

PHASE III REPORT

Health Care Reform: An Analysis of Demand for Health Care Services & Safety Net Provider Capacity to Serve Monterey County Residents

INSTITUTE FOR COMMUNITY COLLABORATIVE STUDIES

California State University Monterey Bay

May 2013

Prepared by:

Kim Judson, DrPH, MPA, Principal Investigator Ignacio Navarro, Ph.D., Co- Principal Investigator

Research Assistants:

Stacy Kelly, BA, CHHS, MPC Nursing Student Emma Spellman, CHHS Student Jessica Snow, MPA, CHHS Lecturer/ICCS Coordinator Joyce Ramirez, CHHS Student Gabriella Calderon, CHHS Student

ACKNOWLEDGMENTS

Many people have contributed to this report, responding to requests for data, providing input to the draft, and providing support in various forms. These include representatives from the many providers who serve residents of Monterey County. We would like to acknowledge the contributions from individuals representing their organizations and agencies from the Monterey County Safety Net Integration Council including ACTION Council of Monterey County; American Cancer Society; Central California Alliance for Health; Central Coast Center for Independent Living; Clinica de Salud del Valle de Salinas; Community Health Innovations; Community Hospital of the Monterey Peninsula; Gonzales Medical Group; Mee Memorial Hospital; Monterey County Health Department; Natividad Medical Center; Natividad Medical Foundation; Salinas Valley Memorial Healthcare System; and Soledad Community Health Care District; as well as the additional safety net providers who responded to the survey including the Big Sur Health Center, Planned Parenthood and Salud Para la Gente.

In addition, we would like to acknowledge the private physicians and medical groups that serve MediCal members in Monterey County and who responded to this study's survey including Acacia Family Medical Group; Vilma R Aguas, MD;; Edgar Castellanos, MD; Clinica Familiar Costa Central; Doctors on Duty; Carmen Hsu, MD; Ramakrishna S. Kochi, MD; Mario Pauda, MD; Pediatric & Adolescent Medical Associates of the Pacific Coast; Peninsula Primary Care; Madhu Raghavan, MD; Elias Rodriguez, MD; Salinas Pediatric Medical Group, Inc.; Salinas Valley Pediatric Associates; Salinas Valley PrimeCare Medical Group, Inc.; Valle Verde Medical Group and Robert J. Weber, MD.

Finally, we would like to thank the community organizations that extended their hospitality to us including the Big Sur Grange Hall, Castroville Library, Catholic Church of St. John the Baptist in King City, Monterey County Health Department in Salinas, and Seaside's Oldemeyer Center; as well as the residents and health professionals who joined us to discuss the study findings at the five public meetings held across the county. We are honored to have been given this opportunity to serve the safety net provider community and residents of Monterey County.

Contents

EXECUTIVE SUMMARY	6
INTRODUCTION	6
HIGHLIGHTS	8
STUDY METHODOLOGY	14
QUANTITATIVE ANALYSIS METHODOLOGY	14
FULL REPORT	17
INTRODUCTION	17
BACKGROUND TO THE STUDY	20
STUDY METHODOLOGY	21
ACCESS TO HEALTH CARE: PRIMARY CARE CLINICS AND HOSPITAL EMERGENCY DEPARTMENTS FINDINGS	23
SERVICE PROVISION/CAPACITY	23
SPECIALTY SERVICES	
HOURS OF OPERATION, ADVICE ACCESS & APPOINTMENT SCHEDULING	27
CULTURAL COMPETENCY AND LINGUISTIC CAPABILITIES OF SAFETY NET PROVIDE	
HEALTH INFORMATION TECHNOLOGY UTILIZATION AND CAPABILITIES	36
PROJECTIONS OF NEW DEMAND FOR SERVICES AND ANALYSIS OF PRIMARY CARE SAFETY NET CLINICS' CAPACITY	
PRIVATE PHYSICIANS/MEDICAL GROUP PROVIDERS SURVEY RESULTS	57
EMERGENCY DEPARTMENTS AS PART OF THE SAFETY NET	
PUBLIC MEETINGS: SUMMARY COMMENTS	
CONCLUSIONS & RECOMMENDATIONS	75
REFERENCES	75
ADDENDICES	70

Figures

FIGURE 1: NUMBER OF SAFETY NET CLINICS REPORTING MAJOR LANGUAGE GROUPS SPOKEN BY
PATIENTS
FIGURE 2: TOTAL NUMBER OF SAFETY NET CLINIC EMPLOYEES ESTIMATED BY RESPONDENTS TO SPEAK THE LANGUAGE
FIGURE 3: NUMBER OF CLINICS REPORTING AVAILABILITY OF HEALTH EDUCATION MATERIALS IN NON-ENGLISH LANGUAGE
FIGURE 4: PUMS (5% SAMPLE) FOR SANTA CRUZ, MONTEREY AND SAN BENITO41
FIGURE 5: METHODOLOGY FOR OBTAINING THE NUMBER OF UNINSURED BY CENSUS TRACT42
FIGURE 6: COUNTY SUB- REGIONS USED IN ANALYSIS
FIGURE 7: DEMAND LEVELS UNDER THE THREE SCENARIOS CONSIDERED
FIGURE 8: PRIVATE PHYSICIANS AND MEDICAL GROUPS THAT ACCEPT MEDICAL PATIENTS58
Tables
TABLE 1: SUMMARY OF MOST FREQUENT AND MOST DIFFICULT TO ARRANGE SPECIALTY25
TABLE 2: SUMMARY OF SAFETY NET CLINICS' CURRENT HOURS OF OPERATION AND EXPANSION
OPTIONS
TABLE 3: SUMMARY OF LINGUISTIC CAPABILITIES: LANGUAGES SPOKEN BY PATIENTS AND
CLINIC STAFF AND HEALTH EDUCATION MATERIALS AVAILABLE
TABLE 4: ESTIMATES OF UNINSURED AND MEDICAL INSURED IN MONTEREY COUNTY BY SUB-
REGION43
TABLE 5: UNINSURED BY INCOME LEVEL AND CITIZENSHIP STATUS FOR EACH REGION44
TABLE 6: ESTIMATES OF UNINSURED THAT WILL BE ELIGIBLE FOR ACA EXPANSION BASED ON
INCOME AND MIGRATORY STATUS45
TABLE 7: ESTIMATES OF UNINSURED WHO WILL NOT QUALIFY FOR ACA EXPANSION PROGRAMS
DUE TO IMMIGRATION STATUS46
TABLE 8: RESPONDENTS OF SAFETY NET PRIMARY CARE PROVIDER'S SURVEY47
TABLE 9: SAFETY NET SYSTEM'S CURRENT FTE STAFFING CAPACITY
TABLE 10: POTENTIAL ADDITIONAL CAPACITY GIVEN HOURS OF OPERATION AND PHYSICAL
SPACE 48
TABLE 11: SCENARIO # 1 – PROJECTED NEW DEMAND, PHYSICIAN REQUIREMENTS, AND GAPS IN
CAPACITY IF ALL NEWLY ELIGIBLE SEEK SERVICES AND ALL OF THEM ARE NEW TO THE
SAFETY-NET SYSTEM
CAPACITY IF ALL NEWLY ELIGIBLE SEEK SERVICES IN THE SAFETY-NET, BUT ONLY 75% ARE NEW TO THE SYSTEM51
TABLE 13: SCENARIO # 3 – PROJECTED NEW DEMAND, PHYSICIAN REQUIREMENTS, AND GAPS IN
CAPACITY IF HALF (50%) OF NEWLY ELIGIBLE SEEK SERVICES IN THE SAFETY-NET AND
ONLY 75% ARE NEW TO THE SYSTEM52
TABLE 14: RESPONDENTS RATING RECRUITING AND/OR RETAINING FOR THE POSITION AS
"DIFFICULT" OF "VERY DIFFICULT"

TABLE 15: BARRIERS TO OBTAINING HEALTHCARE SERVICES	.56
TABLE 16: SYSTEM PATIENT AND REVENUE MIX	.56
TABLE 17: RESPONDENTS TO PRIVATE PROVIDER SURVEY	.57
TABLE 18: CURRENT FTE, POSSIBLE EXPANSION, & CAPACITY TO ATTEND NEW MEDICAL	
PATIENTS (MONTEREY COUNTY	.60
TABLE 19: TOTAL VISITS BY AGE AND ED UNIT	.62
TABLE 20: TOTAL NUMBER OF VISITS IN 2010 BY HOSPITAL EMERGENCY DEPARTMENT	.63
TABLE 21: FREQUENCY DISTRIBUTION TO SURVEY QUESTION: WHAT PERCENTAGE OF	
EMERGENCY DEPARTMENT PATIENTS WOULD YOU CONSIDER TO BE REPEAT OR FREQUEN	ΙT
ED USERS?	.63
TABLE 22: VISITS BY EXPECTED PAYER SOURCES AND TOTAL NUMBER OF PATIENT VISITS	.64
TABLE 23: DISTRIBUTION OF THE 25 MOST FREQUENT DIAGNOSES FOR VISITS TO THE MONTERE	ΞY
ED UNITS FOR 2010 (ICD9 DIAGNOSIS CODES 2010)	.65
TABLE 24: TOTAL VISITS BY EXPECTED PAYER AND ED UNIT	.67
TABLE 25: SELF-PAY PATIENT VISITS TO EDS BY AGE AND GENDER	.67
TABLE 26: USE OF EMERGENCY DEPARTMENTS BY FREQUENT USERS SELF-PAY PATIENTS VS.	
INSURED PATIENTS	.69
TABLE 27: ED RESPONDENT OPINIONS ON STRATEGIES TO FACILITATE EXPANSION OF SERVICES	S
	.70

EXECUTIVE SUMMARY

INTRODUCTION

With final approval by the U.S. Supreme Court of the Patient Protection and Affordable Care Act (ACA) in June 2012, comprehensive reforms begun in 2010 are already changing many aspects of the health care system, providing clinics, hospitals, private physicians and medical groups, and public health agencies with new incentives to work together to improve access to quality health care services.

California was the first state to pass legislation creating a new Health Benefits Exchange (HBE) marketplace ("Covered California"), where consumers will have access to comparative information about insurance companies and plans and financial assistance to purchase health care insurance. Another significant change aimed at providing new insurance options for low-income individuals is an expanded and streamlined Medicaid program (MediCal in California). This is an important step in providing health care insurance coverage for many currently uninsured residents. Many County residents will find new opportunities to obtain health insurance through these programs for the first time beginning in January 2014. But though they may find more affordable insurance options, the ACA will not necessarily guarantee easy access to needed care for all.

Although many aspects of the ACA are being implemented at the national and state levels, Monterey County residents need to know how the new law will affect their ability to obtain health care insurance and how that insurance will ultimately translate into improved access to health care providers.

At the local level, the Safety Net Integration Council (SNIC) was formed in December 2011 for partner organizations and agencies to begin to work together to prepare for changes resulting from health care reform. As a part of their efforts, this study was commissioned by the Monterey County Health Department in May 2012. Faculty researchers at CSUMB's Institute for Community Collaborative Studies (ICCS) were charged with examining the current safety net system of providers who provide services to residents of Monterey County and to determine their capacity to meet expected increases in demand beginning in 2014. The Phase I report, *Preliminary Profile of Health Care Needs & Safety Net Providers that serve Residents of Monterey County, June 2012*, created an initial profile of the safety net clinics and hospital

¹ Current SNIC membership: ACTION Council of Monterey County; American Cancer Society; Central California Alliance for Health; Central Coast Center for Independent Living; Clinica de Salud del Valle de Salinas; Community Health Innovations; Community Hospital of the Monterey Peninsula; Gonzales Medical Group; Mee Memorial Hospital; Monterey County Health Department; Natividad Medical Center; Natividad Medical Foundation; Salinas Valley Memorial Healthcare System; and Soledad Community Health Care District

emergency departments in the tri-county region (Monterey, Santa Cruz and San Benito) and a snapshot of the health concerns and health care needs of Monterey County residents.

This second report provides estimates of new increased demand for health care services and analyzes the capacity of safety net providers to serve residents of Monterey County – especially low-income and uninsured people – in advance of health care reform. It also provides a glimpse at issues of importance to community members who participated at public meetings held across the county in January 2013.

This report provides interested parties with timely information to engage in a collaborative planning process to ensure that all Monterey County residents have access to needed health care services.

HIGHLIGHTS

Projected health care demand county-wide

About 90,000 Monterey County residents – or about one in five – are currently uninsured with most eligible for assistance obtaining required insurance as a result of federal health care reform starting in January 2014. Approximately 26,651 of these newly insured people will be covered by an expanded MediCal program administered through the regional Central California Alliance for Health. An additional 27,329 will be required to obtain health insurance and will be eligible for subsidies through Covered California, the new Health Benefits Exchange (HBE) insurance marketplace. Another 26,100 would be eligible for either MediCal or the new Covered California, but because of their documentation status, will be ineligible for any subsidies and will be prohibited from purchasing insurance through the HBE program. The remaining 9,140 or so are not eligible for MediCal or subsidies because their incomes exceed 400% of the Federal Poverty Line, but will be required to obtain insurance either through their employer or in the individual health insurance market.

Safety Net Providers (Clinics and Hospital Emergency Rooms) Existing Capacity

In Monterey County, six safety net clinic organizations operate twenty-four (24) clinics across the county. These included six Monterey County-based organizations (Clinica de Salud del Valle de Salinas which operates eight clinic sites, Monterey County Health Department with seven clinic sites, Planned Parenthood with three clinic sites, and one clinic site each for Big Sur Health Center, Gonzalez Medical Group, and Soledad Community Health Care District); two hospital-based clinic sites operated by Natividad Medical Center and G.L. Mee Hospital; and one clinic operated in Seaside by a Santa Cruz based organization (Salud Para la Gente).

These sites served 99,222 unique patients and provided for 344,886 patient visits in 2010². Of these patients, 74% were Hispanic, 66% were female and 80% were below 45 years of age. The majority of the clinic's patients (94%) had incomes below 200% of the federal poverty level. Although 44% of the clinic's patients were covered by MediCal, over half (58%) of clinic revenue was made up by MediCal payments. In contrast, 20% of clinic patients were "self-pay," but only 7% of clinic revenue was made up of cash payments.

The patient profile for the hospital emergency departments include a system-wide hospital census totaling 161,566 patients and hospital emergency department total patients visits of 121,861 in 2010. For hospital emergency rooms, 40% of patients were covered by MediCare,

² Patient numbers for Gonzales, Soledad are not included in this count because they did not report to OSHPD in 2010. SPLG in Seaside was not included because the clinic was not in operation in 2010. However, all three clinics responded to the ICCS Safety Net Provider survey so they are included in the capacity analysis.

30% by MediCal, and 24% of patients were covered by private health insurance. Although nearly a third of hospital emergency department patients were covered by MediCal, only 16% of their revenue was made up by MediCal payments.

The Central California Alliance for Health reports that about 80% of MediCal members are served by safety net providers and 20% are served by private physicians/medical group practices in Monterey County. This proportion is similar in Merced County and in contrast to about a 50/50 split between safety net providers and private providers in Santa Cruz County. For Monterey County, all safety net providers who responded to the ICCS Safety Net Provider Survey reported that they are accepting new patients who are eligible for MediCal Managed Care and Healthy Families programs, 96% are accepting new Self-pay (cash), MediCal emergency, MediCare, and Family PACT patients, 87% are accepting new county indigent patients, and 75% are accepting new private insurance patients.

In addition to accepting new patients, two-thirds (67%) of safety net providers have expanded *over the past five years* by adding new medical, non-medical support or social services within their existing clinic sites and 40% have added a new clinic facility at a new physical site. They have also reported *plans for future expansion* including 80% that will add a new clinic facility at a new physical site, complete a major remodeling or expansion at an existing clinic, and/or shift to a patient-centered medical home model of service provision. A third (33%) also plan to add new medical, non-medical support or social services within existing clinic sites.

Some clinics are also considering expanding the days and hours of operation on Monday through Friday including about a third (32%) that reported they were "very likely" to add early morning hours and 24% would extend evening hours and on weekends, 44% were "very likely" to add or expand Saturday hours and 20% were "very likely" to add Sunday hours.

Safety Net Provider Clinics: Three Scenario Estimates of Future Capacity

Researchers developed three scenarios that estimated new demand and projected capacity needed within the local safety net system and an additional analysis included reported capacity from private physicians and medical groups that currently accept MediCal members in Monterey County.

1. Scenario # 1 represents the "highest demand" case situation where all county residents who are newly eligible for both MediCal and Covered California – about 54,979 – seek services and are all new patients within the safety net system. In this scenario the safety net system would need to add twenty-eight (28) new full time equivalent (FTE) physicians and would experience a gap in physical space needed to accommodate nearly sixteen (16) FTE physicians to meet the new demand.

- 2. Scenario # 2 represents a "moderate demand" case where all county residents who are newly eligible for both MediCal and Covered California seek services through the safety net, but only 75% or about 41,235 are new to the system. Under this scenario, the safety net system would need to add twenty-one (21) new FTE physicians and would experience a gap in physical space needed to accommodate nine (9) FTEs physicians to meet the new demand.
- 3. Scenario #3 represents the "least demand" and most likely case where only half (50%) of county residents who are newly eligible for both MediCal and Covered California about 27,500 seek services through the safety net and only 75% or about 20,618 are new to the system. Under this final scenario, the safety net system would experience a gap in physical space needed to accommodate 1.6 FTEs physicians (0.9 in North Monterey, and 0.7 in Salinas).

While these scenarios provide a beginning point for discussion, a number of unknowns impede an accurate capacity forecasting at this time including:

- The proportion of newly eligible individuals who will actually enroll in MediCal
- The proportion of Medi-Cal enrolled individuals who will actually seek services.
- The proportion of eligible individuals enrolled in insurance plans though Covered California who actually seek services in the safety-net system.
- The proportion of individuals who already use the safety-net system (paying for services in cash) who will become insured through Covered California.

Finally, while private providers are not included in the safety net system analysis because they have more freedom than clinics to choose the patients they see based on their insurance coverage, in 2012, private physicians provided services to about 20% of all MediCal recipients in the county. This was considered under Scenario # 3, which assumes that private physicians will provide services to about 20% of the newly insured patients which translates into about 11,000 of the newly insured – including under MediCal and Covered California – who could potentially seek services thorough private providers. Private providers who responded to the survey stated that they are either (13%) accepting new MediCal patients or (50%) plan to accept new MediCal patients in the future, and have the capacity to hire sufficient physician FTEs to cover the new demand – of about 12,000 additional patients. However, most of these private providers were located in the Salinas and Monterey Peninsula areas, and no private providers in South Monterey or the Big Sur area responded to our survey. Therefore, additional private sector capacity in these areas is unknown

Safety Net Providers/Primary Care Clinics Services

For purposes of this study, primary care is considered the initial point of contact between an individual and the health care system. Comprehensive Primary Care includes the provision of family practice, general internal medicine, general pediatrics, obstetrics, gynecology, and/or clinical preventive services which also includes women's preventive services, i.e., well-women visits, screening for gestational diabetes, HPV testing, counseling for sexually transmitted infections, counseling and screening for HIV, contraceptive methods and counseling, breastfeeding support, supplies and counseling, and screening and counseling for interpersonal and domestic violence. Safety net providers are distinguished by their mission to provide services to patients regardless of their ability to pay and their acceptance of all forms of reimbursement including self-pay (cash), publicly-funded programs and private insurance.

Access to Services

Of the clinics surveyed, 73% reported that they provide comprehensive primary care services and 31% provide specialty care including internal medicine, pediatrics, reproductive health and OB/GYN services, podiatry, ophthalmology and vision services, and cardiology. Thirty-five percent (35%) of clinics provide behavioral health screenings, 19% offer psychiatric services, and about 12% offer other types of behavioral health services such as counseling and access to a psychiatric social worker. Thirty-nine percent (39%) of clinics provide "comprehensive" dental services with an additional 4% providing dental services for "children only." Nearly all (92%) of clinics report that they accept all patients, regardless of their ability to pay while 61% indicate that uninsured patients must pay, at least in part, to receive services and 42% do not require fees if a patient is unable to pay.

