC network. At enrollment, enrollees are given a health assessment screening to determine the presence of chronic illness, health



problems and co-morbidities. If needed, these patients are referred for DM and CM services. Oversight of the Contra Costa Health Plan's CM and DM programs is via the health plan's medical director. Service delivery is coordinated in tandem with CM staff and the PCP. PCPs may also refer directly to CM/DM for necessary services. Referral guidelines and forms are provided during provider orientation.

A patient's risk level is identified during the initial health-risk assessment process. CM staff attempt to contact all enrollees for risk assessment. In addition, monthly reports are used to identify high ER utilizers.

High utilizers of inpatient and/or ER services are assigned a level of intervention based on number of visits: three visits receive a letter, four receive a call, and five receive a referral for case management. Enrollees that receive case management must meet one or more of the following criteria:

1. Medical non-adherence (such as frequent missed appointments, misuse of medications, poor dietary practices).
2. High utilization of emergency room services.
3. Frequent hospital admissions.
4. Readmissions of less than 30 days after discharge for ambulatory care sensitive conditions (diabetes, asthma, congestive heart failure, hypertension).
5. Psychosocial risk factors negatively impacting health.
6. Cognitive changes, as evidenced by significant fluctuations in memory, mood, personality or behavior by the geriatric client.
7. Unstable medical conditions warranting closer monitoring.
8. Self-care deficits requiring one-on-one or group health education to promote well-being.
9. Identified as a member of a special need population.

The DM/CM team represents a wide-range of expertise: psychologists, registered nurses, clinical social workers, health educators, and marriage, family and child counselors. Services include coordinated mental health referrals, coordinated PCP appointments for clients and their spouses, community food resource

information, review of medications with clients and/or their families, and communicating with PCPs.

Self-Management Support for Chronic Conditions

CCRMC network providers can order health educational materials that cover many topics online through the Krames system at the time of the patient visit. All HCCI patients receive the CCHP newsletter *Health Sense* with articles on healthy living. The Case Management Unit uses Contra Costa County's Online Resource Directory (CORD) for the purpose of identifying and coordinating appropriate enrollee-specific community resources. Self-management support services such as diabetes monitoring, asthma monitoring and smoking cessation may be provided in-person individually or in group meetings, or via telephone.

Quality Improvement

Contra Costa has established quality assurance mechanisms integrated with existing CCHP protocols and has expanded on those for the HCCI population. Quality-of-care and practice patterns are assessed based on clinical performance measures and evidence-based clinical guidelines. Contra Costa uses HEDIS (Healthcare Effectiveness Data and Information Set) measures to monitor practice patterns for their HCCI network providers.

Chart review and other labor intensive methods are used in quality improvement efforts, including HEDIS measures. This information is provided to the medical home provider. HEDIS-measure results are shared with all levels of stakeholders. Medical home providers are often alerted to the performance rate of their organization through annual reports on HEDIS that identify each network of care's performance for each measure. Networks of care for CCHP consist of the Contra Costa Regional Medical Center, health centers and community clinics.

Patient and pharmacy satisfaction surveys were conducted during the first fiscal year, and the same is planned for the second fiscal year. Routine complaints are handled by member services. All grievances that require follow-up regarding patient services rendered in the medical home are routed for review and response

back to the medical home and go directly to the supervisor of the named provider.

Clinical guidelines and protocols are updated and approved by CCHP leadership and all providers are notified. Providers are typically alerted to new guidelines and protocols through provider bulletins, CCHP's *Community Provider Network* (CPN) meetings, peer review meetings and their respective department rounds.

Decision support software is not used by PCPs. CCHP uses the McKesson-approved clinical guides for utilization management and service decisions. Additionally, CCHP ensures that decisions related to approved formulary prescriptions are regularly reviewed and evaluated from utilization patterns of filled pharmacy prescriptions.

The CCHP pharmacy director reviews formulary adherence on a monthly basis and reports findings every quarter to CCHP leadership and the governance authority. Specifically, the pharmacy director shares adherence rates to the formulary at the Quality Council, Managed Care Commission (MCC) and Joint Conference Committee (JCC).

Electronic health information technology in Contra Costa is available, but varied. Each community clinic has separate information systems that generally do not interface or communicate with other community clinic sites or with CCRMC clinics.

Clinics also have chronic disease registries that are unique and not shared across the system, with the exception of the immunization registry and the diabetes registry that are available systemwide. There is an asthma registry that is also utilized by CCRMC but it is not available across the system. The CCRMC utilizes an electronic prescription system called *RxM*. However the prescriptions that are generated are not sent via e-mail but are instead faxed directly to the pharmacy.

Access to Care

The CCRMC network has open-access scheduling for their family practice and other hospital clinics. Walk-in appointments are not available, but patients can call in

to make same/next day or future appointments for non-urgent care. However, the community clinics have a multitude of methods for making appointments with the assigned PCP. Many clinics offer same-day appointments, and all clinics have some open access or walk-in capacity. Urgent care and extended-hours care are available at some clinics.

The Contra Costa Health Plan has a 24/7-nurse advice line which is available to HCCI patients. The advice line uses nursing triage to assess symptoms and determine the appropriate level of care for each caller. If applicable, nurses can potentially redirect callers to urgent care rather than unnecessary emergency room care. Over 40% of HCCI patients calling the nurse advice line receive advice for *At Home Care* rather than urgent or ER care.

Although advice nurses and care coordinators can leave phone messages for PCPs on the patient's behalf, at this time patients do not have direct access to providers via alternate modes of communication.

Provider Payment

Contra Costa uses its existing CCHP contracts to pay network providers an enhanced contracted fee for services provided. The actual fee amount is determined by the contract with each clinic or physician. Some specific specialists have enhanced fees equal to Medicare. No physician incentives are utilized in the HCCI program at this time.

Future Plans

Specific plans include:

- Additional quality improvement using chart review to ensure clinics and PCPs are providing high quality care to their HCCI enrollees.
- Further integration of health information systems within HCCI to allow for improved modes of feedback between PCPs, case managers, hospitals, clinics and specialists.
- Improving care management for chronically ill patients, considering that the majority of enrollees have significant, chronic health needs.
- To share patient satisfaction survey results with PCPs.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: Kern County

Kern County contracted with COPE Health Solutions to administer the Kern Medical Center Health Plan (KMCHP) which was developed to implement the Health Care Coverage Initiative (HCCI) program. Services are provided in three hospital-based clinics, National Health Services, a Federally Qualified Health Center (FQHC) with 10 clinic sites, and one free-standing community clinic called Community Action Partnership of Kern (CAPK).

Personal Physician

There are 14 medical homes in the county providing primary care for KMCHP patients. Medical home assignments are made to the three hospital-based clinics, to CAPK and to clinics in the FQHC clinic system. Patients are assigned to either a clinic where they had previously visited or, if they have never visited any of the clinics, they are assigned to a clinic based upon their zip code of residence. Kern Medical Center (KMC), the county hospital affiliated with KMCHP, updated its patient charts to include a field to identify the medical home for KMCHP patients.

At the FQHC clinics, patients are not assigned to a specific provider; however, many choose to continue seeing the provider they had seen previously. If that provider works at multiple sites, patients are free to see that provider at any National Health Services site. At the hospital clinics, the clinic assigns patients to an available physician provider at their first scheduled appointment, and that provider is then labeled as the patient's primary care provider (PCP). At CAPK there is only one primary care physician so all patients are assigned to that physician.

The county educates patients at enrollment about the use of the medical home and its services. If patients go to a medical home that is not assigned, the program

will not cover the cost. The patient has the option of changing their medical home if desired, or pay for services provided by a non-designated medical home in the network or a clinic outside the program network.

Physician-Directed Team-Based Approach

The National Health Services' clinics have physicians, nurse practitioners and physician assistants that see patients. Several of these FQHC clinics also have pharmacists onsite, and prescriptions can be faxed directly from the physician to any pharmacy site. Each National Health Services site also has a referral coordinator who works with the providers to send and follow up on referrals.

At CAPK, in addition to the primary care physician, there are nurse(s) and medical assistants. Each provider is assigned a medical assistant, who is responsible for following up on appropriate referrals, labs and tests for all of the patients under that provider. CAPK also has a patient educator, who mostly works with obstetric patients regarding their care.

The hospital-based clinics utilize internal medicine and family practice residents who are overseen by an attending physician. Some of the family medicine faculty physicians are also assigned a panel of their own patients. The medical center has access to behavioral health services and physical therapists, clinical pharmacists and dieticians, and is developing a diabetes education clinic.

KMCHP established monthly in-person meetings,



called *Community Grand Rounds*, for HCCI community clinic providers and KMC primary and specialty care providers to interface with each other. Issues discussed include specialty care education, redesign and clinical guidelines.