Access to clinic services by day of the week and hours per day varied only slightly among clinics, as a majority (85%) of clinics are open Monday through Friday beginning at between 7:00 – 8:00am in the morning, with a majority (59%) closing between 5:00-6:00pm in the evening. Several remain open until 7:00pm, one until 8:00pm, and two until 9:00pm. Fifty-six percent (56%) of clinics are open Saturdays and all are closed on Sundays. Finally, 65% of clinics do not close for lunch and those that do are closed between 12:00pm – 1:00pm.

A majority (85%) of clinics report that they are able to see (new or regular) patients needing *urgent care* within 2-hours of calling. Although there was a wide-range of "third next available appointment" times reported – from a minimum of 0 days or same day for one clinic to a maximum of 30 days for another – the median or most often reported by 37% of clinic respondents was 3 days, and the overall average was 5 days. A majority (89%) of clinics also

⁴ CHCF, 2009

³ HRSA, 2013

⁵ Ibid, p. 8

report that patients can receive telephone advice on clinical issues during open hours while 68% of clinics report that patients can receive telephone advice after-hours and on weekends.

Specialty Services

In additional to primary care services, our survey asked clinics about access to specialist services. Fifty-three percent (53%) of clinic respondents cite a lack of specialty providers as the biggest barrier (esp. for MediCal patients or those without private insurance) and 35% cite very long wait times for appointments as a major barrier. Other barriers include a lack of response from specialty offices, lack of acceptance of MediCal, transportation to metropolitan areas, and communication barriers. To begin to address this lack of access, 41% of clinics reported that they are investigating the use of "telemedicine" for specialty consultations.

Linguistic Capabilities

The survey also asked providers to report on their linguistic capabilities. Given the diversity of the county's population, health care organizations are faced with the challenges of providing equitable access across linguistic and cultural groups. Fifty-two percent of the County's population speaks a language other than English and among safety net clinics fewer than 20% of their patient populations speak English "well or very well." All clinics (100%) have patients and staff who speak English and Spanish and they all also provide health education materials in these two languages. However, there is considerable variation for other languages spoken in the county. A majority of clinics have patients who speak the following languages – Trique (90%), Mixtec (81%), and Zapotec (58%) – but only one clinic has staff that speaks Mixtec and none have staff that speaks Trique or Zapotec. None of the clinics provide health education materials in any of these three languages. For the following four languages, at least half of clinics have patients who speak Tagalog (73%), Chinese (54%), Vietnamese (50%) and Korean (50%). For these languages, Tagalog is spoken by staff in six clinics and one clinic each has staff who speak Chinese and Vietnamese. No clinics have staff who speak Korean. And no clinics provide health education materials in Tagalog, but six clinics provide these materials in Chinese, Vietnamese and Korean.

Despite the availability of a formal language line through the Central California Alliance for Health, only 50% of clinics report using some type of formal language line, while a majority report *also* using "informal" translators including 78% that use patient's spouses or partners, 74% that use a patient's adult children, 70% that use an adolescent or young adult children or non-family members such as neighbors, and 61% that use other family members. A majority (72%) of clinics also report using interpreter services for hearing impaired patients. It is clear that there is still work to be done with regard to providing multilingual and multicultural services to populations served by safety net providers in the tri-county area.

Health Information Systems/Electronic Health Records

Of the clinics surveyed, nearly 89% are currently using electronic health records (EHR) with the remaining clinics that either currently have or will purchase a system within 3 years. Of those with current EHR systems, all integrate pharmacy and 96% integrate lab services, while an equal number (96%) of clinics report that their clinicians use their EHR system to track lab and diagnostic tests, and track patient referrals and 91% facilitate e-prescribing with their system. A majority (65%) of clinics provide patients with electronic access to health information within 5 days. Finally, although 70% of clinics report the ability to share clinical and/or administrative data with other systems through a health information exchange, two-thirds (67%) stated that they are not currently using this capacity and 73% of clinics do not share system data with providers outside of the county and/or tri-county area to track selected patients' health care needs.

Initial Public Comments on Study Findings

As a part of the Phase III study, researchers held five public meetings throughout the county to provide the community with an opportunity to receive information about the preliminary findings, and to provide researchers with initial impressions, concerns and questions. Meetings were held in Big Sur, Castroville, King City, Salinas and Seaside in January 2013. While attendance at these locations varied considerably from four people attending in Big Sur to forty-one in Seaside – five initial themes emerged across locations including the 1) lack of access to health care, 2) quality of health care services, 3) rising costs of health care, 4) preventive vs. urgent care focus, and 5) need for a consumer-side assessment. Despite the low turn-out in some locations – possibly due to a lack of adequate advertising of the events – attendees appeared very interested in the study's findings and concerned about issues related to health care reform.

For the first area of concern, *lack of access to health care*, three main issues emerged: 1) "lack of access in rural areas" – especially in Castroville, Big Sur, San Ardo, and San Miguel, the problem of hiring practitioners, finding specialty care and significant transportation issues for patients needing to travel to city areas, 2) "insurance issues" – specifically the struggles of those who are underinsured, those who are currently insured who fear losing coverage from their employer as a result of health care reform, and the continued lack of insurance for those who are undocumented, and 3) "patients who cross county lines for health care."

For the second area of concern, *quality of health care services*, the main issues include 1) concerns that the quality of care may decrease while wait times and prices may increase as a result of health care reform and 2) questions about the reasons for the "inappropriate" or "overuse" of emergency rooms for primary care needs.

For the third area of concern, *rising costs of health care*, the primary issues included 1) for those who are currently insured who face increasingly prohibitive costs of premiums and high deductibles and 2) the impacts that the most recent recession has had on local unemployment.

For the fourth area of concern, *preventive vs. urgent care*, the issues included 1) questions about "Why does the system wait until patients are very sick to treat them rather than focusing on prevention?" and 2) a suggestion to shift from an emergency/urgent care focus to a more preventive approach to healthcare to help reduce costs.

Finally, for the fifth area of concern, *need for a patient/ consumer-side assessment*, attendees voiced concerns about a lack of input from consumers in the Safety Net Provider study and their desire for the community's perspective to be included for a fair and balanced report. Some consumers in attendance reported that their personal experiences are much different than what is being depicted by the report, i.e., that provider capacity is much lower and the number of self-pay (uninsured) seems incorrect.

STUDY METHODOLOGY

This Phase III report incorporates an analysis of primary data gathered through a Safety Net Provider Survey including an analysis of current safety net providers' patient populations, linguistic capabilities, health information technology utilization, and projected capacity for expansion (in response to health care reforms) with quantitative data collected from OSHPD and the US Census. Researchers also conducted limited interviews with key informants and attended the Monterey County Safety Net Integration Council monthly meetings with provider representatives from May 2012 through April 2013.

QUANTITATIVE ANALYSIS METHODOLOGY

<u>Demand analysis</u>: Estimates of uninsured by income, location and citizenship status were obtained using Public Use Microdata Samples from the US Census and distributed across county sub-zones using the number of low-income individuals in each sub-zone as a weighting mechanism. Estimates of the proportion of non-US citizens who are undocumented were obtained at the county level using the residual method with data from the US census and Johnson and Hill (2011) and applied equally across sub-zones and income levels.

<u>Supply analysis</u>: An online survey application was used to distribute questionnaires to 7 clinic organizations, 43 clinic facilities, and 6 hospital emergency departments in the tri-county area between September 1, 2012 and December 15, 2012 with email reminders sent regularly throughout the data collection period. Questionnaires were also sent to 25 private physician practices/groups that serve the Medicaid and Medicare populations. Safety net physician capacity estimates were obtained from the two provider surveys and responses from these surveys were then aggregated at the sub-zone level to protect respondent confidentiality.

Emergency Department Analysis: The data used for the Emergency Department use analysis came from OSHPD's Emergency Department and Ambulatory Services database for the January – July 2010 and July – December 2010 periods for the four hospital emergency departments in

Monterey County. In addition, each of Emergency Departments in the county responded to an Emergency Department Survey conducted between September 1, 2012 and December 15, 2012 with email reminders sent regularly throughout the data collection period.

CONCLUSIONS & RECOMMENDATIONS

To begin the process of system change requires the development of baseline information about the local safety net system, a shared vision for healthy communities and a commitment to collaboration over the long-term. This study has provided the baseline information from which a shared vision can be established by a committed collaborative of stakeholders.

I. New demand, access and safety net capacity

To meet the new demand by currently uninsured individuals who will become eligible for new MediCal and Covered California options, the County will need to develop a systematic approach to outreach and education efforts to maximize the number of enrollees to these programs.

To meet this new demand and to better understand consumer's experiences with and concerns about the health care system, the County will need to continue studying access issues from a consumer perspective to identify in more detail issues of access and begin to more systematically and collaboratively plan for service expansion. Some next steps may include the following:

- A. Identify safety net services related to specific high risk health issues of concern and geographic areas of need including:
 - 1. Health issues: overweight/obesity; births to teens, prenatal care, and very low birth weight, violence injuries, suicide and homicide; lack of dental care; and the continued lack of health insurance for the undocumented population.
 - 2. Geographic distribution of highest *new demand*: Salinas and North Monterey County and areas of *current access* concerns: Big Sur, South Monterey County, and Seaside
- B. Explore "best practices" to improve access to health care services including:
 - 1. Linguistic capacity: Address needs for clinical staff who speak represented languages; identify alternative formats to provide materials for non-written languages; and assist providers' use of existing interpretation (language line) services.
 - 2. Heath information systems: Ensure full implementation of EHR for all providers; facilitate system integration of data sharing by providers to improve care coordination and identify staff health information technology education and training needs.
 - 3. Specialty referrals: Investigate the highest need services; address barriers including provider availability, transportation, and communication; and explore the use of telemedicine to extend specialty services, esp. in rural areas.
- C. Public Concerns: Develop a patient/consumer-side assessment to involve the community in policy making and planning including an exploration of initial areas of concern.

II. Build a systematic and collaborative approach to planning

We recommend that the County support policy and planning efforts that incorporate best practices by safety net providers in service to the community's health care needs and strengthen the Monterey County Safety Net Integration Council's ability to respond to the rapidly changing health care system landscape. Some next steps may include the following

- 1. Monitor changes in definitions of the "safety net" as this may affect current and new funding opportunities from federal and state agencies, and consider expansion of SNIC's membership to reflect these changes and the population's expanding health care needs.
- 2. Explore options for an independent neutral convener/facilitator to maximize collaboration and assist in the process of service integration and expansion by developing: a shared vision that incorporates the areas of need addressed in this study and a set of goals and periodic (annual) benchmarks to guide implementation of and provide assistance for SNIC members with changes resulting from the ACA.
- 3. Approach implementation of the ACA systematically by beginning to explore ways to collect/analyze patient outcomes data across providers to better understand the distribution of services and health care needs; and discuss options for integration of services across the continuum of care.

As the ACA will extend health insurance coverage – and by extension access to health services – for county residents, this final phase of the Monterey Safety Net Provider study set out to provide projections for new demand for health care services, analyze the current capacity and potential for expansion of existing safety net services to address this new demand, and to begin to identify community concerns about the local implications of health care reform.

The results of this study make visible a system of providers and services with many advantages, as well as the myriad challenges that lie ahead. With major health reforms on the horizon, this year-long collaboration has resulted in a beginning point for future collaboration and decision making to improve our health care system for the benefit of the many individuals and families who struggle to find affordable, accessible, and culturally appropriate services.

FULL REPORT

INTRODUCTION

The Affordable Care Act

The Basics:

Individual mandate requires all citizens and legal residents to have health insurance by Jan 1, 2014 or pay a penalty ("Individual mandate").

Exempts the undocumented, the incarcerated, those with incomes so low they are not required to file tax returns or for whom premiums would exceed 8% of family income, and some specified religious and residence categories and Native Americans.

Employer mandate requires all businesses with 50+ employees to offer insurance or pay a penalty.

Expands MediCaid coverage to all individuals and families with incomes up to 138% of the Federal Poverty Level.

Provides assistance through subsidies for people whose incomes fall between 138-400% of the FPL who do not receive employer coverage.

Requires insurers to issue coverage to all applicants regardless of their health status or pre-existing conditions ("guaranteed issue").

Creates state-based health insurance benefit exchanges where individuals and small businesses can purchase coverage.

Source: HealthCare.gov, 2013

One of the most important changes that health care reform brings is health insurance for many currently uninsured people. Of the nearly 90,000 Monterey County residents (about one in five) who are currently uninsured, slightly more than half, or 54,979, will be newly eligible for either expanded MediCal or affordable publiclysponsored (and subsidized) health insurance.

These changes bring two publicly funded insurance options for many, but not all residents of the county and raise questions about incentives used to encourage employers to provide coverage and individuals to purchase insurance. First, are changes to the federal Medicaid (MediCal in California) program. The Affordable Care Act (ACA) expands coverage for Medicaid by establishing a minimum and uniform income eligibility across the country; this will extend coverage not only to traditionally eligible parents and their children, but also to low-income adults without children.⁶ In Monterey County, this translates into approximately 27,651 newly eligible individuals – with incomes up to 138% of the Federal Poverty Level (FPL) – who will be able to sign-up for this expanded Medicaid (MediCal) insurance program.

⁶ Medicaid.gov: Keeping America Healthy, Medicaid Eligibility, Retrieved at http://www.medicaid.gov/AffordableCareAct/Provisions/Eligibility.html

Second, is the state-operated Health Benefits Exchange program (called Covered California). In Monterey another roughly equal number (27,329) of individuals and families – with household incomes above 138% and up to 400% FPL – will be eligible for financial assistance (subsidies) through this newly created, state-sponsored program which will provide a publicly administered health insurance marketplace for consumers to shop for and purchase health insurance.

A third group of County residents will not be eligible for either expanded MediCal or the Covered California benefits. This large group of uninsured people – estimated at 26,100 who lack legal documentation – will not be eligible for either of these newly available options, yet they will continue to need access to health care through the safety net and are likely to lack health insurance through their employers⁷.

A number of unknown market factors may also affect demand: 1) will the threat of penalties on employers be sufficient to discourage those currently providing insurance to retain it and encourage those without existing coverage to begin offering it for their employees; and 2) will the threat of penalties on individuals who are uninsured be great enough to encourage them to seek coverage.

Of course, eligibility does not equal enrollment, and enrollment will not necessarily result in actual demand on the system. The level of enrollment will depend upon how effective outreach efforts are in reaching the uninsured, how many of the currently uninsured sign-up for one of the new insurance options, and how many of those newly insured will actually seek services through the safety net.

Additionally, as do many counties across California and the nation, Monterey faces existing overarching challenges to the provision of health care services including: an aging population in need of increasing levels of care; the persistent problem of attracting and retaining doctors, mid-level practitioners and nurses to rural areas; expected shortages of nurses and primary care physicians due to an aging health care workforce; a limited number of available primary care physicians coming out of the nations' medical schools; and the limited number of private physicians who accept public insurance. 8

Covered California

In 2010, California was the first state in the nation to enact legislation to implement the provisions of the federal Affordable Care Act by creating a new, easy-to-use marketplace where eligible residents may get financial assistance to make coverage more affordable and can compare and choose health insurance coverage options.

Source: Covered California, 2013

⁷ This is the only study that provides estimates for the number of uninsured who are also undocumented. Although estimates for the number of undocumented have been analyzed, we cannot assume that all undocumented are uninsured.

⁸ Colorado (2011)

National and statewide studies indicate that current shortages of primary care providers including family practice physicians, nurse practitioners and physician assistants are expected to worsen as the large population of Baby Boomers begins to place significant demands at all levels of care ⁹ and requires more specialized geriatric practitioners ¹⁰ who are already in short supply.

Fortunately, two continuing bright spots for our region are Natividad Medical Center's Family Practice Residency Program, which trains new primary care physicians, and CSUMB's new Bachelor of Nursing Program which, in collaboration with our three Community Colleges— (Monterey Peninsula, Hartnell and Cabrillo) train registered nurses for our region. In addition are local efforts to provide health professionals with specialized training in interdisciplinary geriatric and chronic care management. These programs may be able to address some of the aforementioned needs with careful planning, and strategic recruitment and retention efforts.

Although this analysis indicates that a relatively small number of new individual providers may be needed to serve the newly insured, gaps in access may persist that require additional providers in the system. They may be needed to address the demand of those who will continue to be uninsured after full implementation of health care reform. Also, as more residents who will be newly eligible for publicly sponsored insurance gain access through expanded MediCal coverage,

Safety Net Providers

Providers committed to delivering a broad range of health care services to medically underserved and uninsured populations regardless of their ability to pay including safety net clinics operated by public agencies, private, non-profit organizations or for-profit corporations, (e.g., , Federally-Qualified Health Centers and FQHC Look-Alikes, Rural Health Clinics, Free Clinics, family planning clinics, and other types of community clinics serving specific populations) and hospital emergency departments.

Safety Net Services

Preventive and primary health care services, including dental care, optometry and ophthalmology, podiatric care, pediatric care, women's health services (including family planning and obstetric care well-women visits, screening for gestational diabetes, HPV testing, counseling for sexually transmitted infections, counseling and screening for HIV, family planning, contraceptive methods and counseling, obstetric care, breastfeeding support, supplies and counseling, and screening and counseling for interpersonal and domestic violence), geriatric care, chiropractic care, alternative and complementary medicine, mental health and family counseling services, chronic disease care management, health education, alcohol and drug treatment, HIV care, pharmacy, laboratory, radiology, specialty care, and ancillary services. Some also offer social support, outreach, transportation, child care, translation services and insurance eligibility and enrollment assistance.

Sources: CHCF, 2009, HRSA, 2013

traditional safety net providers may face the dilemma of welcoming the newly insured who bring

⁹ Knickman JR and Snell EK (2002)

¹⁰ Center for Health Workforce Studies (2006)

¹¹ Monterey Bay Geriatric Resource Center, Inc. (2013)

in new sources of revenue while continuing to serve those who will remain uninsured and less able to pay for services.

Despite an uncertain picture of the future of health care access in Monterey County, traditional safety net providers and some private physicians and medical groups that currently provide services for MediCal members report that expansion activities are currently underway as well as new plans for future expansion and a willingness and ability to accommodate additional patients. Although our findings suggest that gaps in access to primary care are very real, they vary considerably across the county and there appear to be viable options for expansion to address them.

With many incentives created by national health reform, there are many opportunities for collaboration among newly engaged safety net provider clinics, hospitals, private physicians and medical groups to work together to capitalize on the strengths of the current system while working together to solve the most intractable health problems facing Monterey County residents.

BACKGROUND TO THE STUDY

In the first Phase I report to this study, researchers provided an initial analysis of 2010 OSHPD¹² data on the safety net providers located in the tri-county region who serve residents of Monterey County. This preliminary report included a profile of the safety net clinics and hospital emergency departments; a geospatial database and maps of current population distribution by socioeconomic risk factors and documented overall community-health status indicators; health risk "hot spots;" and population proximity to safety net providers throughout the county.

This second Phase III report of the study incorporates further analysis of the 2010 OSHPD data combined with primary data collected from the first Safety Net Provider Survey implemented in Monterey County. The analysis in this report seeks to answer four primary questions.

- 1. What does "access to services" look like throughout the system including types of services available, open hours, appointment scheduling, linguistic capabilities and cultural competencies, utilization of Health Information Technology (HIT) or Electronic Medical/Health Records (EMR/EHR), available specialists and financial sustainability related to patient demographics and payer mix?
- 2. What will demand look like for safety net providers including those who will become eligible for expanded MediCal and the Covered California options?
- 3. What is the safety net system's capacity to meet the future demand for health care services by residents of the county who will become newly insured under health care reform (specifically expanded MediCal and Covered California options)?

-

¹² Office of Statewide Health Planning and Development

4. Where are the gaps in services provided by the safety net and how will these gaps differ across the County?

Three additional questions were posed for Phase III of this study: (1) How many private physicians and medical group practices are contributing to the safety net and would they contribute to any added capacity to serve these newly insured patients; (2) What concerns might county residents have, given the study's findings; and (3) What changes within the safety net system might be considered to address these identified gaps and to serve expected increases in demand.

The first Phase I report identified two regions within the county in need of a strong safety net provider network. The southeastern part of Salinas and the southern part of the Watsonville and Pajaro area exhibit high population density, poverty rates, numbers of undocumented immigrants, fertility rates and proportion of individuals who do not speak English very well, as well as low median incomes. Additional areas of need were identified through the Phase III analysis including North Monterey County, the City of Seaside, the Big Sur coastal area, and the Highway 101 corridor.

STUDY METHODOLOGY

The purpose of this Phase II of the study was two-fold: to gather and analyze data from primary care safety net providers and hospital emergency departments to determine the system's capacity

to serve newly insured individuals and to develop an analysis of demand for safety net services by individuals who will be newly insured under the Affordable Care Act. This report addresses the above mentioned questions by incorporating an analysis of secondary (2010) OSHPD data with primary data gathered through a Safety Net Provider (SNP) Survey made up of three online questionnaires¹³ developed for the following organizations: 1) Safety net clinic organizations and 2) their individual clinics, and 3) hospital emergency departments.

An online survey application (Survey Monkey) was used to distribute the questionnaires between September 1, 2012 and December 15, 2012 with email reminders sent regularly throughout the data collection period. Email links to the on-line survey

Phases of the Safety Net Study

Phase I: May - July 2012

 Analysis of existing data and preliminary profile of health care needs and safety net providers that serve residents of Monterey County

Phase II: August - November 2012

• Survey primary care safety net providers and hospital emergency room directors

Phase III: December - April 2013

- Survey private physicians who accept MediCal patients
- Hold public meetings across County to report findings and gather community input
- Complete final report

¹³ Please see appendices for ICCS Safety Net Provider Survey questionnaires.

were sent to the primary care safety net providers including 7 clinic organizations, 43 clinic facilities, and 6 hospital emergency departments in the tri-county area.

Estimates of the uninsured and projections of eligibility (for MediCal and subsidies to purchase insurance through Covered California) at the county and sub-county levels were obtained using Public-Use Microdata Samples (PUMS) from the American Community Survey (2008, 2009, 2010), while system capacity and utilization analyses for the Primary Care Safety Net System and the Emergency Departments in the region relied on utilization data from the Office of Statewide Health Planning and Development (OSHPD) and survey responses from each individual provider. In addition to use of the Safety Net Provider Survey to collect primary data, researchers met monthly with representatives of the Monterey County Health Department and Safety Net Integration Council where draft survey questions were vetted and preliminary analyses were presented to Safety Net Integration Council members for review and verification.

Finally, a Phase III of the study was established to gather data from two additional sources. First, a fourth survey, similar to the safety net provider survey was sent to private physicians and medical groups that provide services to MediCal eligible patients¹⁴ to collect supplemental data from private providers on access and capacity. Twenty-five private physicians/medical group practices – representing 41 practice sites – that serve MediCal beneficiaries in Monterey County were also surveyed. Safety net provider organizations and private physicians/medical group practices were identified by the Monterey Safety Net Provider Council and the Central Coast Alliance for Health organization.

Second, the preliminary findings from Phase I and II were made available to the public through a series of community meetings across the county (Castroville, Salinas, Seaside, King City and Big Sur) with the intent to begin to engage residents in the process and gather initial public input for this final report.

¹⁴ As a part of the Central Coast Alliance for Health's (CCAH) network of providers.

Access to Health Care: Primary Care Clinics and Hospital Emergency Departments Findings

Clinic Service Provision/Capacity

Access to healthcare is a complex concept that involves many components. Variables such as policies regarding patients' inability to pay, available specialty services, hours of operation, and appointment availability were examined in Monterey County safety net clinics in an effort to better understand what factors affect the utilization and accessibility of these services.

By definition, safety net clinics are those that accept all patients in need of services regardless of ability to pay. When presented with the question, "do you provide services free of charge if a potential patient presents with a health need and does not qualify for any existing reimbursement program, does not have insurance, and does not have cash to self-pay?" the majority of respondents in the individual clinic site survey (92.3%) answered "yes." However, when asked if an up-front payment or co-pay was required at the time of service, 61% of clinics responded that uninsured patients must pay, at least in part, in order to receive services while 42% reported that no fees are required if a patient is unable to pay. Most safety net clinics help patients who do not have insurance coverage apply for funding or refer patients to various programs to secure funding for continuity of care or offer a sliding scale program based on patient income. Of those respondents who answered that they are unable to accept patients free of charge, a lack of funding was cited as the major reason.

Access to care includes the availability of a full scope of medical services including specialty care and dentistry. The majority of respondents to the individual clinic site survey (73%) stated that they provide comprehensive primary care services, ¹⁵ and nearly 31% provide some types of specialty care including internal medicine, pediatrics, reproductive health and OB/GYN services, podiatry, ophthalmology and vision services, and cardiology. Approximately 35% of respondents provide behavioral health screenings, 19% of respondents offer psychiatric services, and about 12% of respondents offer other types of behavioral health services such as counseling and access to a psychiatric social worker. Finally, about 39% of respondents indicate that they provide "comprehensive" dental services with an additional 4% of respondents providing dental services for "children only" and 4% offering only "selected" (unspecified) dental services.

¹⁵ **Definition of Comprehensive Primary Care**: Provision of family practice, general internal medicine, general pediatrics, obstetrics, gynecology, and/or clinical preventive services; the provision of sick and well care to all age groups, from perinatal and pediatric care to geriatric care; the initial point of contact between an individual and the health care system, by the assumption of responsibility for the person regardless of the presence or absence of disease, by the ongoing responsibility for coordination of medical care for the person, by its family centeredness, and by its community orientation.

Specialty Services

While many respondents indicate that they are able to offer a variety of services, studies suggest that patients of Community Health Centers (CHCs) and other safety-net clinics have difficulty accessing services that are not directly provided by the clinic such as diagnostic and specialty services. A study by the California Healthcare Foundation found that the most difficult to access specialty areas were dermatology, gastroenterology, neurology, and orthopedics. A study done by Cook, et al, showed that while Medicare and privately insured patients had little difficulty accessing specialty medical services, Medicaid recipients and the uninsured almost always had problems with access, especially in the areas of behavior health and substance abuse services (2007).

The findings of Cook, et al, were consistent with studies done in previous years, and this study also suggests that the problem of access to specialty care for MediCal recipients and the uninsured is a much bigger problem than previously thought (2007), especially for the uninsured. Case studies point to the difficulty patients or their providers have in finding a specialist willing to accept [uninsured] patients and their inability to obtain a timely appointment. ¹⁸ Not only does this shortage stress already overburdened providers and cause longer wait times for patients, but Medicare and Medicaid reimbursement cut-backs will likely affect physician's desire and/or ability to accept patients with these coverage types. ¹⁹

For safety net clinics in Monterey, over half (53%) of survey respondents cited a lack of specialty providers as the biggest barrier to specialty referrals, especially for MediCal patients or those without health insurance. Very long wait times for appointments for specialty services was also cited by about a third of respondents as a major barrier. Other barriers included a lack of response from specialty offices, non-acceptance of MediCal, lack of transportation to metropolitan areas, and communication problems.

Because of these issues, among others, "hospitals are a vital source of specialty care for the uninsured." It is widely known that public hospitals and major teaching hospitals play a critical role in the safety-nets of many communities. Studies show that public hospitals are the largest provider of safety-net specialty services in the state of California. Studies that focus only on public hospitals miss the fact that a substantial amount of specialty care is given by other hospitals as well. Because of the vital role that hospitals play, factors that influence hospitals' willingness to participate in providing safety-net specialty care should be closely examined. States well are a vital source of specialty care for the uninsured of specialty care is given by other hospitals as well. Because of the vital role that hospitals play, factors that influence hospitals'

¹⁶ Cook, et al, 2007

¹⁷ Solomon, 2009

¹⁸ Felt-Lisk, McHugh, & Thomas, 2004

¹⁹ Lauer, 2011

²⁰ Ibid

²¹ Ibid

²² Canin & Wunsch, 2009

²³ Felt-Lisk, McHugh, Thomas, 2004

According to Felt-Lisk, McHigh, & Thomas, "Medi-Cal beneficiaries are far more likely than other Californians to be turned down by a physician and are more than four times more likely to get care in a hospital emergency department because they could not get an appointment with a doctor or clinic."²⁴ Studies indicate that emergency departments are often the primary source of specialty care for this patient population.²⁵ Further cut-backs of state and federally funded health programs will only serve to exacerbate the problems patients have in receiving specialty care.

Table 1: SUMMARY OF MOST FREQUENT AND MOST DIFFICULT TO ARRANGE **SPECIALTY**

Ten Most Frequently Referred Services	Ten Most Difficult Services To Arrange	
1. Radiology (Diagnostic)	1. Dermatology	
2. Obstetrics	2. Pain Management	
3. Ears, Nose, & Throat	3. Neurosurgery	
4. Public Health Nursing	4, Vascular Surgery	
5. MCHD ²⁶ Behavioral Health	5. Gastroenterology	
6. Physical Medicine & Rehabilitation	6. Pediatric Sub-Specialty	
7. Psychiatry (Outpatient)	7. Plastic Surgery	
8. Cardiology	8. Pulmonary Medicine	
9. Dermatology	9. Urology	
10. Endocrinology	10. Allergy	

Source: ICCS Safety Net Provider Survey, 2012

Safety net survey respondents identified several major unmet health care needs for the population within their catchment/service area including accessibility to hospital and specialty care services due to the rural location of clinics, with many specialty services including endocrinology, urology, gastroenterology, cardiology and psychiatric services often unavailable. Respondents also emphasized the need for more preventative services including cancer screenings, regular checkups and immunizations. A lack of resources and a lack of coverage for primary care services were also identified by respondents as contributing to unmet health care needs.

Logistical Issues

Along with the issue of provider shortage and the unwillingness to deliver specialty care to safety-net patients, the issue of the referral process itself also poses significant barriers to the timely delivery of care. 27 A few challenges cited in the specialty referral process were inappropriate or ambiguous referrals, incomplete or insufficient work-ups, difficulty allocating

Lauer, 2011Felt-Lisk, McHigh, & Thomas, 2004

²⁶ Monterey County Health Department

²⁷ Solomon, 2009

specialty appointments to the sickest/most complex patients, and over-reliance on personal relationships and informal referral processes. ²⁸

While web-based programs were found to help greatly with the referral process with regard to patient tracking, limitations were also found with regard to the ability to exchange information between providers and patients; this ultimately led to unproductive first visits to specialty providers.²⁹ Recommendations to help overcome these challenges include the development and implementation of a standard referral process, referral coordination improvements, and improvement of electronic medical record programs themselves to allow for greater flexibility in provider communication.³⁰

Options to Address Specialty Access

The most common recommendations given across various studies to improve patient access to specialty care include improving clinic-hospital/specialist relationships/affiliations, offering onsite specialty care, and encouraging community support. Another recommendation was for policy-makers to explicitly underwrite specialty providers and encourage hospital affiliations. It was found that "the ability of patients to obtain specialty care depends heavily on their doctor's or clinic's relationships with other physicians and hospitals. Cook, et al, found that CHCs with medical school or hospital affiliations were less likely to report difficulty accessing specialty care for their patients. 33

Clinics with on-site specialty services like behavioral health services were also found to have fewer access issues. ³⁴ Offering in-house specialty care in FQHCs appears promising provided that clinics were able to find specialists in shortage areas. ³⁵ One problem with offering on-site specialty services would be that clinics may be unable to offer the full range of specialty care for their patient populations. However, expanding the expertise of primary care providers and offering telemedicine services would help in overcoming these problems. ³⁶

It was found that the communities with the greatest community support (shown mostly by private funding to support the safety-net) provided the "most favorable access environment for uninsured people to obtain specialty care." Felt-Lisk, McHugh, and Thomas suggest a number of ideas that would help in the effort to provide access to specialty care among the underserved: implementing or expanding local initiatives to provide health care to the uninsured;

²⁸ Canin & Wunsch, 2009

²⁹ Solomon, 2009

³⁰ Solomon, 2009, Canin & Wunsch 2009

³¹ Cook, et al, 2007

³² Felt-Lisk, McHugh, & Thomas, 2004

³³ Cook, et al, 2007

³⁴ Ibid

³⁵ Felt-Lisk, McHugh, & Thomas, 2004

³⁶ Solomon, 2009

³⁷ Felt-Lisk, McHugh, & Thomas, 2004

strengthening relationships with hospitals; providing additional training to primary care providers; and bringing specialists into the primary care setting (2004).

Clinic Hours of Operation, Advice Access & Appointment Scheduling

Hours of operation are an important aspect of access and play a large part in whether some people choose to utilize outpatient clinics or their local emergency rooms. A study of emergency room utilization by Gindi, Cohen & Kirzinger found that, of those who cited lack of access as their main reason for emergency room use, 48% responded that "doctor's office or clinic was not open" (2012).

When asked about hours of operation, survey respondents indicated that only about half (48%) *never* close their clinic during regular posted business hours while slightly more than a third (37%) either sometime or frequently close during regular business hours, with the vast majority indicating that monthly staff meetings are the main reason. When asked about potential plans to meet increased demand, 44% of clinics reported that opening on Saturday or expanding existing Saturday hours was 'very likely'. Thirty-three percent of clinics reported that adding early morning hours (before 8:00 am) was 'very likely' and 24% of clinics reported that it was 'very likely' that evening hours would be extended. Twenty-five percent of respondents reported already planning on expanding early morning hours. When asked at what hour the clinics were likely to expand if demand increased, 43.8% of respondents reported that they would open at 7:00 am most days and 31.3% of respondents reported that they would close at 7:00 pm most days.

Table 2: Summary of safety net clinics' current hours of operation and expansion options

Clinic hours of operation			
Current hours of operation	Expansion "very likely"		
Mon-Fri: 85% open between 7:00 - 8:00 AM	32% ~ add early AM hours		
Mon-Fri: 59% close between 5:00 - 6:00 PM	24% ~ extend evening hours		
Sat: 56% open	44% ~ add or expand Sat hours		
Sun: No clinics are open	20% ~ add Sun hours		
Lunch: 65% do not close for lunch			

Telephone access was also addressed, and the majority of clinics (89%) responded that patients are mostly or often able to get telephone advice on clinical issues during regular office hours. About 68% of clinics reported that patients are mostly or often able to receive telephone advice after hours or on weekends. When clinics are closed, nearly 81% of clinic respondents replied that, while they did not have a 24-hour nurse advice line available for patients, an answering service which pages the physician on call was available 24 hours per day, seven days per week.

While hours of operation may be an issue for some, others who are able to visit outpatient clinics during regular hours are often faced with difficulty securing timely appointments. When asked a

series of questions regarding appointment availability, the majority of clinics (78.6%) answered that "new and regular patients needing urgent care" are able to be seen within two hours of calling into the office for an appointment. Clinics also report that slightly more than a third (38%) of "regular patients needing non-urgent care" were able to be seen within 48 hours (or 2 days), 35% within 10 business days and the remaining 30% within a month from calling for an appointment. For patients with "ongoing chronic care management needs," 42.3% of clinics reported that they are able to book an appointment within two days (48 hours) and about 19% within 15 business days. Most "non-urgent specialist visits" were able to be scheduled within 10 to 15 business days.

Questions were also posed regarding patient wait times once they arrived in the office. According to survey responses, 57% of clinics reported that the time a patient with an appointment must wait from arrival until they are able to see a provider is between 15-30 minutes with another 36% of clinics reporting appointment wait times within 45 minutes. The majority of clinics (85.7%) reported that walk-in patients are seen within an hour of arriving and urgent care patients are seen by a provider either immediately/within 5 minutes (21.4%), within 30 minutes (29%) or within an hour (36%) of arrival. Eighty-five percent of clinics reported that patients are mostly or often scheduled with their primary assigned physician. Only 4% of clinics reported that patients are mostly or often able to directly contact their primary providers via email with the majority of clinics responding that patients are never able to do this.

Finally, the "third next available appointment (TNAA)" provides a measure of a patient's ability to receive care with the provider of their choice, at the time they choose, regardless of the reason for their visit. The third next available appointment is one of the healthcare industry's standard measures of access to care. While the two main goals of primary care are "accessibility and continuity of care," many primary care providers struggle with delays in care, excessive wait times and disruption of patient-physician continuity. A Kaiser Family Foundation study reported that 40% of emergency department visits are not urgent and occur due to an inability to obtain a prompt primary care appointment.

Safety net clinic respondents across the County reported a wide range of TNAA wait times, from a minimum of 0 days or same day for one clinic to a maximum of 30 days for another. The

Page 28 of 83

³⁸ Definition: Average length of time in days between the day a patient makes a request for an appointment with a physician and the third available appointment for a new patient physical, routine exam, or return visit exam. The "third next available" appointment is used rather than the "next available" appointment since it is a more sensitive reflection of true appointment availability, e.g., an appointment may be open at the time of a request because of a cancellation or other unexpected event. Using the "third next available" appointment eliminates these chance occurrences from the measure of availability. Goals for improving primary care access: Same day or "zero days" for primary care and two days for specialty care appointments. Institute for Healthcare Improvement (2011) ³⁹ Wisconsin Collaborative for Healthcare Quality (2013)

⁴⁰ Murray M, Berwick, DM (2003)

median TNAA and most often reported – by 37% of clinic respondents – was 3 days, and the overall average TNAA reported by respondents was 5 days.

Cultural Competency and Linguistic Capabilities of Safety Net Clinics

Within the healthcare field, linguistic capabilities and cultural competence help ensure appropriate, thorough and accurate communication with patients, thus improving the provision of quality care and patient health outcomes, and eliminating the racial and ethnic health disparities that result in selected populations' added risk for preventable morbidities and premature

mortality.⁴¹ For these reasons, health care organizations must address the challenges of equalizing health outcomes across the population by developing and implementing clear goals to address the needs of the diverse patient populations they serve.

Demographic Makeup of Patient Populations

The proportion of migrant workers and their family members in the total safety net patient population varies by clinic. About 68% of clinics report that more than half of their patients are migrant farmworkers and their families, while slightly more than a quarter (28%) of respondents report a figure of over 90%. Respondents also indicated that a number of their patients may be undocumented. Nine percent of clinics report that under 20% of their migrant worker and family member patients are undocumented, 64% of clinics report the number of undocumented patients at between 21% and 60%, and slightly less than 20% of clinics report that over 90% of their migrant worker/family member patients are undocumented. Many barriers exist which inhibit the ability of these populations to obtain access to high-quality healthcare, including the linguistic and cultural differences between patients and providers.

Cultural Competency

Cultural competency can be described as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations. 'Culture' refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups.

'Competence' implies having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities"

Source: U.S. Department of Health and Human Services Office of the Secretary (2000).

Among the safety net clinics surveyed for this report, most reported that fewer than 20% of their patient populations speak English "well or very well", potentially affecting the quality of communication and care which can be provided. Responses from private providers showed a stark difference from safety net clinics, with the majority of respondents estimating that between 71%-80% of their patient populations speak English well or very well.

⁴¹ Center on an Aging Society at Georgetown University (2004)

Among safety net clinics as well as private clinics, respondents identified English and Spanish as the two most widely spoken languages of their patient populations. Among safety net clinics, Trique and Mixtec were also identified as commonly used languages among patient populations (see Figure 1). Among private clinics, Tagalog and Chinese were the next most common languages spoken after English and Spanish.