The team communication methods between physician, nurse and support staff are in-person and through conference calls. Care managers coordinate with providers by attending patient appointments or meeting with the doctor when there is a problem with a patient. On a more limited basis they follow up with providers via phone.

Whole Person Orientation and Care Coordination/Integration

The program provides primary and specialty care and is planning to provide coordinated chronic care for targeted specialty clinics (diabetes, cardiology, rheumatology, neurology and orthopedics). Clinic medical homes make referrals for patients as appropriate, and arrange for any other service which may be required, including follow-up care from specialty visits, hospital admissions or emergency room (ER) visits. KMCHP is working to develop an online portal for the contracted community clinics to have access to the KMC chart system in order to view clinical records, lab results, radiology files and consultation reports from specialists and other KMC physicians.

Staff known as *care managers* are located onsite at the hospital and the hospital-based clinics. There are two care managers to enroll patients who are frequent users of hospital services. They teach the patients about the process of navigating through the health care system. Care management staff also assure patients receive appointments to one of the clinics and after ER, inpatient or ambulatory care visits, and work with patients to assist with follow-up care instructions. At any time, patients have direct telephone contact with care managers for assistance in obtaining urgent care appointments or other needs. Care managers are also available to follow up with clinic providers on the care management services their patients receive.

Patients are entered into the care management program based upon their frequent use of ER and inpatient

services. High utilizers are defined by: four or more visits to the emergency room; three inpatient admissions; or two admissions and one emergency room visit within the past year. Chronically ill patients are not currently risk-stratified.

Care managers also connect patients with legal services, homeless shelters, transportation, substance abuse programs or other needed community services. Cases are documented in a Web-based program developed by COPE Health Solutions called *NaviLinx*. The program utilizes an acuity scale to record and stratify a patient's condition based upon issues which are known to be associated with frequent use of avoidable hospital services, such as chronic pain, homelessness and mental health issues.

Self-Management Support for Chronic Conditions

The care managers aim to provide patients with appropriate and timely care to avoid hospitalizations and manage ambulatory care sensitive conditions. Care managers schedule appointments for chronically ill patients, remind patients of appointments and attend appointments with patients. Care managers review patient charts and record hemoglobin A1c levels and blood pressure for diabetes patients and those with high blood pressure monthly. Patients with readings outside the normal range are referred to the Kern Medical Center Health Plan medical director to evaluate whether these measures indicate non-compliance with medication and whether the patients need more education from the primary care provider.

Health education materials are available at clinics, most of which are obtained online by providers or clinic staff on behalf of the patient. The hospital also has a patient education module that can be used by the clinics to print material for patients. Care managers also educate patients on how to schedule appointments, apply for Supplemental Security Income (SSI) and other benefits, and they follow up on referrals. Care managers also educate patients on the importance of knowing what medications they take, medication compliance and how to fill and renew prescriptions. Resources for patient self-management such as treatment plans, glucose monitors, and pain scales are also available.

Quality Improvement

The HCCI community clinic providers are credentialed by Kern Health Systems, the county's local initiative health plan for Medi-Cal managed care. The community clinics are required to participate in a quality review program. An oversight committee develops and disseminates policies and procedures for KMCHP, including procedural policies, and this will also include quality and utilization policies in the near future. The committee currently measures hospital and ER utilization, and plans to monitor the quality of care based upon HEDIS (Healthcare Effectiveness Data and Information Set) guidelines, using claims data and chart review. An advisory council, consisting of administrators and medical directors from the community clinics, KMCHP and KMC, meets at least quarterly to discuss and plan for monitoring activities. Results of utilization and quality studies are discussed and distributed to providers through various dissemination methods, including in-person meetings, email, and the Web. The county does not currently employ clinical decision support software. The medical director will directly provide feedback to providers when warranted.

KMC and KMCHP are developing and implementing *consensus care guidelines*. The guidelines are condition-specific and delineate the level of care expected in a community clinic by a provider who has completed diagnosis-specific continuing medical education (CME) for a particular specialty, or by a specialist in a specialty care setting. The guidelines also outline diagnostics necessary in order to obtain a specialty consult. In the second year, KMC and KMCHP developed guidelines for diabetes and rheumatoid arthritis. Guidelines for seizures, headache, congestive heart failure and chest pain are currently in development. Guidelines are available only in paper form.

The *e-referral* system is being upgraded and will include the guidelines. A community clinic provider will be designated as the *specialty champion* most familiar with the guidelines and will be responsible for assuring proper use and compliance with the adopted consensus care guidelines by other providers.

KMC conducts an annual in-patient satisfaction survey. KMCHP will distribute patient satisfaction surveys to

the hospital and community clinics. Once completed, results will be discussed at the advisory council and distributed to each clinic and their providers. A process has also been developed to track, review and process all complaints for HCCI enrollees. If a matter directly involves a provider, KMCHP will contact that provider in conjunction with their response to the grievance.

The Kern County diabetes clinic is instituting a diabetes registry. The registry is not available to all providers but all providers are able to refer diabetic patients to this clinic. The FQHC clinics utilize *i2iTracks*, a population health management software system, for tracking diabetes, hypertension and cardiac disease.

The FQHC has implemented a full electronic medical record (EMR) system for patients within their 10 clinic sites. This system is only accessible by the physicians and staff at FQHC clinics; however, soon there will be access at the community clinics to medical records, lab and radiology results performed at KMC so providers can have immediate access to hospital discharge, ER, lab and radiology records.

A referral system is currently in use, but in need of improvement. Upon implementation of HCCI, staff from KMCHP met with the KMC Referral Center and found a large backlog of specialty referrals that had not been processed. KMCHP and the referral center processed this backlog and conducted a referral system assessment. A joint workgroup was created to identify and address opportunities for improvement. A handbook (work station job aid) was also developed and provided to the staff instructing them on how to use the *e-referral* system. The current system, however, is underutilized for a variety of reasons. When the *e-referral* system is upgraded, KMCHP staff will travel to the community clinics for on-site training.

The FQHC clinic, within their EMR, is able to fax prescriptions to pharmacies. Prescriptions are still in paper form at the county clinics and the one community clinic; however, the county is preparing for *e-prescribing* to be in place by this summer.

Access to Care

Open access scheduling in the form of same or next

day appointment for non-urgent care is not currently available, but walk-in visits and same-day appointments are available at most clinic sites. The FQHC and community clinic have extended hours on some or all Saturdays. Communication with patients occurs only at a clinic visit or by telephone. There is no dedicated nurse advice line.

KMC established a medicine clinic workgroup to address issues related to access to primary care for HCCI patients. Agenda topics have included availability of same-day urgent appointments, clinic capacity, wait times and resource needs.

Provider Payment

All community clinics are compensated for primary care services with a global fee-for-service rate of \$109 per visit, which covers the visit, basic labs, a negotiated formulary and plain film radiology. In addition, providers who have been certified as specialty champions are reimbursed for telephone calls to specialists for patient care questions at a rate of \$50 for extensive chart review and discussion with a specialist. They are also allowed to bill consultation fees if they provide a champion visit for other providers in the group at a rate of \$125 per visit. In addition to this, there is compensation for group visits based upon the number of patients in the group. Providers at the hospital-based clinics are currently paid a flat salary by the county; however, plans are underway for a more incentive-based pay system. Quality incentives are not used in primary care. There have been some discussions around pay-for-performance; however, no such process is currently in place.

Future Plans

KMCHP will continue to assist the county in evaluating possible collaborations between current clinic partners and possibly other clinics in the county. The county hopes to collect adequate data to evaluate the feasibility of creating a sustainable managed care program for all medically indigent adults.

Specific plans include:

- Improving information systems for the hospital-

based clinics within the financial constraints of the county system.

- Improving information exchange between the clinic partners and the county system.
- Establishing *e-prescribing* in the county clinics.
- Developing a KMCHP Web site for use by clinic partners and patients.
- Beginning a *mini-fellowship* program in spring 2009. Selected HCCI clinic providers will undergo training with a KMC specialist to gain the clinical expertise necessary to implement and follow the *consensus care guidelines*. Training begins with a pre-test for primary care providers, a lecture from the specialist, a review of relevant literature, and then a visit to the specialty clinic. At the conclusion of the training, there is a post-test. Upon completion of the fellowship, clinic providers will have access to and compensation for phone consultations and chart reviews in order to obtain medical advice from the specialist, as needed.
- Developing *consensus care guidelines* for conditions in at least five specialty areas: neurology, endocrinology, rheumatology, cardiology and orthopedics. Once implemented, evaluation of the program will consist of monitoring referral data such as next available date for specialty clinic appointments, appointment denials and deferral rates.
- Using the claims processing system, *ikaSystems*, to analyze data on program utilization.
- Training for the upgraded *e-referral* system is currently in the late planning stages.
- Determining which quality measures to evaluate, beginning to collect data with the plans of sharing this with the clinic system, and comparing this quality data with prior data to evaluate the improvement using a primary care home model for patient care.
- Establishing a care coordinator in the emergency room to assist with primary care home follow-up and education for HCCI and any other patients without an easily accessible primary care home.
- Continuing to monitor utilization and cost data with the hope of demonstrating this to be a sustainable system based upon cost avoidance of unnecessary hospitalizations and ER visits, and improving quality of care.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: Los Angeles County

The Health Care Coverage Initiative (HCCI) program in the Los Angeles County Department of Health Services (LACDHS) targets three population groups: 1) those who have been diagnosed with hypertension, diabetes, congestive heart failure (CHF), asthma or chronic obstructive pulmonary disorder (COPD), or dyslipidemia; 2) individuals who are not part of the first group and are pre-Medicare (ages 63 to 64); and 3) individuals who are chronic users of LACDHS services and do not have a medical home. The HCCI program is called Healthy Way LA (HWLA) and provides services in 21 LACDHS clinics and 85 private community clinics that have contracted with the county under the Public-Private Partnership Program. These private clinics are known as PPPs.