Please identify the major language groups spoken by your patient population. Please indicate any additional languages spoken by your patient population in the comment box below. 120% 100% 100% 100% 90% 81% 80% 58% 58% 54% 60% 50% 50% 33% 40% 18% 20% 0%

Figure 1: Number of safety net clinics reporting major language groups spoken by patients

Source: ICCS Safety Net Provider Survey, 2012, (n=25)

Despite the clear need for employees fluent in these languages, respondents from safety net clinics indicated that most of their employees are primarily fluent in English and Spanish. Of the many employees throughout the system, very few speak Chinese, Mixtec, Nahuatl, Mixtec or Vietnamese and none speak Korean, Trique, or Zapotec. Among private clinics, 100% stated that they retain staff members who speak English and Spanish, while some also employ staff members who speak Tagalog, Vietnamese, Chinese, and 'Indian' (although it is unclear which specific language this refers to).

Figure 2: Total number of safety net clinic employees estimated by respondents to speak the language

Source: ICCS Safety Net Provider Survey, 2012 (n=25)

In order to provide equal access to culturally and linguistically appropriate health information, health education materials should be offered in the languages spoken by the diverse patient populations that each organization aims to serve. According to King County Health Department (2012), "Translations are a health equity issue. Limited-English proficient populations are often underserved, more vulnerable and disproportionately impacted by every-day diseases, and during emergencies... Standard 7 of the nationally-recognized standards for culturally and linguistically appropriate services (CLAS) states, 'Health care organizations must make available easily understood patient-related materials and post signage in the languages of the commonly encountered groups and/or groups represented in the service area'" (para. #1-3).

While all respondents indicated that their health education materials are available in English and Spanish, and several clinics also provide information in Tagalog, Korean, Vietnamese and/or Chinese, patients who speak Trique, Mixtec and Zapotec do not have access to these materials in their language as no clinics report providing them (Figure 3); however, these are languages which are largely unwritten or lacking a traditional alphabet. For this reason, health education materials for Trique, Mixtec, Zapotec and Nahuatl speakers must be provided through other media, such as pictorially or verbally.

Are all health education materials given to patients available in the following languages? Yes ■ No

Figure 3: Number of clinics reporting availability of health education materials in non-English language

Source: ICCS Safety Net Provider Survey, 2012

The linguistic diversity of our local area speaks to the need for a healthcare workforce trained in cultural competencies and possessing varied linguistic capabilities. According to the Agency for Healthcare Research and Quality (2004), "The steadily increasing diversity of the United States affects health care providers and institutions, from small rural towns to large urban centers. The impact of this diversity means that every day, health care providers encounter, and must learn to manage, complex differences in communication styles, attitudes, expectations, and world views" (para. 8). The following summary Table 3 shows the significant linguistic gaps in need of attention.

Table 3: Summary of linguistic capabilities: languages spoken by patients and clinic staff and health education materials available

Languages	% of Clinics That Report Patients Speak Language	Proportion of Staff Who Speak Language	Clinics reporting Health Education Materials In Selected Language
English	100%	All clinics have staff who speak English	All clinics
Spanish	100%	All clinics have staff who speak Spanish	All clinics
Trique	90%	No clinics have staff who speak Trique	No clinics
Mixtec	81%	One clinic has staff who speak Mixtec	No clinics
Tagolog	73%	Six clinics have staff who speak Tagolog	No clinics
Zapotec	58%	No clinics have staff who speak Zapotec	No clinics
Chinese	54%	One clinic has staff who speaks Chinese	Six clinics
Vietnamese	50%	One clinic has staff who speaks Vietnamese	Six clinics
Korean	50%	No clinics have staff who speak Korean	Six clinics
Nahuatl	18%	One clinic has 1 staff member who speaks Nahuatl	No clinics
Others	33% (Russian, Indian, Farsi)	Other languages spoken by staff: Italian, French, German, Hindi	NA

Source: ICCS Safety Net Provider Survey, 2012 (n=25)

Interpretation or Translation Services

Studies indicate that utilization of and satisfaction with health care services may be affected by the availability of professional interpreters. Nationally, less than half of non-English speaking patients report "that they always or usually had one," and those who had a professional interpreter available reported that they were as satisfied with the overall health care visit as patients who used bilingual providers."

Although the Central Coast Alliance for Health offers telephone interpretation services for over 80 languages to participating providers (all of the respondents to this study), only 50% of safety net clinic respondents indicated that they use some type of formal language line for interpretation or translation services. Anecdotally, providers report that the reasons for this discrepancy include lack of phones in all exam rooms, the inconvenience of using a language line and the ease of use of informal translators who may accompany patients to their appointments. Among private clinics, 63% of respondents indicated that they use a formal language line for providing interpretation services.

⁴² Center on an Aging Society at Georgetown University (2004)

⁴³ SNIC members, personal communication, November, 2012

Most safety net respondents indicate that they use the assistance of "informal" translators in order to communicate with patients. 78% of clinics' staff turn to patients' spouses or partners, 74% rely on adult children, 70% use adolescent or young adult children or non-family members such as neighbors, and 61% use other family members in order to communicate with patients. Some (39%) also use "uncertified" staff, and about 17% use children under 18 years old to assist with health communication. Among private clinics, 75% report utilizing a spouse or significant other for interpretation, while 50% utilize adult children for translation services. Utilizing these kinds of informal translators has been shown to have a negative impact on patient satisfaction: "patients who use family interpreters or non-professional interpreters, such as nurses, clerks, and technicians are less satisfied with their visit" (p.3). 44

According to the American Academy of Physician Assistants (2008), there are other potential risks that come with using untrained or non-certified interpreters such as friends, family or clinic

staff: "The use of an interpreter who lacks the competency to accurately convey technical information can lead to misdiagnoses and inappropriate treatments. It also places health care providers at greatly increased legal risk. (Other drawbacks)...include the likelihood of inaccurate translations, omissions, additions, substitutions, volunteered answers, personal opinions, and other problems. The use of untrained interpreters also increases the risk of breaching patient privacy and confidentiality requirements."

The American Academy of Physician Assistants indicates that "Language and communication problems may lead to patient dissatisfaction, poor comprehension and adherence, and lower quality of care. Spanish-speaking Latinos are less satisfied with the care they

"Of the more than 37 million adults in the U.S. who speak a language other than English, ~ 18 million people (48%) report that they speak English less than 'very well."

Source: Center on an Aging Society at Georgetown University, 2004

Approximately 52% of the population in Monterey County speak a language other than English, by comparison 40% in San Benito County and 30% in Santa Cruz County speak a language other than English.

Source: US Census, American Community Survey, 2006-2010

receive and more likely to report overall problems with health care than are English speakers."⁴⁶ Among those individuals whose primary language is neither English nor Spanish, obtaining an accurate measure of patient satisfaction may be even more difficult.

Of respondents providing additional comments on this issue, several indicated that they try not to use informal translators; one clinic does not permit its employees to perform this service, while another only allows for informal translation if the patient authorizes this action. Several respondents pointed out that their patients generally choose to bring their own translators to clinic visits.

⁴⁶ Ibid,p. 2

⁴⁴ Center on an Aging Society at Georgetown University (2004)

⁴⁵ American Academy of Physician Assistants, 2008, p.1

In addition, 72% of safety net respondents indicated that their clinic site provides interpreter services for hearing impaired patients, and many respondents indicated that they would use an outside vendor or contractor to provide these services if they were necessary. Among private physicians/medical groups, 44% of respondents reported that they do not provide services for hearing impaired patients, while 33% do offer such services.

Interpretation or Translation Services and Measuring Patient Satisfaction

It is clear from this study's findings that most safety net clinics in the tri-county area are concerned with patient satisfaction, as 96% of respondents indicated that their clinic periodically surveys patients to determine their satisfaction with clinic services and most clinics complete these patient satisfaction assessments on a quarterly basis.

While necessary and helpful in providing feedback to clinics, these evaluations are likely leaving out key patient populations whose level of satisfaction may provide crucial information about the quality of service, as 96% of those respondents who indicated that their patient satisfaction surveys are being distributed in a language other than English only made these surveys available in Spanish. This may result in many patients being unable to communicate their concerns about gaps in the provision of multilingual or multicultural healthcare services at these clinics. Without input from these key stakeholders, clinics may also be unaware of the need to adapt healthcare services and materials for these various population groups.

Conclusions

It is clear that there is still work to be done with regard to providing multilingual and multicultural services to populations served by safety net providers in the tri-county area. Improvements in the provision of culturally competent and linguistically adequate services could significantly improve patient outcomes and patient/provider relationships while also reducing health disparities across diverse populations.

According to several studies, diversification of the healthcare workforce to improve cultural competency and provide patients with access to providers from their own culture has been shown to improve the relationship between providers and patients and to "have a positive impact on appropriate service utilization, treatment participation, and receipt of some services". ⁴⁷ Among older adults, it is estimated that "by 2050, racial and ethnic minorities will comprise 35% of the over 65 population. As the population at risk of chronic conditions becomes increasingly diverse, more attention to linguistic and cultural barriers to care will be necessary." ⁴⁸ Implementing strategies to improve cultural competence now will prepare local safety net providers for the impacts of the ACA.

⁴⁷ Agency for Healthcare Research and Quality (2004), U.S. Department of Health and Human Services...?

Health information technology utilization and capabilities Electronic Health/Medical Records—Clinic Organizations and Sites

Electronic Health/Medical Records (EHR/EMR) began to appear in the 1990's, yet the technology has – until recently – been adopted only slowly. A 2008 national survey of physicians found that only a small minority (17%) had implemented EHRs in their practices.⁴⁹ The percentage of physicians using at least basic EHR systems grew to 35% in 2011 and the percentage of hospitals to 27%.⁵⁰

Of the individual safety net clinic sites surveyed for this study, nearly 89% are currently using EHR/EMR, with the majority having installed their systems between 2009 and 2012. Of the six clinic organizations surveyed, three installed an EHR/EMR system in 2012, one in 2010, one in 2011, and the remaining clinic organization is currently installing a system. Of the six clinic organizations surveyed, the (EHR/EMR systems in use are eMD (2), Nextgen (2), Epic (1) and Vitera Intergy (1). Three individual clinic sites also report using different systems including eclinicalworks, Meditech and Voxent. Only 1 clinic organization has not applied for financial incentives under meaningful use/EHR incentive program (4 under Medicaid and 1 under both Medicaid and Medicare).

The biggest barriers to implementation of an EHR/EMR system for clinic organizations are the cost to acquire a system, the need for staff education and training, and a lack of technical knowledge and technical resources. More than half the clinics surveyed reported that they are in greatest need of personnel to design, customize and lead implementation of the EHR/EMR system, and also of in-house HIT/EMR trainers.

Although EHR/EMR systems are expected to result in improved efficiencies over the long-term, a majority of respondents report that the transition to use of an EHR/EMR system has resulted in an increase in staff workloads and a 15 - 50% decrease in productivity during the first two years of implementation while staff learn how to use the new technology and some staff still struggle with scanning of non-interfaced documents. The EHR/EMR systems of most of the clinics are able to track and record providers associated with a patient encounter, clinical documentation and notes, ordered and pending labs, ordered and pending diagnostic test results, provider orders, and external documents (such as advanced directives and histories).

Nearly all respondents indicated that the clinic's pharmacy (100%) and lab systems (96%) were integrated with the clinic's EHR/EMR system, although clinic organizations cite difficulty in getting outside vendors (i.e. labs and x-rays) to integrate into the EHR. Clinic sites stated that nearly all (96%) clinicians use the EHR/EMR system to track pending laboratory tests,

⁴⁹ DesRoches et al (2008)

⁵⁰ Wilson L, Robert Wood Johnson Foundation (2012)

diagnostic tests, and patient referrals. Most (nearly 91%) clinic sites use the EHR/EMR system to facilitate e-prescribing, with the most common e-prescribing vendor listed as Surescripts.

Of the clinics surveyed, 70% are capable of sharing clinical and/or administrative data with other systems through a health information exchange, but two-thirds (67%) stated that they are not currently using this capacity. Furthermore, 73% of clinic sites do not share system data with providers outside of the county and/or tri-county area to track selected patients' health care needs.

More than half (55%) of clinics are primarily relying on their EHR/EMR systems, with slightly more than a quarter (27%) or 6 clinics reporting that they do not maintain any paper charts and are entirely paperless and an equal number primarily using EHR/EMR but also maintaining paper charts for some patient information. Additionally, slightly more than a third (36.4%) are currently using both (paper and EHR/EMR systems), but are in the process of transitioning to an entirely paperless system. Over two-thirds (68%) of clinics use a computer to access all lab results, 87% reported that all lab results are recorded as structured data within the EHR/EMR, while only 4% use primarily paper, faxes or phone calls. As a part of the EHR/EMR section of the questionnaire, clinics were also asked about the "frequency of alerts, prompts and patient reminders sent by the clinic to patients." A majority (70%) of clinics report that laboratory results are usually (over 75% of the time) tracked until results reach the clinician and 60% of clinics report that a provider often (50-74% of the time) receives an alert or prompt to provide patients with test results. Sixty-two percent of clinics report that their clinicians usually receive an alert/prompt at the point of care for appropriate services needed by the patient. Although only 29% of clinics respond that usually patients are sent reminder notices when it is time for regular preventive or follow-up care, an additional 43% said patients are sent these notices often.

Two-thirds of clinics surveyed provided "after clinical summaries at the end of each office visit for over 80% of all encounters, and of the remaining one-third of clinics that do not provide summaries at the end of each visit, 65% give patients electronic access to the summaries within 5 days of their visit. Most clinics (83%) who are not able to give patients "after clinical summaries" immediately after a visit have the capacity to provide patients with an electronic copy of their health information by request within three business days. Seventeen percent of clinics do not provide patients with any access to their health information. Many clinics stated that "patients have the ability to access their patient information via the web, but the majority of our patients do not have computers."

Most clinic sites report using signed paper consents, with 64% of clinics scanning the paper consents into the EHR/EMR system, 24% tracking consents electronically, and 12% filing them as paper copies. Patients' advanced directives are also available electronically in 56% of clinic sites and stored as paper documents in 28% of clinics.

All clinic sites surveyed state that the data from the EHR/EMR systems is used to create benchmarks and clinical priorities and to set goals and clinical guidelines. With regards to using the EHR/EMR systems for quality improvement, most clinics report that the biggest challenges are learning to use the reporting tools and the limited reporting functionalities of the EHR/EMR system.

Only half of the clinic organizations surveyed use their EHR/EMR system to collect and submit quality measures to outside organizations such as Centers for Medicare & Medicaid Services, Health Resources and Services Administration, and Office of Statewide Health Planning and Development. Fewer (31.8%) are able to provide data to local health departments that conforms to HL7 standards. However, a majority (79.2%) of clinics surveyed have the capacity to generate at least one report that lists patients by a specific condition (a disease registry).

The most common online services offered to patients by clinics are appointment scheduling, secure email communication between providers and patients, and patient portal services. Using an EHR/EMR system, most clinics are able to identify and remind patients who are due for preventative care, identify patient-specific education resources, and send reminders for follow up care for most (over 80%) of their patients.

None of the clinic organizations surveyed currently provides telehealth services to patients, but many (67%) would be interested in developing this capacity. Of those interested, the biggest reported that the barriers to using telehealth services are the costs associated with implementing a new technology (50%), the availability of specialists/practitioners (50%), a lack of staff expertise (33%), unavailable hardware (33%). 33% reported that they have not identified a need for telehealth services.

Finally, clinic organizations report using a number of strategies to develop the capacity to track health improvement in their patient populations including:

- Custom reporting out of EMR and Meaningful use requirements
- Developing a Health Score, using outcomes measurements (UDS, CBI, HEDIS, etc.),
- Using CCAH data to identify and track patients with certain medical conditions and implement utilization.
- Using Healthy People 2020 goals and HEDIS⁵¹ data.
- Using reports from report software to track chronic disease and screen patients

Page **38** of **83**

⁵¹ Healthcare Effectiveness Data and Information Set (HEDIS) is a widely used set of performance measures in the managed care industry, developed and maintained by the National Committee for Quality Assurance (NCQA).

Hospital Emergency Departments EMRs Utilization

Three of the four hospital emergency departments surveyed are currently using EHR/EMR systems, namely Meditech and Eclypsis, and have applied for financial support under meaningful use or the EHR incentive program under both Medicare and Medicaid in 2011.

All hospitals surveyed are able to track and record ordered and pending labs and diagnostic test results, and three of four are able to track providers associated with a patient encounter and clinical documentation and notes. Three of four hospitals are able to provide patients with "after clinical summaries" at the end of each visit for most (over 80%) of their patient encounters.

Three out of four hospitals have advanced directives stored in a readily accessible/consistent part of the EHR, while one hospital stores them in the EHR but not in a consistent place. All hospitals used paper-signed consent forms, and three of four hospitals scan the paper documents and track them through the EHR. Finally, half of the hospitals surveyed are able to provide data that conform to HL7 standards to local public health departments via the EHR.

PROJECTIONS OF NEW DEMAND FOR SERVICES AND ANALYSIS OF PRIMARY CARE SAFETY NET CLINICS' CAPACITY

The Affordable Care Act (ACA) is designed to increase Medicaid coverage by expanding income and categorical criteria for eligibility by January of 2014. This coverage expansion is expected to create a new eligible group that will include uninsured adults (ages 19-65) who have incomes below 138% of the Federal Poverty Line (FPL),⁵² who meet citizenship/permanent residency requirements, are not incarcerated, and are not entitled to Medicare (ACA, 2010). The ACA additionally will benefit individuals with incomes between 138% and 400% of the FPL who are uninsured and cannot afford insurance through their employer. This group of uninsured will benefit from a system of "Health Benefit Exchanges" (HBE) expected to be created by participating states or the federal government (ACA, 2010). In California, the HBE is called "Covered California."

This section of the report presents an analysis of how the expansion of coverage is expected to impact the system of safety net primary care providers in Monterey County and is divided into three parts. The first part presents estimates of the total numbers of uninsured in Monterey County that will be become eligible for MediCal benefits or insurance subsidies through the state's HBE in 2014. The second part presents estimates of the safety net system's capacity for expansion given their physical (infrastructure) constraints. The third part offers an analysis of the system's capacity assuming different scenarios of changes in demand for coverage when the ACA is implemented in 2014.

⁵² The Federal Poverty Line for a family of 4 is currently \$23,050 (USDHHS, 2012)

Expansion of Coverage to the Uninsured Population in Monterey County Under ACA

The US Census Bureau estimates that about 22% of Monterey County's civilian noninstitutionalized residents were uninsured in 2011.⁵³ In order to get a better idea of how many of those will become eligible for coverage under the ACA, Public-Use Microdata Samples (PUMS) from the American Community Survey (2008, 2009, 2010) were used to obtain estimates of the uninsured by their level of income, citizen status, and their geographical location within the tricounty (Monterey, San Benito, Santa Cruz) area.⁵⁴ The tri-county region contains 5 PUMS (shown in figure 4) for which the percentages of uninsured with different income levels and citizenship status were obtained. Estimates of uninsured by income and citizenship status were then assigned to each census tract within each PUMS using the total number of low-income individuals (under 100% of FPL) as a weighting variable⁵⁵. The methodology is explained graphically in Figure 5.

Once census tract estimates were obtained, and because that level of disaggregation was likely to increase the margin of error from the estimates considerably, they were aggregated to obtain county and sub-county estimates for nine regions: North Santa Cruz, Santa Cruz, City, South Santa Cruz, North Monterey, Salinas, South Monterey, Big Sur and Monterey Peninsula, Hollister, and San Benito. These regions are presented in Figure 6, while the estimates of uninsured and for individuals reporting being insured by MediCal are presented in Table 4.

 ⁵³ 2009-2011 American Community Survey 3-Year Estimates, table DP03.
 ⁵⁴ The PUMS dataset was obtained from Ruggles, et al. (2010).