Personal Physician

There are 106 potential medical homes in the county. At enrollment into HWLA, each new enrollee is assigned to a clinic based on their most frequent utilization or by request, and are given a membership card that indicates they are part of HWLA. The medical home serves as the primary location to house and maintain the individual's comprehensive medical records. Some clinics are *HWLA-dedicated* clinics.

Individuals assigned to medical homes are not prohibited from using other clinics, although they are strongly encouraged to seek care at one site. LACDHS has plans to monitor these patterns. The county educates patients at enrollment about the use of the medical home and its services, but does not verify that the enrollee has been assigned a primary care physician (PCP). If an enrollee receives out of HWLA-network medical care, the services will not be covered or paid for by HWLA.

Physician-Directed Team-Based Approach

The medical homes consist of primary care physicians, nurses and other support staff. LACDHS hired health education assistants located at clinic sites that assist with recruitment into the program and are being trained to provide health education. Monthly meetings occur with medical directors at some clinic sites, and may occur more frequently at others. PCP-led teams meet in person on a regular basis, some meet monthly, some bi-monthly, some daily, and others occur right before patient visits. Care coordination and case management services are provided onsite and in conjunction with a disease management program.

Whole Person Orientation and Care Coordination/Integration

HWLA focuses on delivery of primary and preventive care services. PCPs provide referrals to specialty care, mental health services and additional resources. Some clinics have focused on specific conditions including diabetes, heart disease, hypertension and dyslipidemia. Specialty care may be provided at the County Medical Centers, Comprehensive Health Centers, or in some cases at PPP sites where specialists are volunteers or are subcontracted to provide specialty care to HWLA patients. Providers coordinate follow-up and other services beyond referrals.

The providers in HWLA clinics have access to inpatient and emergency room (ER) utilization records of patients in the county system through the Electronic Summary Sheet, a Web-based health care utilization

data retrieval system. After referral or the use of various services, providers are able to log in to a Web-based *Referral Processing System* to look up information on outcomes of specialty care visits.

HWLA will soon include case management services for the homeless, and will provide intensive disease management/case management for a subset of patients with diabetes, CHF and asthma. Enrollment in these programs is limited due to resource constraints. Homeless case management services will be delivered in the community and at the clinics for this population. Risk stratification is conducted to determine patient illness severity and eligibility for placement into a disease management program. Additionally, protocols have been developed for the management of patients with uncomplicated hypertension and dyslipidemia.

Self-Management Support for Chronic Conditions

Some clinics provide patient newsletters, support groups and a high-risk assessment tool, specifically at the dedicated HWLA clinics. The Long Beach HWLA-dedicated clinic has diabetes and heart disease classes, and a nurse practitioner-facilitated hypertension and dyslipidemia clinic. The Long Beach clinic also collaborated with its local PPP to assure patients eligible for case management were included in the system-wide disease management program.

Other specific health education materials for enrollees include brochures about diabetes self-management, asthma triggers, heart disease risk factors and prevention, exercise, goal-setting, cholesterol management and some nutrition classes. The HWLA senior health educator is currently working on adding further materials on the anatomy of each targeted chronic disease, action plans and stress management. Patients are provided with resources such as scales and monitors. Patients receive disease and case management services in-person, either individually or in group meetings, and by phone.

Quality Improvement

LACDHS has a designated individual responsible for monitoring and assessing the impact and efficacy of

the program using administrative data, clinic reports and chart reviews. Chart review was initiated in January 2009 for PPP clinics due to a lack of adequate administrative data. HEDIS (Healthcare Effectiveness Data and Information Set) and other preventive care quality measures gathered from the chart reviews will be reported back to the PPP clinics as performance measures. Average measures for each agency will be compared to the average of all the PPP clinics.

PCP performance on preventive services and lab practice patterns are gathered through encounter data analysis for LACDHS visits only. There are nurse-driven protocols for management of hypertension and dyslipidemia.

The county intends to conduct patient satisfaction surveys for HWLA but has not yet implemented these surveys. The county is starting to track patient complaints about HWLA by requiring clinics to report the complaints as part of the information they provide for the state quarterly reports. Patient complaints are discussed with providers during each clinic's quality improvement meetings.

Evidence-based guidelines are distributed to providers in the disease management program through email or are posted on the intranet. A clinical decision support software, called ADST for asthma, is currently pilot-tested within the county system, but it is not available systemwide. Providers receive direct oversight by the medical director when warranted. Diabetes, CHF and asthma disease registries are utilized for chronic conditions in the LACDHS disease management program. PPPs have a diabetes registry for their diabetics, most use PECS but some are transitioning to *i2iTracks*, a population health management software system. In the LACDHS clinics, registries are accessible to the providers working in disease management programs, while in the PPPs access is open to each patient's provider.

The Electronic Summary Sheet (ESS) discussed earlier, includes information on diagnoses, medications dispensed from LACDHS facilities, primary and specialty care visits, LACDHS ER utilization, hospitalizations and LACDHS scheduled appointments. Both LACDHS and PPP clinics have access to ESS.

The referrals to specialty care are done online via the *Referral Processing System* (RPS) and all clinics have access to this system. The county is not currently utilizing an electronic prescribing system.

Access to Care

Appointment scheduling varies considerably by site and capacity. Clinics will try to accommodate same-day appointments, but do not hold appointments specifically for this service. Several county clinics and one PPP have urgent care clinics. Few clinics have walk-in capabilities. Extended hours are available at some clinics. Some PPPs offer increased access to walk-in, same day and extended hour appointments.

A 24/7 nurse advice line is available to assess symptoms and determine the appropriate level of care for each caller. If applicable, nurses can potentially redirect callers to urgent care or a next-day appointment at their medical home rather than unnecessary emergency room care. The nurse advice line began in March of 2008 for LACDHS clinics, and in August of 2008 for PPP clinics. Initially the line was not heavily used and there were implementation issues to work out with the vendor, McKesson. Nurses are to be available via telephone, but the follow up mechanism for nurses to fax a HWLA clinic for a next-day appointment was only recently resolved.

Patients in LACDHS disease management programs have the ability to email their providers.

Provider Payment

Los Angeles County has contracts with the clinics that are strategic partners of the PPP Program at a set reimbursement rate of \$109 per visit. PPPs that subcontract with specialists for HWLA are reimbursed at the Medicare rate for services. The LACDHS site staff are salaried employees and do not receive any additional reimbursement.

Future Plans

Specific plans include:

- Expanding further access of the Electronic Summary Sheet (ESS) to both LACDHS and PPP clinics.
- Adding a *Preventive Health Committee*.
- Implementing a pilot study for homeless HWLA patients.
- Conducting a patient satisfaction survey for HWLA through the *Patient Assessment Survey*.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: Orange County

The Orange County Medical Services Initiative Program (MSI) is the county safety net program responsible for the provision of medical care to Orange County's medically indigent adults under the Health Care Coverage Initiative (HCCI) program. MSI functions as a public-private partnership and contracts with a variety of private entities for the provision of medical care to eligible persons.

Personal Physician

There are 196 medical homes in the county consisting of 14 community clinics and 182 private-physician offices. Individuals are assigned medical homes, which are either clinics or community-based physicians in private practice. Individuals assigned to clinics are assigned at the clinic level. The county is able to track the number of patients assigned to each clinic, but cannot verify assignment to individual physicians within a clinic. In the private-physician office, assignment is done at the physician level and is tracked as such. The county educates patients at enrollment about the use of the medical home and its services, but does not enforce adherence to the same medical home. Providers, however, have the choice of charging additional copays to improve adherence. Only the assigned medical home has access to their assigned patient's clinical data. So providers seeing patients that are not assigned to them will not have access to those patients' clinical history.