⁵⁵ The number of poor by census tract was obtained from the 2008-2010 American Community Survey 3-Year Estimates.

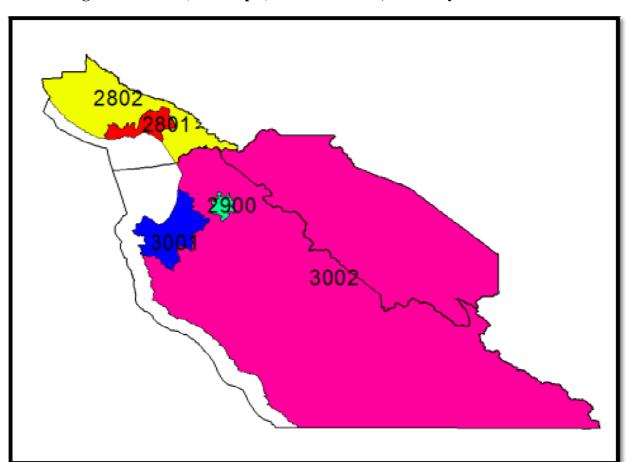


Figure 4: PUMS (5% sample) For Santa Cruz, Monterey and San Benito

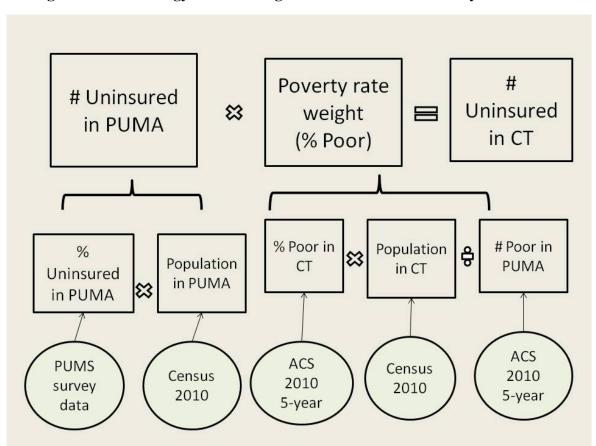


Figure 5: Methodology for obtaining the number of uninsured by census tract

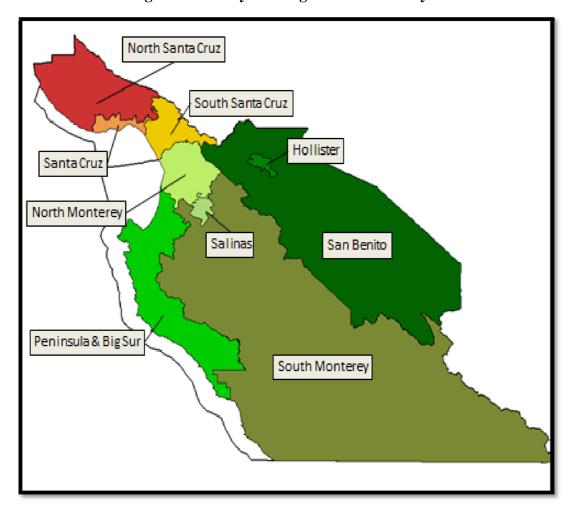


Figure 6: County sub- regions used in analysis

Table 4: Estimates of uninsured and MediCal insured in Monterey County by Sub-region

Monterey County Sub region	Total Population (census 2010)	Total Uninsured	% of total Pop.	MediCal Insured	% of total Pop.
North Monterey	49,287	12,755	25.9	9,985	20.3
Salinas	143,754	33,639	23.4	36,816	25.6
Monterey Peninsula + Big Sur	123,927	20,136	16.3	14,045	11.3
South Monterey	98,089	23,597	24.1	18,473	18.8
Total	415,057	90,126	21.71	79,319	19.11

As Table 4 presents, our estimates suggest that about 90,126 Monterey County residents were uninsured in 2010. This figure represents about 22% of the county's total population. Furthermore, our estimates show that about 19% of the county's residents are insured by

MediCal (about 79,300). When looking at regions within the county, the Monterey Peninsula and Big Sur region show a relatively low proportion of uninsured and MediCal insured (16% and 11% respectively) compared to the rest of the region, while North Monterey presents the highest percentage of uninsured (about 26% of total population) and MediCal insured (20%), and the Salinas area has a higher percentage of uninsured (at 24%) and MediCal insured (at 26%) relative to other regions within the county.

The uninsured within the county are not a homogeneous group; they vary by citizenship status and family income. Table 5 presents the uninsured by income and citizenship status for each of the county sub regions.⁵⁶

Table 5: Uninsured by income level and citizenship status for each region

Citizenship Status	Region	Income as % of FPL					
		I≤133	133 <i≤138< th=""><th>138<i≤200< th=""><th>200<i≤400< th=""><th>400≤I</th><th>Total</th></i≤400<></th></i≤200<></th></i≤138<>	138 <i≤200< th=""><th>200<i≤400< th=""><th>400≤I</th><th>Total</th></i≤400<></th></i≤200<>	200 <i≤400< th=""><th>400≤I</th><th>Total</th></i≤400<>	400≤I	Total
	North Monterey	3,623	120	1,088	1,421	1,166	7,419
US Citizens	Salinas	5,966	474	3,019	3,781	1,926	15,166
US Citizens	Monterey Pen. and Big Sur	3,147	213	2,494	4,012	2,412	12,279
	South Monterey	6,703	222	2,013	2,629	2,157	13,725
	Total US Citizens	19,440	1,029	8,614	11,844	7,662	48,588
	North Monterey	2,207	229	1,510	1,171	203	5,321
Non US	Salinas	9,718	460	3,766	3,925	561	18,429
Citizens	Monterey Pen. and Big Sur	3,107	292	1,694	2,608	339	8,040
	South Monterey	4,084	424	2,793	2,167	376	9,843
	Total Non US Citizens	19,116	1,404	9,763	9,871	1,479	41,633
Total		38,556	2,433	18,377	21,714	9,140	90,221

As Table 5 presents, our estimates show that out of the 90,221 uninsured Monterey County residents, about 48,588 are U.S. Citizens while 41,221 are non-U.S. Citizens. Further, Table 5 shows that out of the estimated 38,556 uninsured residents with a family income below 133% of the FPL, about 19,440 of those are U.S. citizens while 19,116 are non-U.S. citizens.

While a portion of non-U.S citizens will not qualify for the expansion of benefits under the ACA due to their immigration status, the law is clear that uninsured Legal Permanent Residents (Green Card holders) who meet the income qualifying criteria can be covered by either MediCal or subsidies for the HBE. In order to estimate which portion of uninsured non-U.S. citizens are

Page **44** of **83**

⁵⁶ It is important to note that even though these are the best estimates obtainable given the nature of the data, they do contain a margin of error that could not be estimated. The estimate sat the PUMA level obtained contain a level of margin of error due to the sampling error from the survey design. This error is likely to increase as the results are extrapolated to the census tract and the county sub-regions, yet there is no way for us to estimate the nature of this increase. So the numbers should be treated as estimates and not definitive numbers.

undocumented immigrants, and thus will not be eligible for the programs' expansion under the ACA, we used a residual method that compares the estimated number of undocumented residents to the estimated number of non-US citizens in the county as explained in the Equation # 1: *Proportion of undocumented non-U.S. citizens.* = (# of Undocumented) / (total non US Citizens)

The most recent estimate indicates that in 2008 there were about 62,000 undocumented immigrants in Monterey and San Benito Counties. 57 Additionally, the U.S. Census Bureau estimates the total number of non-U.S. citizens in these counties for 2008 to be approximately 95,310.58 These two figures introduced into equation 1 suggest that approximately 65% of all non-US citizens are undocumented immigrants in Monterey and San Benito Counties (62,000/95,310=0.65).

Taking into account the estimated proportion of non-US citizens that are undocumented immigrants, Table 6 presents the estimates of uninsured residents who will be eligible to qualify for MediCal or HBE subsidies in 2014⁵⁹. As Table 6 shows, about 54,979 residents (about 61% of the total number of uninsured) in Monterey County are estimated to become eligible for one of these two ACA programs. Further, about 27,651 of these currently uninsured residents are estimated to become eligible for MediCal, and about 27,329 are estimated to become eligible for the HBE subsidies in 2014.

Table 6: Estimates of uninsured that will be eligible for ACA expansion based on income and migratory status.

County Region	Eligible for MediCal		Eligible for	Total	
	I≤133	133 <i≤138< th=""><th>138<i≤200< th=""><th>200<i≤400< th=""><th></th></i≤400<></th></i≤200<></th></i≤138<>	138 <i≤200< th=""><th>200<i≤400< th=""><th></th></i≤400<></th></i≤200<>	200 <i≤400< th=""><th></th></i≤400<>	
North Monterey	4,396	200	1,616	1,831	8,043
Salinas	9,367	635	4,337	5,154	19,493
Monterey Pen. + Big Sur	4,235	315	3,087	4,925	12,562
South Monterey	8,133	370	2,991	3,388	14,882
	26,130	1,520	12,031	15,298	54,979
Total Monterey	27,651		2'	54,979	

A sizable portion of the uninsured, however, will remain uninsured due to their immigration status. As Table 6 shows, an estimated 26,100 uninsured residents (about 29% of the total number of uninsured) who would have qualified for the new ACA programs based on income are likely to remain uninsured because of their immigration status. As Table 7 details, about 13,338 of those who are likely to remain uninsured due to immigration status would have qualified for

⁵⁷ Hill and Johnson, 2011

⁵⁸ US Census, 2006-2008 American Community Survey 3-Year Estimates, table B05001.

⁵⁹ The proportion of undocumented immigrants (65%) was applied equally to the estimate of non-us citizens across different income groups and geographic sub-regions. This assumes that the undocumented to total non-citizen ratio is constant across income groups and region. It is also important to note that the estimate excludes individuals on temporary visas and assumes that all uninsured but documented non U.S. citizens are permanent residents.

MediCal based on their family income (incomes up to 138% of the FPL) and about 12,762 would have qualified for the HBE subsidies in 2014. The estimates at the sub-region level reveal important differences: in the Salinas area, for example, about 35% of the uninsured (about 11,615) could have qualified for a program based on their income, but will not due to their immigration status. On the other hand, on the Peninsula and Big Sur area 27% of the uninsured (about 5,005) will not qualify for ACA programs due to their immigration status.

Table 7: Estimates of uninsured who will NOT qualify for ACA expansion programs due to Immigration status

County Region	In	Total			
	I≤133	133 <i≤138< th=""><th>138<i≤200< th=""><th>200<i≤400< th=""><th></th></i≤400<></th></i≤200<></th></i≤138<>	138 <i≤200< th=""><th>200<i≤400< th=""><th></th></i≤400<></th></i≤200<>	200 <i≤400< th=""><th></th></i≤400<>	
North Monterey	1,435	149	981	761	3,326
Salinas	6,317	299	2,448	2,551	11,615
Monterey Pen. + Big Sur	2,020	189	1,101	1,695	5,005
South Monterey	2,654	275	1,815	1,409	6,154
Total Monterey	12,425	913	6,346	6,416	26,100
Total Monterey	13,338		12,7	26,100	

Capacity for Expansion of Safety Net System of Primary Care Providers in Monterey County

Two sources of data were used to estimate the county's safety net capacity: The 2011 Office of Statewide Health Planning and Development's (OSHPD) database on primary care providers, and the results of a survey of safety net providers in Monterey County implemented in September 2012. A total of 24 primary care providers shown in Table 8 responded to the survey and provided data on their current staffing and expansion plans among other questions⁶⁰. Survey items that were not answered by providers regarding current levels of staffing were completed using data reported by the providers to OSHPD in their 2011 reports.

⁶⁰ All of the safety-net primary care providers identified in phase I of this study responded to the survey. We are extremely grateful for their commitment and collaboration to this study.

Table 8: Respondents of safety net primary care provider's survey⁶¹

Provider Group	Location/provider	# of sites surveyed
Monterey County Health Department	Laurel (Salinas)(4), Seaside, Marina, Alisal	7
Clínica de Salud del Valle de Salinas	Salinas, Sanborn, Alvin, Castroville, Chualar, Soledad, King City, Greenfield	8
Planned Parenthood	Seaside, Salinas, Greenfield	3
Other	Big Sur, Gonzalez, Soledad, Natividad, G.L.Mee, SPLG (Seaside)	6
TOTAL		24

The 24 primary care providers in the Monterey County safety net reported being staffed by the equivalent of 60.59 full-time physicians and the equivalent of 36 full-time mid-level practitioners (physician assistants and nurse practitioners). The distribution of physicians and mid-level practitioners by region is presented in Table 9. The figures presented in Table 9 represent current levels of supply for services in the safety net system by region. However, in order to assess the possibility of added capacity given the anticipated expansion of health insurance coverage under ACA, providers were asked for the approximate number of "extra physicians and mid-level practitioners that could be added to the site without making any changes to the facility or modifying the sites' hours of operation." The reported potential additional capacity by region is presented in Table 10.

Table 9: Safety Net System's Current FTE Staffing Capacity

Region	Providers	Current level of providers (FTE)		
		Physicians	Mid-level*	
North Monterey	1	0.84	0.80	
Salinas	11	26.37	14.17	
Monterey Pen. + Big Sur	5	16.40	5.90	
South Monterey	7	16.98	15.13	
Total Monterey	24	60.59	36.00	

^{*} Mid-level provider includes physician assistants and nurse practitioners

As Table 10 shows, the system could add the equivalent of about 7.2 full-time physicians and 8.95 mid-level practitioners given their current space and hours of operation. Using a standard panel⁶² of 2,000 patients per physician and 1,000 patients per mid-level practitioner per year, these results suggest that the system has enough existing physical space and operational capacity to accommodate 23,350 new patients without making any changes to their facilities or hours of

⁶¹ The operational definition of a safety net clinic for inclusion in the survey included only clinics/providers that receive payments from local, state, or federal programs to serve low income individuals and report a paid physician on site.

⁶² Central Coast Alliance for Health (2012)

operation. When looking at the sub-regional level, the estimates suggest that the North Monterey County area has no space to add any physicians or mid-level practitioners given their current facilities. On the other hand, providers in the Monterey Peninsula/Big Sur, South Monterey County, and Salinas areas report having enough space to add the physicians and mid-level practitioners sufficient to attend an extra 8,600, 8,750, and 6,000 patients respectively.

Table 10: Potential additional capacity given hours of operation and physical space

Region	Potential addition in facility of	Potential additional # of	
	Physicians	patients*	
North Monterey	0	0	0
Salinas	1	4	6,000
Monterey Peninsula and Big Sur	2.2	4.2	8,600
South Monterey	4	0.75	8,750
Total Monterey	7.2	8.95	23,350

^{*} Mid-level provider includes physician assistants and nurse practitioners

Table 10 shows that safety net providers report some room for growth given their current space and hours of operation. An analysis of whether this additional projected capacity will be sufficient to accommodate the estimated demand from additional newly insured patients in 2014 is a question that we turn to in the following section.

Analysis of the SNP System's Capacity Under Three Different Scenarios of Demand

This section explores the question of system capacity to respond to the projected new demand for services from the newly insured in 2014. We begin the analysis with the assumption that the levels of supply presented in table 6 represent "equilibrium" levels in which there is no slack in the system when it comes to staffing and thus any added demand to the system would require (other things being equal) additional levels of supply. In other words, we assume that providers in the safety net system are attending the maximum number of patients they can attend given their staffing level and, other things being equal, expanding services to additional patients would require additional physicians and/or mid-level practitioners.

Forecasting future demand for health services for the newly insured under the ACA involves three unknowns about the number of new patients seeking services after 2014:

^{**}Using panel of 2,000 patients per FTE physician and 1,000 patients per FTE mid-level practitioner.

⁶³ This assumption is standard in current models of physician requirements. For more information see Demand/Utilization-based approach physician requirements models in HRSA (2008)

- 1) The proportion of newly eligible individuals who will actually enroll in MediCal or in the HBE:
- 2) The proportion of MediCal and HBE enrolled individuals who actually seek services in the safety-net system and
- 3) The proportion of newly insured patients who are not new to the system (those who already use the safety-net system paying for services in cash and thus are not new patients

This section presents three scenarios that represent different assumptions about these unknowns. Figure 7 presents a summary of the different levels of demand under each scenario described in this report.

Scenario # 1 Scenario # 2 Scenario #3 Newly eligible Newly eligible who are new to All newly eligible who are new to the system that the system enroll and seek services 41,235 54,980 20,618 new patients new patients new patients

Figure 7: Demand levels under the three scenarios considered

Scenario #1: All of the newly eligible seek services and all are new to the safety-net system

This scenario assumes that all newly eligible individuals for both MediCal and HBE programs enroll into one of the new programs and seek services in the safety net system, and that all are new to the system (i.e. have never been treated in the safety net system). Thus, this scenario assumes the maximum possible new demand given our estimates of eligible individuals in the

county. Table 11 breaks down this scenario by region. The first two columns in the table show how many new patients would be expected to enter the system under this scenario and how many physicians would be required to accommodate this additional demand (assuming a standard panel calculation). The third and fourth columns in the table present the providers' reported capacity to accommodate new patients without adding to the systems' available physical space or hours of operation. The fifth and sixth columns present the difference between the number of new patients expected under the scenario and the available reported space that could be used to accommodate new patients without adding to the system's hours of operation or physical space in terms of patients and physician FTE respectively.

Table 11: Scenario # 1 – Projected new demand, physician requirements, and gaps in capacity if all newly eligible seek services and all of them are new to the safety-net system

	•	l new demand scenario #1	Reported extra capacity available		GAP in capacity*	
Region	New patients	Physician FTE needed to cover new demand	Patients**	FTE	Patients	FTE
North Monterey	4,596	2.3	0	0.0	-4,596	-2.3
Salinas	19,494	9.7	6,000	3.0	-13,494	-6.7
Peninsula & Big Sur South Monterey	12,562	6.3	8,600	4.3	-3,962	-2.0
County	14,880	7.4	8,750	4.4	-6,130	-3.1
Monterey county	54,980	27.5	23,350	11.7	-31,630	-15.8

^{*} The gap represents the difference between the demand and the reported extra FTE capacity. A negative sign represents a deficit in physical space to accommodate the projected demand under the demand scenario.

** Number of patients who could be served, based upon the standard panel calculation of 2,000 patients per FTE physician.

As Table 11 shows, if all individuals eligible for the expansion of MediCal and HBE programs under the ACA were to seek services in the safety net system and all of them accessed the safety net, the system at the county level would face a new demand of 54,980 patients that would require the equivalent of an additional 27.5 full time physicians. The safety net providers report that they have enough space to accommodate 11.7 extra FTE physicians (who could serve an additional 23,350 patients) given their current facilities and hours of operation. Therefore, under this scenario, the county-wide safety net system would experience a gap of the equivalent of 15.8 additional full-time physicians. Whereas all regions would experience gaps under this scenario, Salinas' gap is about three times as high (6.7 FTE physicians) as is the Peninsula's (2.0 FTE physicians).

Scenario #2: All newly eligible seek services, but only 75% are new to the safety net system

The system of safety net providers in Monterey County served about 19,475 uninsured patients (about 20% of all patients) in 2010.⁶⁴ We estimate that about 70% (or about 14,000) of these patients will become eligible for insurance under the ACA programs.⁶⁵ This number represents about 25% of the total number of estimated newly eligible (14,000/54,980=0.25). Using this estimation, this scenario considers that about 25% of individuals who will become eligible for MediCal or the HBE may already be counted in the safety-net system as self-paying patients, so they would not represent new patients to the system. Table 12 shows how many patients would be expected to seek services if all eligible individuals for MediCal and HBE subsidies seek services in the safety net, but assumes that only 75% of them are "new" to the system. The first two columns in the table show how many "new" patients would be expected in the system and how many new physicians would be required to serve them. Columns 3 and 4 show the reported capacity for expansion, and columns 5 and 6 show the expected shortages to accommodate the 'new" demand.