Physician-Directed Team-Based Approach

A medical home staff generally consists of primary care physicians (PCPs), nurses and support staff. Some private physician medical homes may only consist of a PCP and support staff, while some clinics may have case managers on staff. Teams communicate through in-person meetings and conference calls. The county contracts with a vendor that provides case and disease management services. Disease management service

providers include nurses, health educators and social workers who operate from a central location outside the medical home. Their method of communication with the physician team leader is telephonic, however the frequency of such communication is not known.

Whole Person Orientation and Care Coordination/Integration

Providers are directed to a central Utilization Management Department that approves appropriate referrals for patients. Status of the referral is available electronically through Clinic-Connect, which links clinical medical homes. A similar application is being deployed to private-physician medical homes. The system generates the referral with appropriate contact information and directions to the specialist; after referral or use of various services, the primary care provider does not currently receive the outcomes of visits to specialists, emergency room visits and inpatient stays. Specialist may fax results to providers, but this is uncommon. The county is working to develop an *e-referral* application that will improve the communication between the home and the specialist while helping to eliminate wasted specialty referrals.

The chronically ill patients are stratified into two levels: level 1 and level 2 with a higher frequency of phone calls for level 1 patients (weekly vs. monthly). Level 1 often includes crisis intervention—assisting the patient during a period of exacerbation of their chronic condition or illness. Level 2 patients are more stable in their condition and require ongoing patient coaching to maintain a positive health outcome. High



utilizers of services are identified as those who have made six or more visits to an ER within a three-month period. These patients are referred to the disease management provider for further education about the medical home and appropriate management and linkage to a medical home when necessary.

Self-Management Support for Chronic Conditions

Disease, case and patient education services are provided by an outside vendor. Patients are contacted upon enrollment for education on use of the medical home and service availability by trained patient educators. Nurse case managers provide disease and case management services for patients with diabetes, congestive heart failure (CHF), asthma, hypertension, hyperlipidemia, CAD, obesity and pain management. Nurses and patient educators deliver services on the phone. These providers log information from patient contact into an electronic application that is only available to county workers. Currently the county has a cap of 1,000 for enrollment in case management.

Disease management providers use a host of educational materials such as nutrition guides for example. The emphasis is towards prevention of exacerbated conditions and complications through patient strategies and self management. Patient compliance is encouraged with treatment plans and physician/provider recommendations. Individualized care plans are developed and revised as health care needs change. Case managers refer any mental health or alcohol and drug related cases to clinics outside the network as needed.

Quality Improvement

Orange County has established quality assurance mechanisms, conducted under the leadership of the medical director and using claims data. Quality of care and practice patterns are assessed based on HEDIS (Healthcare Effectiveness Data and Information Set) clinical performance measures and evidence-based clinical guidelines. These measures are identified under the pay-for-performance program. The county assesses medical homes using case review, billing patterns, utilization trends, formulary utilization, provider credentialing, provider and patient complaints, and

patient satisfaction data. Information is then provided to providers through the provider newsletter via the Web, email/mail, and more personal interventions by the medical director including phone calls. These feedback mechanisms are used to inform and encourage providers to adhere to evidence-based clinical guidelines and the HCCI formulary, promote early intervention activities, and teach the medical home concept. The quality assurance committee meets quarterly and attempts to include physicians from the medical home network. Provider satisfaction surveys are conducted to identify gaps in program understanding such as the utilization review process and the scope of covered services.

Electronic decision support software is employed within the utilization management contracted vendor's office using Milliman criteria. Clinical decision support software is not directly available to providers.

Electronic health information technology, called MSI Connect, is available to all hospitals and medical homes within HCCI. There are three components within the system called ER Connect, Clinic Connect, and Community Connect (the latter connects private physicians and was planned for May of 2009). MSI Connect is a Web-based application available to all 24 of Orange County's emergency departments, all medical homes and all nurse case managers. It includes information from medical and pharmaceutical claims, the status of specialty referrals, hospital census data reported every 24 hours, lab and diagnostic data, and clinical notes from community clinics and emergency physicians. The county maintains a centralized disease registry for internal use only. Clinics may maintain or have access to other registries.

Access to Care

The county has contractual relationships with most of the community medical home clinics that guarantee a minimum number of available daily appointments. Walk-in appointments are not generally available.

The county has contracted with 26 retail or *minute clinics* throughout the county (recently scaled down to 11 due to a resizing of their organization) to deliver care after hours or on weekends to reduce wait-times

for seeing the medical home provider. These clinics are staffed by nurse practitioners or physician assistants. Orange County also employs a nurse advice line available 24/7 (provided by the utilization management vendor) to provide expert advice at all hours and reduce the need for emergency room services. Alternative modes of communication with providers is not currently available.

Provider Payment

Orange County pays primary care providers on a fee-for-service basis with a global fee set at 70% of the Medicare fee-schedule. Physicians, dentists and community clinics are reimbursed on a fee-for-service basis. The county employs a pay-for-performance (P4P) mechanism that may increase provider payments to a figure above the base rate of the Medicare fee-schedule. P4P was initially designed to encourage providers to take on Orange County HCCI patients, but it is also used to improve utilization of preventive services and adherence to clinical performance measures. Pay-for-performance to clinics includes payment for a commitment to a minimum number of lives, a certain number of visits based on chronic vs. non-chronic conditions, a fee for new and renewal applications, and a fee for information technology (IT) adoption. P4P to private physicians includes number of lives assigned with no commitment to a minimum, services provided with no commitment to the number, and types of primary and preventive activities performed. Other P4P payments include \$15 to emergency physicians to enter clinical notes into the system and \$100 to community clinics to successfully receive patient referrals directly from emergency departments.

Sub-specialists in great need may be reimbursed at negotiated rates that exceed the base rates paid to other medical home and specialty providers.

Future Plans

Orange County is planning to move towards a fully integrated delivery system using health information technology.

Specific plans include:

- To measure clinical outcomes and effectiveness of the case management services using predictive modeling with customized software.
- Creation of an *e-referral* system that will streamline specialty care access. The goals of this system include better distribution of referrals to all contracted specialists to avoid over-burdening of some and providing an electronic feedback loop for specialists to follow up with the primary care provider on services that were provided and recommendations to patients. The system would allow for automatic decision processes, rather than using Utilization Management Department (UMD) for every specialty referral request.
- Piloting an expanded module within the Clinic Connect application to serve as a care management tool, including a reminder system for tests and other HEDIS-related activities.
- Quality improvement implementation using performance guidelines.
- Accessing the feasibility of a patient health record.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: San Diego County

The Health Care Coverage Initiative (HCCI) program in San Diego County provides services to individuals with diabetes and hypertension. This program focuses on the chronic care model using disease management services.

Personal Physician

There are 16 medical homes in the county consisting of a network of Federally Qualified Health Centers (FQHCs) that provide health care services. Enrollment and recruitment into the program is completed by certified application assistants (CAA) who are trained and funded by the county. Most CAAs are located in a specific clinic, but a few clinics share CAAs. Thus, assignment to the medical home is clinic based, and these clinics assign patients to a specific team. The assignment process is not standardized to date, but promoted by the county.

The county educates patients at enrollment about the use of a medical home and its services, but does not enforce adherence to the assigned medical home. To qualify to be a medical home, clinics must be FQHC, use an evidence-based diabetes management program with the full scope of services, have formal referral arrangements with hospitals that have emergency rooms (ER) and offer after-hours care.

Physician-Directed Team-Based Approach

Clinical management of patients is conducted by a provider team, lead by a primary care physician (PCP) and consisting of a nurse educator, registered dietitian and a health educator. Some team members may be assigned to more than one clinic. The teams work with approved clinical guidelines and protocols as directed by the PCPs. Team members communicate with each other and the PCP leader regularly, most often in per-

son, but also via conference calls, email and other communication methods, such as telemedicine applications.

Whole Person Orientation and Care Coordination/ Integration

Each new enrollee is assessed during enrollment for their health status, including clinical, educational and psychosocial aspects of their health. This assessment is done to risk-stratify the patients and determine the level of disease management intervention needed. Although only patients with diabetes and hypertension are enrolled, the program covers their inpatient, outpatient, dental and ancillary care. Patients are seen quarterly for routine follow up.

The team generates and arranges for referrals, referral tracking and follows up post referral. Specialty care referrals are done through a third-party administrator called *AmeriChoice*, which is contracted by the county. For non-medical referrals, such as social, support and community resources, patients may be directed to *2-1-1 San Diego*, a public service in the county.

The primary care physician has access to information that indicates the use of services from other network providers., and also has access to *Hospital-Select*, a database that includes information on labs, imaging, ER, ancillary and physical and occupational therapy services used.

San Diego County identifies high-utilizers and places them in the *Project Dulce* disease management program.



Self-Management Support for Chronic Conditions

San Diego County offers disease management through *Project Dulce*. The team is composed of a nurse educator, a registered dietician and a health educator. Disease management services include overall health and nutrition assessment, group health education classes on diabetes and hypertension self-management and treatment plans for patients. Nurses track and health educators monitor patient compliance with care plan goals, which may include behavioral, nutritional, exercise, self-monitoring and clinical follow-up interventions. The group education classes utilize American Diabetes Association accredited criteria and may incorporate peer educators, such as promotoras, for patients with limited English proficiency. The teams utilize educational materials to support self-management by patients. Individual sessions with team members occur when necessary.

Quality Improvement

A physician steering committee is established by the county to standardize clinical protocols and care of enrolled patients. *Project Dulce's* model of care for patients with diabetes, hypertension and hyperlipidemia includes treatment plans and assessments based on clinical performance measures and evidence-based clinical guidelines. Information and training is available to providers through written materials, classes and online tools. New programs such as medical assistant training are under development. There is direct oversight or intervention with PCPs by the medical director. Currently, there is no decision support software available to providers. However, the county utilizes extensive peer review performance and quality outcomes, utilizing HEDIS (Healthcare Effectiveness Data and Information Set) measures and claims data. Patient satisfaction surveys are conducted through *AmeriChoice* and the results are made available to the providers.

The county has also developed a quality assurance plan to manage and analyze patient encounters and clinic operations at the clinic level. Based on national benchmarks, hemoglobin A1c, LDL cholesterol and blood pressure measures are used. These results are provided back to the clinics.

Some clinics have disease registries (including CDEMS and PECS) that are connected to hospital emergency rooms. Others use Web-based portals to register patients and make follow-up appointments from the ER to their clinics. There are registries used for patients with diabetes, hypertension and hyperlipidemia, which are available to all providers.

There is a variation among clinics in terms of electronic patient records that are available to some providers. One example of *e-record* utilization is *i2iTracks*, a population health management software system. Referrals are made through *AmeriChoice* by fax, with calls as needed. There is no electronic prescribing at this time, although a pharmacy benefits management system is available. There is an *e-pharma* management system that generates prescription labels and allergies reporting called *Carepoint GuardianRx* Pharmacy Management System. Planning for an electronic health record (EHR) is also in progress countywide.

Access to Care

Patients can walk in to clinics or schedule appointments. Alternative modes of communication with a primary care physician include group visits, phone follow-ups and limited email communication. These alternative methods of communication are emphasized for the near future.

Patients may call a dedicated toll-free number for information or to set up appointments. There is no dedicated 24/7 nurse advice line. All clinics have after-hours answering service and nurse consultation. Physician consultation is available as needed for back-up. Extended hours and urgent care are limited to certain clinics.

Provider Payment

San Diego County pays PCPs on a global fee-for-service basis at \$125 per visit. Specific provider incentives are not used at this time. Specialists are paid at an enhanced rate similar to the County Medical Services program rates.

Future Plans

Specific plans include:

- Partnering with hospitals and clinics to implement *Safety Net Connect*, a public-private partnership to electronically link hospital emergency rooms with FQHC medical homes.
- Increasing availability of extended hours and after-hours clinics.
- Organizing a *Care Coordination Work Group* consisting of county and private providers, and community health stakeholders to build the safety-net network in the area. These meetings include discussion and planning for clinic-wide EHR development and implementation.
- Working with the San Diego Medical Society Foundation to recruit new physicians and to expand the provision of free and/or discounted services to indigent populations in the county, including HCCI enrollees. *Project Access* is a part of this effort and offers surgery services at no cost to the patient.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: San Francisco County

The city and county of San Francisco's Department of Public Health (DPH) operates the Health Care Coverage Initiative (HCCI) program. The HCCI program is part of a larger effort known as Healthy San Francisco (HSF). If an enrollee is eligible for HSF they are screened for HCCI; however, HCCI status is *invisible* to the enrollee. The county uses *One-e-App* to determine eligibility at clinic medical homes, San Francisco General Hospital (SFGH), and the Department of Public Health.

Personal Physician

There are 14 primary care medical homes consisting of 11 community-based and three hospital-based clinics. All clinics are part of the DPH and work within the city and county network to provide primary care. The San Francisco General Hospital provides specialty, inpatient and pharmacy services, and Laguna Honda Hospital provides sub-acute care services. All clinics participating in the HCCI program are part of the DPH.

Upon enrollment, enrollees choose a medical home from participating clinics. The patient selects a primary care physician who coordinates their care. Enrollees who try to receive routine services at a medical home other than the one they selected are redirected back to their medical home of choice. Enrollees are not redirected for needed urgent care or appropriate emergency room (ER) use.

The county surveys clinics twice a month to monitor their capacity to accept new patients. Clinics that indicate their inability to provide care to new patients and that cannot provide the first clinical appointment within 60 days of the patient request will be *closed* to new HCCI enrollees as a medical home. The medical home *open/closed* status is determined by appointment availability and/or whether the clinic is accepting new patients. The Department of Public Health provides

clinics with monthly enrollment summaries and is able to verify that enrollees have selected primary care medical homes. The designated primary care provider delivering services to the HCCI/HSF participant is noted in the department's electronic medical repository—the Lifetime Clinical Record.

Physician-Directed Team-Based Approach

Clinics are staffed with a combination of physicians, nurse practitioners, physician assistants, nurses and/or front and back-office staff. The community-based (non-hospital) clinics within DPH have at least one full-time social worker who assists with program administration, or non-clinical issues, and nurses that oversee clinical care management. DPH Primary Care Centers share information systems to provide primary care services across sites. The primary care medical home teams communicate through in-person meetings, fax, electronic mail, and conference calls to share information across the delivery system.

Whole Person Orientation and Care Coordination/Integration

The medical home sites provide primary and preventive care and arrange for participants to receive needed specialty, ancillary/diagnostic and inpatient care services. For example, the DPH developed a HIPAA-compliant electronic portal for primary care providers to arrange for needed specialty care services (known as *e-referral*).



Providers of other services follow-up with the medical home to inform them what service or procedure has been done or what orders for care were given. All information from care provided in a non-primary care medical home is available from the Lifetime Clinical Record. Also, the listed primary care physician receives e-mail notifications when their own patients are seen in other sites, such as specialty, diagnostic, ER and urgent care clinics.

Disease management services are available in both community and hospital-based primary care medical homes. Four conditions are specifically targeted: diabetes, asthma, hypertension and hyperlipidemia. There is a data warehouse with all encounter data for the enrollees in the program. Clinical data (diagnoses codes, service codes and dispensed drugs) are used to help identify enrollees to be added to disease registries and manage the registry population. The County has a disease management program, *Strength in Numbers*. It recently implemented a *pay for improvement* incentive program to support and expand the use of registries for diabetes disease management within the HSF medical homes. The program encourages medical homes to actively use their diabetes registries to improve care at the point of service, to improve outreach to enrollees who may have fallen out of care, and to give clinician-specific data to drive quality improvement efforts. The goal is to expand this to asthma, hyperlipidemia and hypertension in future years.

Risk stratification is done for disease management. A report is generated every six (6) months that stratifies diabetics by degree of glucose and lipid control. High utilizers are not specifically identified and managed through disease management.

Self-Management Support for Chronic Conditions

While the initial design was to implement a telephonic disease management program, this was ultimately revised to a disease registry model. All clinics offer nutrition, diabetes, and hypertension education and smoking cessation education. Medical assistants and health workers at the medical homes perform a wide variety of paraprofessional duties and function as liaisons between community residents and program staff. They also provide counseling and advice to enrollees

regarding health problems, including providing instruction on self-management support for lifestyle changes and navigating the medical system. Registered nurses instruct enrollees on more intensive self-management for chronic conditions, including counseling on medication questions and issues of medication adherence. Health education brochures are sent on an annual basis to members. The County has initiated data collection for disease management and will be implementing data reporting for these services.

Quality Improvement

The county created a Healthy San Francisco Provider Work Group that meets monthly and is chaired by the county's medical director for community-oriented primary care. The Provider Work Group addresses provider issues related to both HCCI and HSF. Once a quarter, the Provider Work Group convenes as the HSF Quality Improvement (QI) Work Group. As with the Provider Work Group, the QI Work Group addresses issues related to both HCCI and HSF. The focus of the HSF quality improvement effort is on adult preventive care and on assuring access to care through monthly review of appointment wait times, and devising strategies to remediate wait times that exceed standards. Quality measurements focus on adult preventive care guidelines and will include breast and cervical cancer screening, appropriate care of diabetes, asthma and other preventive guidelines, including immunizations. Both work groups have public, non-profit and private providers. Guidelines are distributed to providers either in-person, through email/mail or through the Web.

Quality measures include HEDIS (Healthcare Effectiveness Data and Information Set) measures, like appropriate breast and cervical cancer screening, diabetes and asthma care, and other measures of preventive service provision, such as immunizations. The QI Work Group receives reports on service utilization and participant complaints, for example. Providers are given feedback on quality measures for their aggregated overall patient panel by their medical directors, but the data are not broken down by payer source or program.