Table 12: Scenario # 2 – Projected new demand, physician requirements, and gaps in capacity if all newly eligible seek services in the safety-net, but only 75% are new to the system

Region	Projected new demand under scenario #2		Reported extra capacity available		GAP in ca	GAP in capacity	
	New patients	Physicians FTE to cover new demand	Patients	FTE	Patients	FTE	
North Monterey	3,447	1.7	0	0.0	-3,447	-1.7	
Salinas	14,621	7.3	6,000	3.0	-8,621	-4.3	
Peninsula & Big Sur South Monterey	9,422	4.7	8,600	4.3	-822	-0.4	
County	11,160	5.6	8,750	4.4	-2,410	-1.2	
Monterey county	41,235	20.6	23,350	11.7	-17,885	-8.9	

^{*} The gap represents the difference between the demand and the reported extra physical capacity. A negative sign represents a deficit in physical space to accommodate the projected demand under the demand scenario.

Table 12 shows that if all eligible individuals for the expansion of MediCal and HBE programs under the ACA who had never visited the safety net system before were to seek services, Monterey County could expect about 41,235 new patients in its system (54,980*0.75=41,235).

⁶⁴ This figure represents the number of patients seen by the system under the self-pay sliding fee modality (see table 21 in phase I report.

⁶⁵ Our estimates suggest that 30% of the uninsured in the county will not be eligible due to their immigration status as explained in the previous section.

41,235 new patients would require the equivalent of about 20.6 extra full-time physicians to be served, and the system would experience a gap of the equivalent of 8.9 additional full-time physicians. Whereas all regions would experience gaps under this scenario, Salinas would face the most significant gap (4.3 FTE physicians) while the Peninsula area would face the smallest gap (0.4 FTE physicians).

Scenario #3: About half (50%) of newly eligible seek services in the safetynet and only 75% are new to the system

In a recent study, the Colorado Health Institute (2001) estimates that, on average, the equivalent of about 60% of the newly insured under the ACA are expected to seek primary care services. Considering that about 80% of all patients insured by MediCal are served by the safety net system in Monterey County, this translates into roughly 50% of the newly insured who may visit the safety net clinics⁶⁶. Taking into consideration that about 25% of the newly insured are already in the system, as explained in the previous scenario, the county could expect about 38% of newly eligible patients under ACA to seek services in the safety net system as new patients.

Table 13 presents the demand scenario in which about 50% of newly eligible individuals enroll in one of the programs under the ACA and seek services within the safety net system as new patients. Under this scenario an expected 38 % of these represent actual new patients to the system.

Table 13: Scenario # 3 – Projected new demand, physician requirements, and gaps in capacity if half (50%) of newly eligible seek services in the safety-net and only 75% are new to the system

Region	Projected new demand under scenario #3		Reported extra physical capacity available		GAP in physical capacity	
	New patients	Physicians FTE to cover new demand	Patients	FTE	Patients	FTE
North Monterey	1,724	0.9	0	0.0	-1,724	-0.9
Salinas	7,310	3.7	6,000	3.0	-1,310	-0.7
Peninsula & Big Sur South Monterey	4,711	2.4	8,600	4.3	3,889	1.9
County	5,580	2.8	8,750	4.4	3,170	1.6
Monterey county	20,618	10.3	23,350	11.7	2,733	1.4

^{*} The gap represents the difference between the demand and the reported extra physical capacity. A negative sign represents a deficit in physical space to accommodate the projected demand under the demand scenario.

Page **52** of **83**

 $^{^{66}}$ The proportion of medical patients attended by providers in the safety net system (80%) was obtained from an analysis of the "Linkage Database" provided by the Central California Alliance for Health. The 50% estimate comes from multiplying $.8*.6 \sim .50$

As the first two columns of Table 13 show, the county could expect 20,618 new patients in the safety net system which would require the equivalent of 10.3 additional full-time physicians. The safety net providers report the ability to add about 11.7 additional FTE physicians without making any changes to system facilities or hours of operation. Thus, at the county level, the system shows sufficient space to accommodate the additional required FTEs. However, when looking at the county sub-regions, North Monterey and Salinas will likely lack space to accommodate physicians to meet the expected new demand (0.9 and 0.7 FTE physicians respectively). On the other hand, on the Peninsula and in South Monterey County providers report the ability to accommodate this additional demand without adding to their facilities or hours of operation.

Summary/Conclusions

Out of the total number of uninsured in the county, which is estimated at 90,221, about 61% (54,980) will be eligible for MediCal or HBE subsidies, an additional 29,100 (29%) will not qualify for any ACA programs due to their immigration status, and about 10% will not qualify for any of the ACA programs because their incomes are above 400% of the federal poverty line.

The system of safety net primary care providers in the county, comprised of 24 sites, reports a current capacity of approximately 60.6 FTE physicians and 36 FTE mid-level practitioners. As a system, the providers report their ability to add the equivalent of 7.2 FTE physicians and 8.95 FTE mid-level providers in their existing facilities that could serve about 23,350 new patients. This reported additional capacity, however, is concentrated in the Peninsula and South County areas.

In the extreme case of Scenario # 1 – that all newly eligible individuals seek services in the safety net system and all of them are new to the system – the safety net system would need to add the equivalent of 27.5 additional physicians to accommodate the new demand. Given the reported physical space, this addition would require a system-wide physical expansion to accommodate the equivalent of an extra 16.8 FTE physicians.

Under Scenario # 2 – that all newly eligible individuals seek services in the safety net system but only 75% of them are new to the system – the safety net system would need to add the equivalent of 21 additional physicians to cover the new demand, which, given the existing space, would require and a physical expansion to accommodate about 9 FTE physicians.

The most plausible Scenario # 3 takes into consideration the estimate that about 50% of the newly insured would seek services in the safety net and that 75% would be new patients to the system in 2014. Under this scenario, the County would need to add the equivalent of 1 FTE physician in North Monterey, 3.7 FTE physicians in Salinas, 2.4 in the Monterey Peninsula, and 2.8 physicians in South Monterey. Taking into consideration the available capacity in each region, both North Monterey and Salinas would experience a gap of approximately 1 FTE physician to accommodate the added demand in each area.

Further access and expansion issues faced by the primary care safety net system in Monterey County

The Safety Net Provider Survey provided important information on the challenges and opportunities faced by the primary care safety net system in the County as it prepares to accommodate the newly insured beginning in 2014. It is interesting to find, for example, that many survey respondents indicate that their clinics have plans for major changes in the next five years; most respondents claim that they are planning to add a new clinic facility at a new physical site, complete a major remodeling or facility expansion at an existing clinic, or shift to a patient-centered medical home model. Within the past five years, 80% of respondents report that they have already added new medical services within existing clinic sites.

While many clinic sites reported plans for physical expansion or have recently expanded, when asked about potential plans to meet increased demand, 44% of clinics reported that opening on Saturday or expanding existing Saturday hours was 'very likely'. Thirty-three percent of clinics reported that adding early morning hours (before 8am) was 'very likely,' and 24% of clinics reported that it was 'very likely' that evening hours would be extended. Twenty-five percent of respondents reported already planning on expanding early morning hours.

Although many clinic organizations within the Monterey safety net system have been growing and also have plans for further growth within the next five years, they identify many challenges for expansion including the recruitment of new physicians, especially recruiting and/or retaining family practice physicians, internal medicine physicians, psychiatrists, nurse practitioners, physician's assistants and registered nurses. On the other hand, clinic organizations reported having less difficulty with recruiting and/or retaining mid-level practitioners, and the least difficulty with recruiting and/or retaining medical assistants as shown in Table 14.

Table 14: Respondents rating recruiting and/or retaining for the position as "Difficult" of "Very Difficult"

Position	% of respondents rating recruiting and/or retaining for the position as "Difficult" of "Very Difficult"
Psychologists	100%
Psychiatrists	85%
Internal Medicine Physicians	79%
Registered Nurses	72%
Family Practice Physicians	71%
OB/GYNs	69%
MSW/LCSWs	50%
Nurse Practitioners	29%
Physician Assistants	20%
Licensed Vocational Nurses	20%
Dentists	18%
Community Health Workers/Promoto	res 8%
Medical Assistants	0%

Source: ICCS Safety Net Provider Survey, 2012

When asked specifically about the obstacles to growth, respondents report a number of challenges in planning for service delivery changes or other clinic expansion. Several respondents cited obstacles including excessive local bureaucratic red tape, lack of available space for expansion, and (lack of) water. Seventy-five percent of respondents, however, cited reimbursement issues as the major challenge, with one referring to a "reimbursement disconnect" with regard to unfunded mandates. Fifty percent of respondents indicated that there are numerous issues related to rural health clinic (RHC) reimbursements. RHC reimbursement rates are much lower than those of hospital-associated clinics, and RHC limitations make it difficult to obtain loans for expansion, new equipment and payment of new providers. One respondent noted that this makes it "difficult to keep doors open, let alone serve all the medical needs of a community."

Beyond the obstacles and challenges which affect the ability of the system to grow, providers identified many factors that tend to impede their patient population's access to services. While the lack of health insurance was identified by most respondents (80%) as a very significant problem, other barriers such as lack of adequate transportation, homelessness, lack of childcare, inflexible work schedules, and family conflicts were also identified as significant barriers for access as shown in Table 15.

Table 15: Barriers to obtaining healthcare services

Barriers	Very significant problem	Somewhat significant problem	Not a significant problem	Don't know	Response Count
Limited or no health insurance coverage	80%	16%	4%	0%	25
Lack of adequate transportation	60%	32%	4%	4%	25
Unstable employment/unemployment	60%	32%	4%	4%	25
Limited ability to pay for medical services	60%	36%	4%	0%	25
Inadequate housing/homelessness	52%	32%	16%	0%	25
Inflexible work schedule	52%	40%	8%	0%	25
Lack of childcare	44%	44%	12%	0%	25
Family conflict/difficulties	44%	32%	20%	4%	25

Source: ICCS Safety Net Provider Survey, 2012

An additional consideration when making decisions about system expansion is that of competition for patients between clinics and even though the study did not consider this aspect directly, it is an important consideration. With the expansion of MediCal and the introduction of the Health Benefit Exchanges insurance subsidies, the safety net system's reliance on MediCal funds as a large portion of revenues is likely to continue or even increase, so it is important for the system to consider payer mix when expansion plans are devised. As Table 13 presents, MediCal covered patients represented the highest proportion of patients served by the system in 2010 (44%), but they represented 56% of the system revenues. On the other hand, patients under "self-pay" and "private insurance" represented 19.6% of system patients, but only 7% of revenues.

Table 16: System Patient and Revenue Mix

Coverage Type	Patient Mix (%)	Revenue Mix (%)
Medicare	7.39	6.72
Medi-Cal	14.68	35.58
Medi-Cal - Managed Care	29.37	20.18
Healthy Families	2.19	3.01
Private Insurance	13.16	6.45
Self-Pay / Sliding Fee	19.55	7.15
Free	0.46	0.00
All Other Payers	13.21	20.91

Source: OSHPD Primary Care Utilization Data (2010)

This revenue mix highlights the possibility that in areas where the demand for services is adequately met by the supply of services, additional clinics that compete for MediCal patients could have an impact on the "average clinic" (which relies on MediCal for 56% of its revenues). This possibility highlights the need for a coordinated effort to plan for expansion.

Finally, all survey respondents indicated that establishing a safety net provider collaborative within county or regional boundaries and charging the collaborative with assessing needs and making joint decisions would facilitate the expansion of services for patients. Many respondents also stated that county-level guidance would be important, with the County Health Department or Board of Supervisors establishing rules and processes by which county-wide expansion could take place.

PRIVATE PHYSICIANS/MEDICAL GROUP PROVIDERS SURVEY RESULTS Service Provision and Access

Along with safety net clinics, individual medical groups and providers were also asked to participate in this study. While they serve a small proportion of the county's MediCal eligible population, they still play an integral role in meeting the health care demands of the under/uninsured and underserved populations of Monterey County. A total of 11 organizations representing 24 private practice sites operating in Monterey County responded to the survey, all of them located in the Salinas and Monterey Peninsula area, as presented in Table 17.

Table 17: Respondents to private provider survey

Provider	Region	Sites Represented
Peninsula Primary Care	Peninsula	2
Doctors on Duty	Peninsula/Salinas	6
Dr. Mario Pauda	Salinas	1
Edgar Castellanos	Salinas	1
Pediatric & Adolescent Medical Associates of the Pacific Coast	Salinas	1
Salinas Valley Pediatric Associates	Salinas	1
Valle Verde Medial Group	Salinas	1
Vilma R Aguas, MD	Salinas	1
Acacia Family Medical Group	Salinas/Prundale	2
Salinas pediatric medical group, Inc.	Salinas	2
Salinas Valley PrimeCare Medical Group, Inc.	Salinas	2
Total		20
Number of organizations		11

As shown in Table 17, most private providers who accept MediCal that responded to the survey are located in Salinas and the Monterey Peninsula areas with only one provider (Acacia Family medical Group) in the North Monterey (Prunedale) area. Figure 8 presents the geographic

distribution of private providers that responded to our survey, the Safety Net clinic providers, and the Hospital Emergency Departments in Monterey County.

Safety Net Provider
Emergency Department
Private Provider
Major Roads
ICCS Zone

General Valley Village

General Soledad

King City

King City

Figure 8: Private physicians and medical groups that accept MediCal patients

When asked about barriers to health care delivery, especially with regard to specialty referrals, 43% of respondents stated that issues with patient insurance are the biggest barriers. These issues include the fact that the specialty physician sometimes does not accept the patient's insurance, or that the patient does not have insurance coverage and cannot afford to pay out-of-pocket for specialty care. Other barriers cited included specialists not taking new patients, transportation problems for the patient, a lack of specialty providers in the area, and long wait times for an appointment.

Again, the issue of hours of operation was addressed, and all the private providers replied that they had opening times between 7:00am and 9:30 am with the majority opening their doors at 8:00 am. Most respondents stated that they were open on Saturday, and one office replied that they were open on Sunday as well. All of the respondents had a closing time between 4:00 pm and 6:00 pm, with the majority responding that they closed at 5:00 pm. All respondents listed

their lunch hour start time as 12:00 pm with lunch finish times varying evenly among respondents between 1:00 and 2:00pm. These responses very closely mirror those given by the safety net clinics.

When the private providers were asked whether their offices were ever closed during regular hours of operation, 40% of respondents replied "No, never", while 30% responded "Yes, rarely" and 30% responded "Yes, sometimes". Among the reasons given for office closure, "office meetings" and "provider illness/emergency" were most frequently cited. Again, these responses closely mirrored those given by the safety net respondents.

When asked whether a nurse advice line was available for patients, 20% responded with "yes". The remaining 80% of offices responded that, while there was no nurse advice line, a physician was on-call and available by phone for patients 24 hours per day 7 days per week.

As with the safety net clinics, private providers were asked questions regarding patients' ability to receive a timely appointment. When providers were asked within what periods of time patients were able to be seen after calling to make an appointment, the majority of respondents replied that urgent patients were able to be seen within two hours of calling. Many offices reported that "non-urgent, routine visits" (i.e., well-child exams, annual physicals) were able to be seen within 24 hours of calling. However, most offices reported that it took anywhere from 10 days to one month for patients in this category to be seen. Timeframes for "non-urgent, ongoing/chronic care" patients varied widely with slightly less than half of respondents reporting that patients in that category were able to be seen within 24 hours of calling, while the remaining offices reported that this group of patients could be seen anywhere from within 2 hours of calling to more than 1 month after calling.

Survey respondents were also asked about patient wait times once patients had arrived in the offices to the time they saw a practitioner. The majority of respondents reported that patients with appointments were seen between 15 and 30 minutes of arriving. Walk-in patients were reported to be seen anywhere from between 15 minutes to 1 hour. Nearly all respondents reported that urgent care patients were seen within 5 to 15 minutes.

Survey respondents were also asked about whether they were currently accepting new patients in a variety of payor categories. While a majority (92%) responded that they were accepting new private insurance and self-paying patients, slightly more than half (58%) were adding MediCare and less than half (42%) were accepting new Healthy Families patients. About a third indicted that they were currently accepting new MediCal patients (managed care or emergency MC) and fewer than a quarter (22%) were accepting new patients without a means to pay for services, (20%) Family PACT or (13%) County Indigent patients.

Private Provider Capacity and Expansion

The eleven organizations located in Salinas and the Monterey Peninsula area representing 24 sites responded to the survey of private providers. As Table 18 presents, the 24 sites reported having a total of 62 physicians and 9 mid—level practitioners. Half of the sites (12) responded that they are accepting new MediCal patients and these sites currently employ the equivalent of 12 full time physicians and 1 mid-level practitioner.

When asked about the possibility of adding new providers to their sites without expanding their facilities, the organizations that responded reported that they could add about 10 physicians and 1 mid-level practitioner. Sites that reported accepting new MediCal patients, however, reported that they could add only 1 physician and 1 mid-level practitioner given their facilities' current space.

Table 18: Current FTE, Possible Expansion, & Capacity to attend new MediCal patients (Monterey County

Are you accepting new Medi-Cal Managed Care patients?	Sites	Curr	ent FTE	Possible Additional FTE		
		Physicians	Mid-level practitioners	Physicians	Mid-level practitioners	
NO ANSWER	4	16	5	3	0	
Don't know	2	6	0	0	2	
No, we are not accepting new patients and will not in the future	3	4	0	2	0	
We are not accepting new patients, but expect to in the future	3	24	3	4	1	
Yes, we are accepting new patients	12	12	1	1	1	
Total	24	62	9	10	3	
Number of organizations	11	11	11	11	11	

Conclusions and implications of private providers' contributions to capacity

Private providers are not included in the safety net network because they have more freedom than clinics to choose the patients they see based on their insurance coverage. However, in 2012, private providers served about 20% of all MediCal recipients in Monterey County. This percentage was considered under capacity Scenario # 3, which assumes that private providers will continue to serve about 20 % of the newly insured patients under the A.C.A. This means that about 11,000 newly insured patients (includes MediCal and Covered California patients) could potentially seek services thorough private providers.

About 63% of the sites that responded to the survey stated that they are accepting new MediCal patients (13%) or plan to accept new MediCal patients in the future (50%). All of these sites were located in the Salinas and Monterey Peninsula areas, and they reported having the space necessary to add physicians and mid-level practitioners to service about 12,000 additional patients. These results suggest that if private providers see about 20% of the newly insured though the A.C.A., they would have enough space in the Salinas and Monterey peninsula area to hire the additional physicians required to cover the new demand. However, no private providers in the areas of north Monterey, South Monterey or the Big Sur area responded to our survey.

Emergency Departments as part of the Safety Net

Emergency Departments (EDs) are considered part of the safety net as, by law, they cannot turn patients away based on their ability to pay for services. In fact EDs are usually referred to as the ultimate safety net. Monterey County has four emergency departments that are part of the four major hospitals: Community Hospital of the Monterey Peninsula (CHOMP), George L. Mee Memorial Hospital, Natividad Medical Center (NMC), and Salinas Valley Memorial Hospital (SVMH). This section of the report combines OSHPD data from 2010 and responses from a 2012 survey of all EDs in Monterey County during to provide an overview of the system of EDs in their role as safety net providers. Survey respondents consisted of leadership personnel representing emergency departments in the major hospitals that serve residents of Monterey County.

Part I: Emergency Department Patient Characteristics

In 2010 the four EDs attended 121,862 visits and as Table 19 presents, the majority of those visits (23.5%) involved patients between 20 and 34 years of age. The ED at CHOMP had a slightly higher proportion of patients in the 65 and over age group (17% compared to less than 11% in the other three) and a lower proportion of child patients below the age of 5 (13% compared to more than 21% in the other three) which was expected given the demographic distribution in each region of the county.

⁶⁷ Ong Eng Hock, et al. (2005).