The Department utilizes the San Francisco Health Plan (SFHP) as a third-party administrator (TPA) for

Healthy San Francisco. TPA services include collecting encounter data. SFHP maintains the HSF clinical data warehouse (dataset includes outpatient, hospitalizations, ER visits, behavioral health and pharmacy data). In doing so, SFHP oversees the collection and analysis of all encounter data from entities in the provider network. Collection and analysis of encounter data is one key approach to ascertaining the extent to which the program is meeting its goals to improve access and quality of care. SFHP provides quarterly and ad hoc reports to the county in such areas as utilization, access, utilization of preventive services, provider network, quality and chronic care. These reports are shared with the provider and QI work groups, disease management nurses, and other provider staff to obtain relatively recent data on patient utilization.

The Kaiser Family Foundation is conducting a one-time participant satisfaction survey for HSF. This telephone survey is designed to ascertain the experience of early HSF enrollees. Questions are in the areas of enrollment process, knowledge and understanding of HSF, uninsured status, satisfaction with HSF, health status, access to care and health care utilization. The survey results will be shared with providers and HCCI/HSF program staff.

The HCCI/HSF program has a provider operations manual which is distributed to all participating primary care medical homes. The purpose of the manual is to provide medical home administrators and staff with a reference to the HSF program policies and procedures, and to clarify the roles of HSF program staff and medical home staff. The manual covers such issues as provider network, participant eligibility-covered services and exclusions, service records/data, quality improvement, participant complaints, medical home site reviews and coordination with other programs.

All San Francisco General Hospital (SFGH) and community-oriented primary care medical providers are credentialed every two years through the SFGH-based Medical Staff Services Office. Individual providers are supervised by their on-site medical director and are subject to annual performance appraisals. Many have monthly or more frequent medical provider meetings in which clinical cases are reviewed.

As discussed, the county has an electronic medical repository, the Lifetime Clinical Record, and all medical homes have access to this system. Clinical decision support is incorporated into a field of the Lifetime Clinical Record which links to U.S. Preventive Services Task Force (USPSTF) guidelines. Chronic disease management guidelines and clinical decision making software are embedded in the *i2iTracks* disease registry (this includes patient visit summary formats for diabetes, cardiovascular risk, Hepatitis B and depression) which is used at the point of care by some but not all of the clinics.

The County has expanded their *e-referral* system to four specialties and six sub-specialties. There is also a new patient appointment system and efforts are made to schedule all new enrollees within 60 days of their request for the first clinical appointment. There is also an *e-prescribing* system through the Lifetime Clinical Record.

Access to Care

There is a dedicated customer service line, but not a 24/7 clinical advice line. Urgent care services and extended hours are available at some clinics. All medical homes are expected to provide short turnaround appointments — including access via walk-in — for their enrolled patients. Alternative modes of communication with providers are available. Some providers follow up with patients via phone after a visit to check in on medication changes or referral issues. Also, at present, a few providers and patients have email communication.

Provider Payment

All clinics, specialty providers, inpatient providers and pharmacists are salaried staff of DPH. As a result, providers are responsible for delivery of services and data reporting. With the exception of the pay-for-improvement program that provides financial incentives for primary care medical homes to use chronic care disease registries, physician incentives are not used for HCCI. Financial incentive is not tied to a physician, but to a primary care medical home. For HSF, primary care payments to non-DPH clinics is tied to program enrollment in which the clinics receive

funding for conducting HSF enrollment, providing services to HSF participants and providing the program with encounter data.

Future Plans

Specific plans include:

- The Department of Public Health put out a *Request for Proposal* to develop a comprehensive ambulatory care EHR for use at all department primary care health centers and satellite sites located throughout the city and county of San Francisco, and at the primary and specialty care clinics located at San Francisco General Hospital. An automated EHR, if fully implemented, could allow the department to integrate the primary patient management system, the clinical results repository, the behavioral health system, the disease registry, department electronic mail and other clinical and systems.
- The QI Work Group is in the process of examining the current access measures for both primary and specialty care, based on HSF participant complaint data. These measures will address clinical capacity, demand, productivity and appointment availability.
- Data reporting on disease management services for CI is to be improved.
- To develop disease registries for hypertension, hyperlipidemia and asthma.
- To develop and implement a nurse advice line within the next year.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: San Mateo County

The San Mateo County Health Care Coverage Initiative program, *Access and Care for Everyone* (ACE), is part of the county's *Blue Ribbon Task Force on Adult Health Care Coverage Expansion* pilot program. The ACE program is operated by the San Mateo Medical Center (SMMC), which includes one acute care hospital, 11 clinics and a Federally Qualified Health Center (FQHC) named Ravenswood Family Health Clinic (RFHC). The Health Plan of San Mateo (HPSM) acts as the third-party administrator for the program. San Mateo ACE emphasizes primary and preventive care as well as management of chronic conditions. The county also recently opened (January, 2009) a new community clinic known as the Innovative Care Clinic (ICC), which is envisioned to be the *ideal* medical home model. ICC is housed within the SMMC.

Personal Physician

ACE enrollees are assigned to one of 11 primary care clinics, which will serve as their medical home. Medical home assignment is usually based on the existing doctor-patient relationships and proximity to a patient's home. In all primary care clinics operated by the San Mateo Medical Center, patients are assigned a primary care physician. For other clinics, the goal is to have an enrollee assigned to a physician, but this may not always occur. The county is able to verify whether patients are assigned to a physician within the SMMC clinics. Enrollees are required to use their assigned medical home and clinics may enforce this adherence by redirecting patients for non-urgent care. However, the county does not. Enrollees can only go to a non-ACE provider if they receive a referral from an ACE provider and have authorization from the Health Plan of San Mateo.

Physician-Directed Team-Based Approach

The ICC employs the physician-directed team-based approach and the staff includes nutritionists, social workers, community health workers and therapists. Services include group visits, case management, telephone outreach and home-health care.

Team communication methods at the ICC are in-person, via conference calls and other methods, including email and written reports. ACE has also implemented a medication management program with a clinic-based pharmacist at the ICC.

Other clinics have team structures that include behavioral health professionals, social workers, diabetes health educators and dietitians who are either onsite or visit on certain days. Team communication methods are also in-person, via conference calls and include email.

Whole Person Orientation and Care Coordination/Integration

ACE focuses on delivery of primary and chronic care to Health Care Coverage Initiative (HCCI) enrollees. Providers arrange for referrals as well as coordinate delivery of follow-up and other services across clinics. PCPs in most clinics receive feedback on what services are delivered or the outcomes/recommendations after receipt of care from a specialist, an emergency room (ER) visit, or in-patient care.



The ICC utilizes the chronic care model to enhance primary and preventive care delivery with appropriate management of chronic conditions. Their chronic disease management and care coordination include the identification and management of patients with complex and/or combinations of chronic diseases; and improved management of chronic disease across systems to ensure efficiency and effectiveness in care coordination and utilization of medical resources.

Disease and case management services are available at most clinics. Many clinics do risk stratification of their chronic care population. High utilizers are identified and managed through disease and case management services. At some clinics, case management services are conducted through an outside vendor, at the Ron Robinson Senior Care Center for example, or patients may be referred for support services in the community as in the case of the Ravenswood Family Health Center.

The county received a *Specialty Care Access Initiative* grant from the Kaiser Northern California Community Benefit Program, which will improve access by:

- 1) redesigning clinic flow in specified specialty clinics;
- 2) implementing a new *smart* referral system to ensure that all prerequisite testing and analysis is completed prior to a specialty referral; and
- 3) utilizing physician extenders in specified specialty clinics.

Self-Management Support for Chronic Conditions

Health education materials and self-management resources are available to enrollees to aid with chronic care management. Educational materials are provided at all clinics and some also have health education classes available. For example, the Ravenswood Family Health Center utilizes Stanford Chronic Disease Self Management classes in English and Spanish. Disease management services are provided through group visits with provider teams at the ICC and some other clinics. Services are provided via individual in-person and telephone communications across the system.

Quality of Care

The county uses HEDIS (Healthcare Effectiveness Data and Information Set) to measure the quality of care, using claims data analysis and chart review methods. The SMMC has developed measurable quality of care goals for providers at the ICC and some other clinics. For instance, for diabetic patients the following performance measures have been developed:

- 60% of patients will have hemoglobin A1c less than 7.0.
- 60% of patients will have blood pressure less than 130/80.
- 80% of patients will have LDL cholesterol less than 100.
- 80% of patients will be given *Pneumovax*.
- 80% of patients will get a yearly retinal screening.
- 80% of patients will have a yearly foot exam.
- 80% of patients will have a yearly mammogram.

The Ravenswood Family Health Center also uses Health Resources and Services Administration (HRSA) diabetes collaborative measures, Accelerating Quality Improvement through Collaboration (AQIC) measures, Preventing Heart Attacks and Stroke Everyday (*PHASE* program for Kaiser members) measures, Uniform Data System (UDS) measures, and Optimizing Primary Care Delivery measures.

Summary information on performance of providers in delivery of preventative care and other utilization data is shared systemwide, although the data do not identify performance of individual providers at this time. Tracking individual provider performance will be possible after the implementation of the new Ambulatory Electronic Medical Record (AEMR).

Patient satisfaction surveys are conducted across the clinic system and include surveys of ACE patients. Results are shared with providers at regular meetings when they become available. Complaints are monitored by the SMMC, and are shared with clinic managers and the chief medical officer.

The results of reviews are shared in regular meetings between the chief medical officer and clinic medical directors and managers. Clinics and providers are informed of their performance on these measures via written reports by email and the Web. Guidelines are disseminated to providers via email, online and in person. Decision support software, including *Up-to-Date* and *Epocrates*, are available to providers systemwide. There is direct oversight of providers by peer or medical directors on the use of evidence-based guidelines.

ACE uses *One-e-App* for enrollment and tracking of chronic conditions. Lifetime clinical records and disease registries are available systemwide. Diabetes, hypertension and immunization registries are available across the system. Within the ICC, Fair Oaks, Willow and Ravenswood, most providers utilize registries. However, outside these clinics, not all providers utilize available registries. Ravenswood also has additional registries including, congestive heart failure, hypertension, hyperlipidemia and asthma.

The county has initiated the implementation of Ambulatory Electronic Medical Records. Initial roll-out occurred in April 2009 at ICC and the Obstetrics/Gynecology clinic and full implementation is expected by September 2009. AEMR offers an integrated diabetes registry, physician referrals, and care coordination tools. It is jointly used for ACE and other County programs.

Currently *e-referral* and *e-prescribing* are only available to clinics where the AEMR has been implemented. It is expected that by September of 2009 all clinics will have this capability.

Access to Care

The ICC has implemented a program called *Advanced Access* with the goal of having 50% of patients calling for an appointment to be seen that day. The clinic also aims to have all patients receive a response from a defined health care team by the end of the day if they call. The clinic will also decrease the no-show rate to less than 20% and decrease ER visits by 20% for pan-

eled patients. Open access in the form of same or next day appointments for non-urgent care is also available at some other ACE clinics. Walk-in capability is available at some clinics. Urgent care and extended hours are available at all SMMC clinics. The county has a 24/7 nurse advice line operated by Health Plan of San Mateo that is available systemwide. Patients can leave messages for providers through the clinic staff at ICC and some clinics. Other modes of communication with the primary care physician are not available.

Provider Payment

All primary care providers are employees of the medical center.

The Fair Oaks and Willow clinics receive global fee for service. The Ravenswood Family Health Clinic is reimbursed with FQHC rates, and receives global fees and fee-for-service payment. There are enhanced payment rates for some contracted specialists and payment rates are coordinated on a case-by-case basis.

There are incentives being used for some primary care providers and some contracted specialists. For example, HPSM has quality indicators for diabetic patients such as incentive payments for performing eye exams.

Future Plans

- The program is working to standardize clinic-level data across SMMC/RFHC to understand cycle time, wait times for primary care, and patient satisfaction.
- The program has also been developing a strategic plan to address the following challenges with implementing the Innovative Care Clinic as the ideal model:
 - Staff acceptance/capacity for change
 - Magnitude of data collection
 - Development of teams and work flow
 - Project evaluation
 - Time requirement for training staff

- San Mateo County received a grant from the Safety Net Institute (SNI) to develop and implement *e-prescribing* at the Daly City Clinic and the Main Campus Primary Care Clinic which will be incorporated in the electronic medical record.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: Santa Clara County

Santa Clara County has an integrated health care delivery system. Historically the system offered a traditional safety-net network for the uninsured as episodic and emergency care through the Santa Clara Valley Medical Center's (SCVMC) charity care program, *Ability to Pay Determination* (APD). With the implementation of the Health Care Coverage Initiative (HCCI) program, known as Valley Care, uninsured low-income adults now receive care from a network of Santa Clara County and SCSMC, working in partnership with the Santa Clara Family Health Plan.

Personal Physician

There are 27 medical homes for the Valley Care program in Santa Clara County. For county owned and operated clinics and two privately-contracted physicians, patients are assigned to a specific physician provider; for community clinics, patients are assigned to a clinic site and then the clinic assigns them to a specific physician provider. Patients who were seeing SCVMC providers are assigned to that provider if there have been previous encounters over the last three years. The county is able to verify whether this assignment occurs through encounter data.

To qualify as a medical home under CI, clinics must have primary care providers available to accept assignment of enrollees, be part of the traditional safety-net network, and meet all of the contract requirements of the county and the county-managed care organization for quality, encounter data reporting and provider credentialing.

Enrollment applications are taken online, and a database is used to identify eligible enrollees and contracted providers to pay claims. Enrollment staff educates patients about the use of the medical home and its services. If patients go to a medical home other than the one assigned, attempts will be made to redirect

them to the correct medical home site and physician. Patients may see other providers in the system but should continue to receive all routine primary care at the site where their provider is located.

Physician-Based Team-Directed Approach

Clinics are staffed with physicians, nurses and/or office staff. Clinics vary from large organizations with multiple primary care providers — with all ancillary services onsite — to small provider offices with a small support staff. Case and disease management staff are part of the Santa Clara Valley Health and Hospital System network. However, certain clinics may have their own chronic care model based on a coordinated care management program. Disease or case management staff are located at large clinic sites and smaller sites use centralized services through the SCVMC.

Teams communicate with each other and the physician leader through several methods, including regular meetings with clinic medical directors, staff and CI program staff. Methods of communication include weekly in-person meetings with centralized program staff, bi-weekly meetings with clinic administration, and electronic and hardcopy communications throughout the network.

Whole Person Orientation and Care Coordination/Integration

The medical home arranges for referrals, follow up and other care. The primary care provider receives the results of visits to specialists, emergency room visits,



and inpatient stays after referral or use of various services. Follow-up methods range from telephonic conversations post follow up to notes in the electronic referral system.

The program provides primary and chronic care for specific conditions. There is a diabetes center, an asthma management program, and enrollees are monitored for hypertension. Adult obesity and chronic pain management are also targeted.

The case management staff assists with the referral process for enrollees with chronic conditions to disease management. Disease management staffing includes nurses and registered dietitians. Nurse care managers conduct individual assessments and provide health education during initial enrollment via telephone. Services include counseling and ongoing assessments. Enrollees receive a physical and their complete history is obtained. Higher severity enrollees are identified and assigned to a nurse who will work with the assigned physician to provide care management. High utilizers are also identified and managed through case and disease management and other approaches.

The staff communicates with providers through in-person meetings and electronic communication. The County Health and Hospital System network is linked by several encrypted referral, appointment and data systems where communications occur. Staff at the clinic sites have their own team meetings, and the administrative teams (physicians and managers) meet on a regular basis in a central location.

Self-Management Support for Chronic Conditions

Enrollees identified as having a chronic condition receive telephone care management, which includes health assessments and information/education. Health education classes are also available for diabetes management. Numerous other classes that address lifestyle modification are also available. Health education utilization depends on the clinic and the provider. Many classes such as smoking cessation, prenatal care, breast feeding and parenting are centralized, but some are decentralized such as the diabetes prevention program run by the Indian Health Center. Educational materials are available at clinics for patient self-management,

and resources such as nutrition guides or disease guidelines are also utilized to improve patient self-care. Disease and case managers meet with patients in-person or by telephone.

Quality Improvement

Quality improvement methods are currently focused on increasing utilization of appropriate services to improve the health status of HCCI enrollees. Utilization patterns are monitored and presented to the primary care leadership on a regular basis. The county utilizes claims/encounter data analysis for physician performance review. Patient satisfaction surveys are conducted with enrollees and the results are shared with providers. A satisfaction survey of the HCCI enrollees has been conducted and a subsequent survey is under consideration. The county also reviews complaints and shares feedback with providers during issue resolution.

Providers have online access to Santa Clara Valley Health and Hospital System (*SCVHHS*) evidence-based practice guidelines. The county has also hired a physician to review/update chronic care policies and practice guidelines. Providers also have access to two clinical decision support software programs called *InterQual Clinical Guidelines* and *Milliman Care Guidelines*, and there is direct oversight of providers to adhere to these guidelines. There is a diabetes registry to track patients and it is currently accessible to some providers.

The Lifetime Clinical Record and the claims adjudication systems provide patient information such as diagnostic test results, hospitalization records and services utilized by each patient, as well as patient demographic information to some providers within the system. An electronic medical record (EMR) system is being developed. A new specialty center opened in January 2009. The *e-referral* system (Access Express) allows all providers to have access to specialty utilization data. An *e-prescribing* system is planned as part of the EMR implementation.