Table 19: Total visits by age and ED unit

Age	СНОМР	%	GEORGE L. MEE	%	NATIVIDAD	%	SALINAS Valley	%	Total	%
Under 1 year	1,330	3.5	673	7.2	2,889	7.5	2,094	5.8	6,986	5.7
1 - 4 years	3,647	9.7	1,576	16.9	5,605	14.5	5,543	15.4	16,371	13.4
5 - 12 years	2,804	7.4	961	10.3	3,596	9.3	3,771	10.5	11,132	9.1
13-19 years	3,170	8.4	936	10.1	3,843	9.9	3,449	9.6	11,398	9.4
20 - 34 years	8,350	22.1	2,575	27.6	10,092	26	7,596	21.1	28,613	23.5
35 - 44 years	4,125	10.9	951	10.2	4,750	12.3	3,845	10.7	13,671	11.2
45 - 64 years	7,875	20.9	1,068	11.4	6,513	16.8	5,730	15.9	21,186	17.4
65 and over	6,428	17	600	6.4	1,467	3.8	4,010	11.1	12,505	10.3
Total	37,729	100	9,340	100	38,755	100	36,038	100	121,862	100

Out of the total number of visits, 29% involved patients whose social security number could not be collected and were not assigned an individual identifier⁶⁸. The total number of visits for patients who were assigned a unique identifier reached 86,238 in 2010 and as Table 20 presents, out of the total number of visits about 28% corresponded to patients who visited the ED once. Further, about 14% of visits corresponded to patients who attended the ED 5 times or more in 2010. When looking only at patients who received a unique identifier, patients that visited the emergency department 5 times or more in 2010 represented about 20% of all visits (17,545/86,238*100=20).

Table 17 also presents differences, in terms of patient visits, across the region's EDs in terms of patient visits. While CHOMP and Salinas Valley EDs presented the lowest numbers of patients who did not disclose their Social Security numbers (21% and 25% of all their visits respectively), Natividad and George L. Mee Memorial attended the highest relative number of visits for patients who did not disclose their social security numbers (44% and 37% of all patients respectively). Furthermore, out of the visits involving patients who disclosed the social security numbers, Natividad had the highest proportion of visits from patients who visited the ED more than 4 times in 2010 (25%)⁶⁹. On the other hand, George L Mee Memorial had the lowest proportion of patients who visited their ED 5 times or more in a year when considering patients who disclosed their social security number (15%)⁷⁰.

⁶⁸ OSHPD requires provision of the social security number to produce a unique identifier resulting from the encryption of such number. Patients who do not provide a social security number are not assigned an identifier and therefore cannot be tracked.

⁶⁹ The total number of patients with valid social security numbers in the data for Natividad was 24,302. 6160/24302=0.25

⁷⁰ The total number of patients with valid social security numbers in the data for G. L. MEE was 5,217. 763/5,217=0.15

Table 20: Total number of visits in 2010 by hospital emergency department

			GEORGE				SALINAS			
Visits	CHOMP	%	L. MEE	%	NATIVIDAD	%	VALLEY	%	Total	%
1	12,687	33.6	2,726	29.2	8,097	20.9	11,098	30.8	34,608	28.4
2	5,930	15.7	998	10.7	5,124	13.2	5,602	15.5	17,654	14.5
3	3,412	9.0	458	4.9	3,000	7.7	3,417	9.5	10,287	8.4
4	1,968	5.2	272	2.9	1,921	5.0	1,983	5.5	6,144	5.0
5 or more	5,663	15.0	763	8.2	6,160	15.9	4,959	13.8	17,545	14.4
No SS# to track*	8,069	21.4	4,123	44.1	14,453	37.3	8,979	24.9	35,624	29.2
Total visits	37,729	100.0	9,340	100.0	38,755	100.0	36,038	100.0	121,862	100.0

In order to obtain a sense of ED perceptions of ED use by frequent users, ED units were asked about the percentage of patients that could be cataloged as "frequent users of the ED". Table 18 results show that three of the four EDs reported that 25% or less of their patients were considered "frequent users" and one ED reported that between 26% and 50% of their patients used their ED "frequently. The distribution is presented in Table 21.

Table 21: Frequency distribution to survey question: What percentage of Emergency Department patients would you consider to be repeat or frequent ED users?

% of patients who are "frequent users" of the ED	Emergency Departments
0-10% of patients	1
11-25% of patients	2
26-50% of patients	1

Source: Emergency Department Survey, September 2012

Table 19 presents a distribution of expected payer sources for visits by total patient visits. About 41% of all ED visits expected to be covered by MediCal in 2010. About 15% of all ED visits in the county were expected to be covered by self-pay patients and about 20% were expected to be covered by private insurance. Table 19 also reveals that the payer mix varies considerably across different patient types. Patients with 5 or more visits in the year (frequent users) were more likely to be covered by MediCal than visits for patients who attended the ED once (46% compared to 22%). Similarly, patients who visited the ED once in the year were more likely to be covered by private insurance than patients who visited the ED more than 4 times (31% compared to 9%).

Table 22: Visits by expected payer sources and total number of patient visits

	1 vis	it	2 visi	its	3 vis	its	4 vi	sits	5 or n		Unknow visit		Tota	1
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Self-Pay	5,535	16.0	2,733	15.5	1,464	14.2	926	15.1	2,804	16.0	5,387	15.1	18,849	15.5
MediCare	5,901	17.1	3,300	18.7	1,959	19.0	1,010	16.4	3,426	19.5	70	0.2	15,666	12.9
MediCal Private	7,690	22.2	6,221	35.2	4,372	42.5	2,881	46.9	8,118	46.3	20,585	57.8	49,867	40.9
Insurance	10,826	31.3	3,462	19.6	1,636	15.9	741	12.1	1,532	8.7	5,855	16.4	24,052	19.7
Other	4,656	13.5	1,938	11.0	856	8.3	586	9.5	1,665	9.5	3,727	10.5	13,428	11.0
Total	34,608	100	17,654	100	10,287	100	6,144	100	17,545	100	35,624	100	121,862	100

Interestingly, the percentage of self-pay patients (who are most likely uninsured) was similar across patient visits. As Table 22 shows, the percentage of self-pay patients who visited the ED once during the year was identical to the percentage of the self-pay patients who visited the ED more than 4 times during the year. This finding is important as it seems to contradict a misconception that frequent users are most likely to be uninsured. Our findings show that frequent users are not more likely to be uninsured than non-frequent users, but they are more likely to be covered by MediCal and less likely to be covered by private insurance than non-frequent ED users. These findings corroborate recent literature suggesting that frequent patients' visits to the ED are more likely to be paid by MediCaid than visits from non-frequent patients .⁷¹

For the total ED visits in the system, the 25 most frequent diagnoses represented about 35% of all visits in the year. Table 23 presents the diagnoses in order of relative frequency. As the table presents, the most frequent diagnosis for the four EDs combined was "acute upper respiratory infections," abdominal pain, otitis media, fever, and urinary tract infections. These five diagnoses represented about 14% of all visits to the ED system in 2010.

-

⁷¹ Castillo, et.al, (2012)

Table 23: Distribution of the 25 most frequent diagnoses for visits to the Monterey ED units for 2010 (ICD9 diagnosis codes 2010)

Rank	Diagnosis	#	%
	465.9 Acute upper respiratory infection of unspecified		
1	site	5,213	4.3
2	789.00 Abdominal pain unspecified site	3,212	2.6
3	382.9 Unspecified otitis media	3,207	2.6
4	780.60 Fever	2,860	2.3
5	599.0 Urinary tract infection (site not specified)	2,313	1.9
6	784.0 Headache	2,284	1.9
7	490 Bronchitis (not specified as acute or chronic)	1,752	1.4
8	786.50 Chest pain (site not specified)	1,706	1.4
9	787.03 Vomiting alone	1,636	1.3
10	724.2 Lumbago	1,509	1.2
11	486 Pneumonia, organism unspecified	1,505	1.2
12	V58.89 Other specified aftercare	1,442	1.2
	558.9 Unspecified non-infectious gastroenteritis and		
13	colitis	1,331	1.1
14	462 Acute pharyngitis	1,313	1.1
15	346.90 Migraine, unspecified	1,191	1.0
16	493.92 Asthma unspecified with (acute) exacerbation	1,080	0.9
17	463 Acute tonsillitis	1,047	0.9
18	466.0 Acute bronchitis	1,042	0.9
19	648.93 Other current conditions-Antepartum	1,033	0.8
20	786.59 Chest pain (not elsewhere classifiable)	1,027	0.8
21	959.01 Head injury not specified	1,021	0.8
22	300.00 Anxiety state not specified	1,016	0.8
23	780.2 Syncope and collapse	989	0.8
24	V58.32 Encounter for removal of sutures	974	0.8
25	883.0 Open wound of finger	971	0.8
Total v	risits 121,862		

Emergency Departments' relation to Safety Net Primary Care Providers

Results from our survey of EDs indicate that the safety net primary care network in Monterey County is closely linked to the EDs. Survey results show that three out of four EDs answered this question and identified a safety net clinic as their main source of referrals to the ED (the 4th ED did not answer the survey question). Similarly, 2 out of the 4 EDs identified a safety net clinic as the place where they refer most of their ED patients. However, when asked if their ED unit had a

formal agreement of referrals with primary care clinics, 3 out of 4 ED units responded that they did not have one in place. Further, 50% of respondents also stated that referrals are a major issue; some are unable to refer patients back to primary care or have difficulties with this process.

Emergency Department System Capacity

While there are many ways to measure capacity in an ED, all of the ED units in the system responded that they measure capacity in terms of available beds and physicians. Given their own definition of capacity, two out of four EDs responded that they are working at or above full capacity in a given day and the other two reported working at between 75% and 99% of their capacity. All of the EDs reported that a physician can see a patient regardless of diagnosis in less than 30 minutes of the time of arrival to the ED unit, and 2 ED units report that they can see patients requiring urgent care in less than 5 minutes after arrival to the ED. Additionally, 3 out of 4 ED rooms report that they have a "fast track" protocol to serve patients whose conditions are more appropriate for a primary care center than the Emergency Department.

When asked about strategies being implemented to reduce the number of Ambulatory Care/Special Conditions (ACSC) visits to emergency departments, answers varied from implementing a Rapid Medical Evaluation (RME) area (ED "fast track"), to expanding the hours that the RME area is available. One respondent replied that their hospital has implemented a patient satisfaction survey with every ED discharge which specifically asked patients to identify their reasons for using the emergency department at that time. The respondent commented that this approach has given them valuable data that they can use to develop further plans to reduce the number of ACSC visits.

When asked what types of interventions would be effective in reducing ACSC visits to EDs, respondents replied that support for expanded hours of primary care clinics would help greatly. One respondent replied that making social workers/social services more available to patients would help reduce the number of ACSC visits and one other respondent replied that educating the public about the purpose of the emergency department and how it should be accessed would help.

Part II. Emergency Departments and the Uninsured

ED units represent the provider of last resort in the safety net system. By law, EDs must treat visits regardless of patients' ability to pay and they are opened 24 hours a day. ⁷² In 2010, the four EDs in Monterey County attended about 19,000 visits for patients who were self-pay (which

-

⁷² Ong Eng Hock, et al (2005)

most commonly applies to the uninsured). These represented about 15.5% of the total annual ED visits. Table 21 presents the number of visits by payer type for the 4 EDs in the county. As the table presents, the Natividad ED attended the highest relative percentage of self-pay patients (20%) while Salinas Valley ED attended the lowest relative percentage of self-pay visits.

Table 24: Total visits by expected payer and ED unit

	CHO	GEORGE L.				SALINAS				
	CHO	MP	ME	E	NATIVIE	DAD	VALL	ΕY	Tot	al
	#	%	#	%	#	%	#	%	#	%
Medicare	7193	19.1	716	7.7	2510	6.5	5247	14.6	15666	12.9
Medi-Cal	10281	27.2	1271	13.6	21611	55.8	16704	46.4	49867	40.9
Private Insurance	9,018	23.9	1,472	15.8	4,215	10.9	9,347	25.9	24,052	19.7
Self-Pay	5,956	15.8	1,534	16.4	7,773	20.1	3,586	10.0	18,849	15.5
ALL other	5,281	14.0	4,347	46.5	2,646	6.8	1,154	3.2	13,428	11.0
Total	37,729	100	9,340	100	38,755	100	36,038	100	121,862	100

Source: OSHPD Emergency Department Data, 2010

The age distribution of self-pay patients presented in Table 25 reveals that about 41% of self-pay patient visits in 2010 were between the ages of 20 to 34. An additional 42% of visits for self-pay patients involved patients between the ages of 35 to 64 years of age. These two age groups had significantly higher representation of visits under the self-pay category when compared to the overall age distribution of patient visits to the ED. In fact, when comparing the age distribution of uninsured patient visits to the ED in Table 25 to the overall age distribution of patient visits to the ED in 2010 presented in Table 19, the percentage of visits in these age groups for self-pay visits was 30 percentage points higher than the percentage of the overall patient's visits in these age groups to the ED system (82% compared to 52%)...

Table 25: Self-pay patient visits to EDs by age and gender

Age	Female	%	Male	%	Total	%
Under 1 year	121	1.38	188	1.87	309	1.64
1 - 4 years	338	3.84	446	4.44	784	4.16
5 - 12 years	296	3.36	364	3.62	660	3.5
13-19 years	802	9.12	708	7.05	1,510	8.01
20 - 34 years	3,476	39.5	4,368	43.47	7,844	41.61
35 - 44 years	1,560	17.73	1,868	18.59	3,428	18.19
45 - 64 years	2,108	23.96	2,040	20.3	4,148	22.01
65 and over	98	1.11	68	0.68	166	0.88
Total	8,799	100	10,048	100	18,849	100

Source: OSHPD Emergency Department Data, 2010

Even though we find no evidence suggesting that frequent users are more likely to be uninsured (self-pay) than non-frequent users of the ED, we find some differences between uninsured and insured frequent patients in the diagnoses for which these patients are treated in the ED. Table 23 shows the top 25 diagnoses for frequent users or those patients using the ED 5 or more times in a year. The left panel of the table shows visits for patients with frequent visits that report having some type of coverage, while the right panel shows visits for patients with frequent visits under the category of self-pay. The top 25 diagnoses for the uninsured and insured frequent users represented about 46% and 42% of all visits for these two groups respectively in 2010.

As Table 26 shows, uninsured (self-pay) frequent users are more likely to use the ED for follow-up type visits. In fact specified aftercare and prescription comprise about 6% of all visits for uninsured frequent ED users while they represent less than 3% of all visits for insured frequent visitors. Finally, Table 26 suggests that uninsured (self-pay) frequent users are also relatively more likely to visit the ED for substance abuse related diagnoses (alcohol abuse, and drug withdrawal effects) than insured frequent users.

Table 26: Use of emergency departments by frequent users self-pay patients vs. insured patients

	Patients with some type of coverage visiting the E more times in 2010	R 5 or	Self-Pay patients visiting the ER 5 or more time 2010	nes in
Rank	diagnosis	% total visits	diagnosis	% total visits
1	789.00 Abdominal pain unspecified site	4.1	789.00 Abdominal pain unspecified site	4.5
2	338.29 Chronic pain (not elsewhere classifiable)	3.5	346.90 Migraine, unspecified	3.9
3	346.90 Migraine, unspecified	3.4	784.0 Headache	3.7
4	724.2 Lumbago	3.1	V58.89 Other specified aftercare	3.4
5	784.0 Headache	2.8	305.00 Alcohol abuse-unspecified	3.0
6	465.9 Acute upper respiratory infect. unspec. site	2.3	724.2 Lumbago	2.6
7	599.0 Urinary tract infection (site not specified)	2.0	338.29 Chronic pain not elsewhere classifiable	2.5
8	724.5 Backache (site not specified)	1.8	724.5 Backache unspecified	2.4
9	300.00 Anxiety state (not specified)	1.7	V68.1 Issue repeat prescription	2.1
10	V58.89 Other specified aftercare	1.7	493.92 Asthma unspecified with acute exacerbatin	1.8
11	786.50 Chest pain (not specified)	1.4	682.3 Cellulitis of arm	1.5
12	490 Bronchitis (not specified)	1.3	300.00 Anxiety state (not specified)	1.3
13	789.06 Abdominal pain epigastric	1.2	292.0 Drug withdrawal	1.3
14	648.93 Other current conditions-Antepartum	1.1	847.0 Sprain of neck	1.2
15	493.92 Asthma unspecified with acute exacerbation	1.1	786.50 Chest pain (not specified)	1.2
16	729.5 Pain in limb	1.1	465.9 Acute upper respiratory infect. unspec. site	1.2
17	382.9 Otitis media site not specified	1.0	682.6 cellulitis of leg	1.1
18	780.60 Fever (not specified)	1.0	525.9 Dental disorder not specified	1.1
19	V68.1 Issue repeat prescription	1.0	789.06 Abdominal pain epigastric	1.1
20	787.03 Vomiting alone	0.9	682.2 cellulitis of trunk	1.0
21	786.59 Chest pain (not elsewhere classifiable)	0.9	847.2 Sprain lumbar region	0.9
22	338.19 Acute pain (not elsewhere classifiable)	0.9	V64.2 No procedure because of patient decision	0.9
23	525.9 Dental disorder not specified	0.9	599.0 Urinary tract infection (site not specified)	0.9
24	789.09 Abdominal pain other specified site	0.8	291.81 Alcohol withdrawal	0.9
25	462 Acute pharyngitis	0.8	729.5 pain in limb	0.9
		41.8		46.1

Part III: Expansion and Capacity Issues Regarding the Emergency Department system

All EDs that responded to the survey identified obstacles which impede the ability of the local health care system to expand to meet projected growth and local health care needs that affect their EDs. These obstacles included: financial barriers, a lack of doctors accepting Medi-Cal or

self-pay patients, long delays in getting patients into clinics, space limitations and a need for greater access to primary and mental health care for the uninsured or underinsured.

Further, Respondents identified several ways in which recent government legislation or regulations have affected their hospital's viability or vulnerability. One respondent stated that "regulations often impede health care delivery", while another explained that legislation "will significantly impact (the hospital) as more patients will seek (emergency services) and we will see lower reimbursement through ACA exchange rates with commercial patients vacating their current plans." Another respondent identified that the Affordable Care Act has already impacted the Emergency Department since more children can stay on their parents' insurance plan and more children now have coverage.

When asked about which measures could benefit patients as the ACA is implemented, all of the respondents identified having a strong collaborative of safety net providers at the county level as "useful" or "very useful", additionally all of the respondents believe that clearer rules to guide expansion would be "very useful" as shown in Table 27.

Table 27: ED respondent opinions on strategies to facilitate expansion of services

As health care reform increases the number of insured patients throughout the county/region, please indicate how important you think the following might be in facilitating the expansion of services for patients.