Access to Care

Walk-in, extended hours, urgent care and open access scheduling for primary care is also available at some clinics. There is a dedicated 24/7 nurse advice line,

extended hours and urgent care services. Patients can communicate with providers by leaving messages with staff.

Provider Payment

Primary care providers are paid a global fee at the Medicare fee-for-service rates. Incentives are not used for primary care. Specialists are on staff and do not receive enhanced payments.

Future Plans

Specific plans include:

- To continue implementation of full electronic medical records.
- To implement a contract with a large independent practice association (IPA) to accommodate demand and increase network access for patients. The IPA has approximately 100 adult primary care physicians.
- To continue development of programs to improve the health status of this population.

Health Care Coverage Initiative Medical Home Implementation, Interim Findings: Ventura County

The majority of care for the safety net population is provided by the Ventura County Health Care Agency (HCA). The HCA is an integrated health care delivery network that includes two hospitals (the Ventura County Medical Center (VCMC) and VCMC-Santa Paula), and the Department of Public Health (DPH) and the Behavioral Health Department (BHD). Outpatient services are delivered through three urgent care centers and 29 ambulatory care clinics (primary and specialty care), DPH health care centers and eight BHD clinics. Since the implementation of the Health Care Coverage Initiative (HCCI), HCA has also contracted with *Clinicas del Camino Real* which is a Federally Qualified Health Center (FQHC). It has nine clinics in the county that are now CI providers. In the second year of the program, *Clinicas* enabled the provision of dental services for CI enrollees. The HCA works with the various components of the agency to educate the community about the CI program known as ACE (Access, Coverage, Enrollment).

Personal Physician

There are 23 medical homes in the ACE program consisting of 14 primary care clinics and nine FQHC clinics. Individuals are assigned to the clinic upon enrollment to the program. When the patient calls their assigned clinic for a new patient visit, the clinic assigns them to a clinic that has room in their practice. The patients have the choice of remaining with that provider or choosing a new one. Assignment to a clinic is recorded in the electronic enrollment and medical record database maintained by the HCCI staff. The criteria for assigning enrollees to a medical home is: 1) where they live; 2) do they have a current provider; and 3) the closest provider. The county educates patients upon enrollment about the appropriate use of the medical home and its services, but does not enforce adherence to the assigned medical home.

Physician-Directed Team-Based Approach

Clinic teams consist of physicians, nurses and ancillary/support staff. There is also a registered dietician available to consult with patients who travels between clinic sites. Case management staff is assigned to specific clinic sites, and they are responsible for all communication, patient referrals and liaison activities with their clinics. There are five full-time case managers, one of whom is fluent in Spanish.

The Ventura County HCA instituted a collaborative process between the patient, the primary care physician (PCP) and the case management unit that includes assessment, care coordination and follow-up. Communication between the case managers and the providers is usually by fax and phone. The case management staff meets every two weeks with the ambulatory care medical director in-person to review cases. Oversight of cases is by the case manager, the clinical nurse manager and the ambulatory care director. All case management activities are documented and communicated to the PCP by phone or a visit to the clinic. If it is a complicated case, the case manager will meet the patient at their visit time with the PCP to ensure communication and follow-up as needed are accomplished.

There is also ongoing coordination with the VCMC discharge planning committee to ensure the successful discharge of ACE patients. The VCMC Internal Utilization Review (IUR) Committee is comprised of hospital discharge planners, social workers, physical therapists, occupational therapists, the *hospitalist*, fiscal staff, the director of nursing or designee, the



CFO, the ACE case managers and the ACE clinical nurse manager.

Whole Person Orientation and Care Coordination/Integration

The medical home is intended to coordinate all program services including specialty care, ancillary services and acute care. Each provider does their own referrals for their patients. Many of the specialty referrals go through a referral center that coordinates the referral process. The PCP arranges for care with other providers as well.

Many of the specialty referrals are documented in the VCMC *Medi-Tech* system; otherwise the consultation documentation is sent back to the provider by fax or through the internal mailing system. A registered nurse case manager calls every patient that utilizes the emergency room (ER) over the weekend. If it is a reason the PCP should know, the case manager will call the PCP. All ER visits are documented in *Medi-Tech* so providers have access to this information.

ACE patients fill out a medical questionnaire at the time of enrollment. This is used to determine the level of care needed by the individual and what support services, such as case management, they may require. There is also a health assessment done at recertification to determine preventive services utilized by enrollees and potential changes in health status.

Over 30% of ACE enrollees have chronic conditions, as self-reported on the health assessments. The conditions targeted for case management are diabetes, hypertension, chronic obstructive pulmonary disease, asthma and coronary artery disease. The case management staff also monitors the use of ERs via review of ER-based daily census or collaboration with ER staff to obtain names of high utilizers.

The ACE case management team developed their policies and procedures, forms, and criteria for referral in January 2008. Each member of the team is assigned to specific clinics, and the information, including policies and procedures, are disseminated to the clinics. Case managers also distribute resources such as glucometers, test strips and other materials. ACE services

are outlined in the *ACE Program Case Management* newsletter that is sent biannually to all ambulatory care clinics and ACE enrollees.

Self-Management Support for Chronic Conditions

The case management nursing staff developed policies and procedures for the program, incorporating clinical protocols, and a telephone script for staff who contact patients. Thirty percent of enrollees in case management are Spanish-speaking only. The staff has a list of these enrollees and calls them on a regular basis determined by the patient's needs—usually one to three calls per month. The case management staff works with enrollees via telephone or in-person at clinics. The registered dietician works with clients who have diabetes, coronary artery disease, hypertension, congestive heart failure, hypercholesterolemia, hyperlipidemia, obesity with co-morbidities and chronic kidney disease (non-dialysis), as well as those in need of education for a therapeutic diet, unexplained weight loss, and requiring weight loss as a condition for transplant consideration. The dietician instructs patients in the appropriate diet and nutrition to manage their condition.

Educational materials are either downloaded from reputable sites (such as Centers for Disease Control and Prevention (CDC), American Diabetes Association (ADA) or American Lung Association (ALA)) or prepared in-house. The case managers use *Healthy Interactions* developed by the American Diabetes Association and have received training on the use of this tool. The case managers also collaborate with the local chapter of the American Lung Association for education in adult asthma.

Quality Improvement

Quality of care measurement is based on HEDIS (Healthcare Effectiveness Data and Information Set) measurement and the use of claims data, but measurement activities are not yet implemented. The Ventura County HCA uses *Medi-Tech* claims data to review practice patterns, including utilization for labs and prescriptions. The *Medi-Tech* system does include some patient information if VCMC providers dictate it into the system. If a patient is hospitalized, or has labs or radiology, reports are also available.

The county uses Press Ganey Associates to conduct patient satisfaction surveys at ambulatory care clinics, although the surveys are not specific to the ACE program. Survey results are reviewed by the ambulatory care administration staff and shared with clinic managers and medical directors of the clinics. HCA also reviews enrollee complaints. The clinical nurse manager reviews complaints and works with the ambulatory care medical director to resolve issues.

Clinical decision support software was recently purchased from Milliman called *Clinical Guidelines*, but is not implemented yet. Providers have on-line access to clinical guidelines. The medical director has direct oversight of providers to encourage adherence to guidelines.

Some clinics utilize a PECS registry for diabetes; however, very few providers have entered the data. The county has centralized the data entry and will start entering the data into PECS by June, 2009.

For case management, the nursing staff plans to document patient data in an electronic application that is a *homegrown* system called *Nursing Referral System*. The system is being upgraded to address the HCCI program needs and will include a disease management component. This system will be effective this summer.

Electronic medical records and *e-prescribing* systems are not currently in place. The county is developing an e-referral system in conjunction with a *Specialty Care Access Initiative* grant from the Kaiser Permanente Community Benefit Program.

Access to Care

The Ventura County HCA monitors access to ensure that ACE enrollees are able to obtain an appointment in a timely manner; follow up appointments exceeding four weeks are considered to be outside of acceptable limits. Walk-in appointments are not available, but extended hours and urgent care are available at some clinics. The county does not have a dedicated phone line, 24/7 access to clinical advice or open access scheduling in every clinic. However, patients can obtain same day appointments for non-urgent care

if appointments are available. Alternative modes of communication with providers are not available.

Provider Payment

A contractual relationship exists between the ACE program and each medical home. The reimbursement mechanisms for the ambulatory primary care clinics are tied to VCMC and are fee-for-service. The nine FQHC clinics are reimbursed \$110 for each primary care and/or dental visit. Incentives are not used and payment for specialists is not enhanced.

Future Plans

Specific plans include:

- A disease management program for ACE is under development. There is a chronic disease management committee, and they are considering naming a director to work more closely with the community.
- An electronic referral system is under development for specialty care access through the Kaiser Permanente *Specialty Care Access Initiative*.