Answer Options	Percentage that identified this measure as "useful" or "very useful"
Providers within a county geographic boundary establish a collaborative of safety net providers to assess need and make joint decisions	100%
State level guidance: California Department of Health Services establishes a process/set of rules to guide expansion	100%
Providers establish a regional collaborative of safety net providers to assess need and make joint decisions	75%
Federal level guidance: establishes a process/set of rules to guide expansion	50%
County level guidance: Health Department/Board of Supervisors establishes a process/set of rules by which county-wide expansion can take place	50%
Free market process allows any clinic/practice/provider group to expand to meet demand without government interference	25%

Conclusions/Summary of Emergency Department findings

- The system of EDs, comprised by 4 EDs across Monterey County, served around 121,862 visits in 2010. At least about 14% of those visits involved patients who visited the ED 5 or more times during the year.
- Patients in the 20-34 years old age group were the most frequent group to visits the ED in 2010, accounting for about 30% of all visits. Among the uninsured (self-pay), the 20-34 years old group had the greatest representation of total visits (42%). There were not significant gender differences in the number of visits for uninsured patients.
- Frequent users are equally likely to be under the self-pay category than non-frequent users. But frequent users are more likely to be covered by MedCal than by private insurance.
- Patients covered by MediCal comprised the highest percentage of visits to the ED in 2010 (about 41%) while self-pay patients comprised about 15% of all visits.
- Although respondents report no formal agreements between the safety net primary care network and the system of EDs, the most common point of referral to the ED and the most common point of referral from the ED were identified as safety net primary care clinics.
- "Upper respiratory infection" was the most frequent diagnosis for the ED system comprising about 4.3% of all visits in 2010.
- Among frequent users of the ED, (5 times or more visits in a year), after care visits and prescription refills were in the top 20 most frequent diagnoses,
- Uninsured (self-pay) frequent users are more likely to use the ER for follow-up type visits than insured frequent users.
- Uninsured (self-pay) frequent users are also relatively more likely to visit the ED for substance abuse related diagnoses (alcohol abuse, and drug withdrawal effects) than insured frequent users.
- ED system in the county as a whole reports operating at almost full capacity, responses regarding their plans for expansion were varied.
- All ED in the county responded that a coordinated safety-net providers collaborative approach at the county level would facilitate planning for expansion and better service delivery.

PUBLIC MEETINGS: SUMMARY COMMENTS

As a part of the Phase III study, researchers held five public meetings throughout the county. The purpose of the public meetings was to provide the community with an opportunity to receive information about the preliminary findings and to provide researchers with initial impressions, concerns and questions. These public meetings drew a total of 79 stakeholders from across the county and from a wide variety of professions and backgrounds.

- The Castroville meeting, held at the Castroville library, drew six participantsemployees of local hospitals and the Monterey County Health Department (MCHD), among others.
- The Seaside meeting, held at the Oldemeyer Center, attracted a total of 41 attendees; dozens of community members, teachers, professors and students participated in the meeting, as well as employees from local nonprofit organizations, hospitals, clinics, MCHD and the Monterey County Department of Social Services, among others. This meeting was also attended by Monterey County Supervisor Jane Parker.
- The Salinas meeting, held at the Monterey County Health Department, drew 19 attendees including employees of MCHD, as well as employees of local clinics and hospitals and other interested community members.
- The Big Sur meeting, held at The Grange Hall, brought in four attendees including employees of the Big Sur Health Clinic as well as a local student.
- Nine attendees were present at the Catholic Church of St. John the Baptist in King City meeting, including employees of local hospitals, community service agencies, foundations and MCHD, as well as interested community members.

An analysis of the public comments from each location has been categorized under five general areas of concern which were voiced by meeting participants across the county.

Rising Costs of Healthcare

Constituents in both Seaside and King City raised concerns about the rising costs of healthcare in the U.S. and specifically, our local communities. Participants in Seaside argued that, while many people do have health insurance coverage, the deductibles are so high that many people are opting out of their health insurance plans. One participant indicated that local school districts have doubled insurance costs and increased deductibles to the extent that 2/3 of their employees have opted to drop their insurance; insurance in these districts will cover things like vaccine administration, but not the cost of the vaccine itself. Participants indicated that future research should investigate why these costs are rising so dramatically; they were also interested to find out what effect the uninsured are having on insurance premiums. In King City, participants indicated that we cannot afford to continue with the rising costs that many are currently

experiencing; a shift from using emergency services and urgent care to a more preventive approach to healthcare may help to reduce some of these costs.

Preventative vs. Urgent Care

Among both employees of the health field and those advocating their perspective as consumers, many participants in the public comment meetings mentioned the need for more focus on preventive care, encouraging patients to use a medical home or local clinics to meet their healthcare needs instead of emergency rooms.

In King City, there was mention of the need for a culture shift in which an educational campaign could encourage patients to use more low-cost healthcare options as opposed to "waiting until the last minute" to seek assistance and using urgent or emergency services. Others in the audience argued that there needs to be an analysis of the community in order to understand why emergency rooms are being used instead of primary care physicians; hypotheses ranged from the cost of primary care co-pays (even with insurance) to the familiarity of using emergency services to the convenience of these services (since the emergency room is open 24/7 as opposed to many local clinics).

In Salinas, audience members indicated the need for future research into the cost savings that might be gained if the community were to take a more preventive approach to healthcare. Although this might increase the demand on local clinics, this would be a better and more cost-effective solution than using emergency or urgent care services. Preventive services would ultimately improve the overall health of our communities and save on costs.

In Seaside, it was mentioned that although urgent care services are meant to be available for those with pressing medical needs, it still takes weeks to get an appointment, so patients might as well be using primary care services for their healthcare needs. Audience members also questioned the approach that is taken to healthcare in the U.S., asking why it is that we wait until patients are very sick to treat them instead of preventing health issues before they become serious.

Need for a Patient/Consumer-Side Assessment

Audience members at both the Seaside and King City meetings discussed their concerns about the lack of input from the community and consumers in our report. Participants from both cities advocated that we need to go to the people with our surveys in order to have a fair and balanced report. Participants stated that both from their experiences and anecdotally, patient experiences are much different than what is being depicted by providers; the capacity is much lower and the number of self-pay patients seems incorrect. Also, as a result of the recent recession, there are many local unemployment issues which are affecting access to healthcare, which a consumer-side survey should take into account.

Patients Seeking Care Across County Lines

Participants in both Seaside and Salinas indicated that further research must take into account those patients who cross county lines to obtain care. In Seaside, one audience member explained that, in discussing this issue with his doctor, the doctor indicated that he has approximately 23,000 patients from outside the county, and that there are likely many similar experiences in areas along county borders.

In Salinas, audience members explained that this issue is likely occurring in places like San Ardo and San Miguel; while patients may be going to King City for services, there are likely many individuals who drive to San Luis Obispo County to obtain healthcare as well.

Rural Access Issues

Audience members at each of the meetings indicated that there are issues with providing healthcare in rural areas of the county. In Seaside, participants mentioned that it is especially difficult to get specialty doctors to provide services in rural areas; sometimes these providers are not fully reimbursed for services, indicating that the revenue structure is not conducive to providing these kinds of services in rural areas.

In Salinas, participants questioned the lack of research focused on areas like San Ardo and San Miguel. Several audience members criticized this lack of focus on rural healthcare, asking whether it was possible that the County does not know who is providing healthcare in these areas. It was recommended that a public survey and local clinic survey be administered in the future to figure out the healthcare needs in north and south county, where there may not be large providers. In South County, for example, it is unknown whether or not mobile units are traveling to these areas to provide services, or whether local community centers, nonprofits, church or volunteer services are being provided.

Participants in the Big Sur meeting indicated that they have many issues related to their rural location. Audience members stated that many of their patients live far away; they may live 30 minutes down the highway from the clinic but another 45 minutes into the hills, making for a long trip to obtain healthcare services. There are also many people experiencing transportation issues in Big Sur, as there is no public transport system in place; sometimes patients have to go to Salinas for specialty services, which is especially difficult without personal transportation. Big Sur has also experienced issues with hiring, as many employees live in the more urban areas of the county; participants indicated that getting people to make the drive to Big Sur for work is the biggest hiring issue.

CONCLUSIONS & RECOMMENDATIONS

Building a system of health care delivery that is integrated and seamless and leads to improvements in individual patient (and broader population) health outcomes is a complex process that requires a significant level of collaboration and rethinking the "who, how, what and where" of health care delivery. Beyond the question of how care is reimbursed, must be a more systematic approach to care delivery that considers a continuum of services beginning with the identification of health concerns and risks within a geographic area – compared with desired population health outcomes to be achieved – and then pared with the actual delivery of services from public health education and prevention activities to primary care and out-patient chronic care management, to specialty services and in-patient hospital and emergency services, and finally, to end-of-life care.

To begin this process requires the development of baseline information about the local safety net system, a shared vision for healthy communities and a commitment to collaboration over the long-term. This study has provided the baseline information from which a shared vision can be established by a committed collaborative of stakeholders.

I. New demand, access and safety net capacity

This study finds that about 54,979 uninsured individuals will become eligible for ACA insurance options (expanded MediCal and subsidies to purchase insurance through Covered California). The County will need to develop a systematic approach to long-term outreach and education efforts to consumers to maximize the number of enrollees into these programs.

This study's projections of demand and supply are based on a providers' perspective. An underlying assumption of the method used is that prior to the changes in the system brought by the ACA, demand for services was met by current levels of provision. Thus, our results show the additional number of physicians that will be required to serve the new demand, but do not consider current gaps experienced in the system. Under the most likely scenario of new demand the county will need to expand provision of services for the newly insured by 10.3 additional FTE physicians and this may require an expansion of facilities or hours of operation in the areas of Salinas and North Monterey County. However, concerns about *current* access to services were expressed during the public meetings in other areas of the County including Big Sur, South Monterey County (San Ardo), and Seaside.

Our recommendations on this point are two-fold: For the County to continue studying access issues from a consumer perspective to identify in more detail issues of access throughout the County that can serve as an addition to this study, and to continue to use a systematic and collaborative approach to planning for service expansion. Some next steps may include the following:

- A. Identify needed safety net services related to specific high risk health issues of concern including:
 - 1. Overweight/obesity
 - 2. Births to teens, prenatal care, and very low birth weight
 - 3. Violence injuries, suicide and homicide
 - 4. Lack of dental care
 - 5. Continued lack of health insurance for the undocumented population.
- B. Explore "best practices" to improve access to health care services including:
 - 1. Linguistic capacity
 - a. Address language groups with no clinical staff who speak the language and identify alternative formats to provide materials for non-written languages.
 - b. Research reasons for providers lack of use of existing interpretation (language line) services and assist with changes to increase such use.
 - c. Address providers' use of non-trained, informal "translators."
 - 2. Heath information system capacity and use of Electronic Health Records (EHR)
 - a. Ensure full implementation of EHR for all providers.
 - b. Facilitate system level integration of data sharing by individual providers to improve care coordination.
 - c. Further identify staff health information technology education and training needs.
 - 3. Specialty referrals
 - a. Investigate specialty services most frequently referred and difficult to arrange.
 - b. Address barriers to specialty care: availability, transportation, and communication
 - c. Explore the use of telemedicine to extend specialty services (esp. in rural areas)
- C. Public Concerns: Develop a patient/consumer-side assessment to involve the community in policy making and planning including an exploration of initial areas of concern: lack of access to health care, quality of health care services, rising costs of health care, preventive vs. urgent care focus and rural access issues.
- D. Future research questions regarding: New demand, disparities, access and capacity
 - 1. How will the system address demand by those who will remain uninsured because of their immigration status?
 - 2. Where will newly insured Covered California patients seek primary care services?
 - 3. Will providers' expansion plans match demand in the highest need areas?
 - 4. Is the system staffed and structured to most effectively and efficiently address behavioral health patient needs?
 - 5. What are the reasons for the high utilization of emergency departments for nonemergency services, e.g., primary care type follow-up visits?

II. Build a systematic and collaborative approach to planning

Based upon our experiences in this year long process working collaboratively with the Monterey County Safety Net Integration Council (SNIC) providers at their monthly meetings, receiving very positive responses to the survey process from providers – both within and outside of the SNIC – and the initial public comments on the study, it is clear that there is a strong desire for collaboration from a wide range of providers (some of whom are current members of SNIC and others who are not). Thus we recommend that the County support policy and planning efforts that incorporate best practices by safety net providers in service to the community's health care needs. Some next steps may include the following:

- A. Strengthen the Safety Net Integration Council's ability to respond the rapidly changing health care system landscape.
 - 1. Monitor changes in definitions of the "safety net" as this may affect current and new funding opportunities from federal and state agencies, and consider expansion of SNIC's membership to reflect these changes and the population's expanding health care needs.
 - 2. Explore options for an independent neutral convener/facilitator to maximize collaboration and assist in the process of service integration and expansion by developing:
 - a. A shared vision that incorporates the areas of need addressed in this study.
 - b. A set of goals and periodic (annual) benchmarks to guide implementation of and provide assistance for SNIC members with changes resulting from the ACA.
 - 3. Approach implementation of the ACA systematically by beginning to:
 - a. Explore ways to collect/analyze patient outcomes data across providers to better understand the distribution of services and health care needs.
 - b. Discuss options for integration of services across the continuum of care.
 - c. Determine reasons for and levels of cross-jurisdiction service seeking by residents who live in areas next to county boundaries at the northern and southern areas of the county.
- B. Future research questions: System organization and collaboration
 - 1. What level of collaboration exists among safety net providers in Monterey County and throughout the tri-county region?
 - 2. Given that most clinics do not currently share clinical or administrative data with other providers (across the system), how will data sharing occur to improve collaboration, access and patient (and population) health outcomes?
 - 3. What is the level of cross-jurisdiction service seeking by residents living in areas next to county boundaries in the northern and southern areas of the county?
 - 4. What will be the major impacts on the local safety net providers from implementation of ACA including:

- a. How will new organizational models, e.g. Patient Centered Medical Homes and Accountable Care Organizations affect the safety net's ability to expand to meet increased demand for services?
- b. How will increased competition from private providers for MediCal patients affect safety net providers?
- c. How will competition among safety net providers change after full implementation of ACA?
- d. How will the shift in financing from "process/services" to "health outcomes" affect stability?

As the ACA will extend health insurance coverage – and by extension access to health services – for county residents, this final phase of the Monterey Safety Net Provider study set out to provide projections for new demand for health care services, analyze the current capacity and potential for expansion of existing safety net services to address this new demand, and to begin to identify community concerns about the local implications of health care reform.

The results of this study make visible a system of providers and services with many advantages, as well as the myriad challenges that lie ahead. With major health reforms on the horizon, this year-long collaboration has resulted in a beginning point for future collaboration and decision making to improve our health care system for the benefit of the many individuals and families who struggle to find affordable, accessible, and culturally appropriate services.

REFERENCES

- Agency for Healthcare Research and Quality. (2004). Setting the agenda for research on cultural competence in health care. *U.S. Department of Health and Human Services*. Retrieved from http://www.ahrq.gov/research/findings/factsheets/literacy/cultural/cultural2.html
- American Academy of Physician Assistants. (2008). Use of medical interpreters for patients with limited English proficiency. Retrieved from http://www.aapa.org/uploadedFiles/content/About_AAPA/Governance/Resource_Items/2 0-MedicalInterpreters.pdf
- California HealthCare Coundation. (2009). *California's safety net clinics: A primer*. Retrieved from http://www.chcf.org/publications/2009/03/californias-safetynet-clinics-a-primer
- California HealthCare Foundation. (2012). California health care almanac: Regional markets issue brief. Fresno: Health providers expand capacity, but health reform preparation lags. Retrieved from http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/A/PDF%20AlmanacRegMktBriefFresno12.pdf
- California HealthCare Foundation. (2009). California health care almanac: Regional markets issue brief. Fresno: Poor economy, poor health stress an already fragmented system. Retrieved from http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/A/PDF%20AlmanacRegMktBriefFresno09.pdf
- Canin, L. & Wunsch, B. (2009). Specialty care in the safety net: Efforts to expand timely access. Retrieved from http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/S/PDF%20SpecialtyCareOverview.pdf
- Castillo, E.M., Brennan J.J., Chan T.C., Killeen J.P., & Vilke G.M. (2012). Factors associated with frequent users of emergency department resources, *Annals of Emergency Medicine*, 60(4), S32.
- Center for Health Workforce Studies, School of Public Health at Albany. (2006). The impact of the aging population on the health workforce in the United States: Summary of key findings. *National Center for Health Workforce Analysis Bureau of Health Professions, Health Resources and Services Administration*,
- Center on an Aging Society. (2004). Cultural competence in health care. *Georgetown University*. Retrieved from http://ihcrp.georgetown.edu/agingsociety/pdfs/cultural.pdf

- Cook, N., Hicks, L., O'Malley, J., Keegan, T., Guadagnoli, E., & Landon, B. (2007). Access to specialty care and medical services in community health centers. *Health Affairs*, *26*(5): 1459-1468. doi: 10.1377/hlthaff.26.5.1459. Retrieved from http://content.healthaffairs.org/content/26/5/1459.full.pdf+html
- Covered California. (2013). *Fact sheet*. Retrieved from http://www.coveredca.com/PDFs/English/Covered_California_About_fact_sheet_English_pdf
- Colorado Health Institute. (2011). A half million uninsured: Is Colorado ready? Retrieved from http://www.coloradohealthinstitute.org/uploads/downloads/A Half Million Newly Insured Is Colorado Ready.pdf
- DesRoches, C.M., Campbell, E.G., Rao, S.R., Donelan, K., Ferris, T.G., Jha, A., Kaushal, R., Levy, D.E., Rosenbaum, S., Shields, A.E., & Blumenthal, D. (2008). Electronic health records in ambulatory care A national survey of physicians. *New England Journal of Medicine*, *359*, 50-60. doi: 10.1056/NEJMsa0802005
- Felt-Lisk, S., McHugh, M., & Thomas, M. (2004). *Examining access to specialty care for California's uninsured: Full report*. Retrieved from http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/A/PDF%20AccessToSpecialtyCareForCalifUninsuredReport.pdf
- Healthcare.gov. (2013). *The health care law and you: Key features of the law*. Retrieved from http://www.healthcare.gov/law/features/index.html
- Health Resources and Services Administration. (2008). The physician workforce: Projections and research into current issues affecting supply and demand. *U.S. Department of Health and Human Services*. Retrieved from http://bhpr.hrsa.gov/healthworkforce/reports/physwfissues.pdf
- Health Resources and Services Administration. (n.d.). Women's preventive services: Required health plan coverage guidelines. Affordable Care Act expands prevention coverage for women's health and well-being. *U.S. Department of Health and Human Services*. Retrieved from http://www.hrsa.gov/womensguidelines/
- Hill, L. E., & Johnson, H.P. (2011). *Unauthorized immigrants in California: Estimates for counties*. Retrieved from http://www.ppic.org/content/pubs/report/R_711LHR.pdf
- Institute for Healthcare Improvement. (2011). Third next available appointment. Retrieved from http://www.ihi.org/knowledge/Pages/Measures/ThirdNextAvailableAppointment.aspx

- <u>Kellermann</u>, A.L. & Jones, S.S. (2013). What it will take to achieve the as-yet-unfulfilled promises of health information technology. *Health Affairs*, *32*(1), 63-68. Retrieved from http://content.healthaffairs.org/content/32/1/63.abstract
- King County Health Department. (2012). Translation manual and policy: Reaching populations with limited English proficiency. Retrieved from http://www.kingcounty.gov/healthservices/health/languages/translation.aspx
- Knickman ,J.R., & Snell E.K. (2002). The 2030 problem: Caring for aging Baby Boomers. *Health Services Research*, *37*(4), 849-884. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1464018/
- Lauer, G. (2011). Austerity won't help physician shortage, experts predict. *California Healthline*. Retrieved from http://www.californiahealthline.org/features/2011/austerity-wont-help-physician-shortage-experts-predict.aspx
- Medicaid.gov. (n.d.). Keeping America healthy, Medicaid eligibility. *Centers for Medicaid and Medicare Services*. Retrieved from http://www.medicaid.gov/AffordableCareAct/Provisions/Eligibility.html
- Monterey Bay Geriatric Resource Center. (2013). *Welcome*. Retrieved from http://www.mbaygrc.com/
- Murray, M., & Berwick, D.M. (2003). Innovations in primary care, advanced access: Reducing waiting and delays in primary care. *Journal of the American Medical Association*, 289, (8). Retrieved from http://www.sfhp.org/files/PDF/providers/Best-Practices/Advanced-Access.pdf
- Office of Minority Health. (2005). What is cultural competency? *U.S. Department of Health and Human Services*. Retrieved from http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=11
- Ong Eng Hock, M., Ornanto, J.P., Cosby, C., & Franck, T. (2005). Should the emergency department be society's health safety net? *Journal of Public Health Policy*, 26(3), 269-281.
- Ruggles, S., Alexander, J.T., Genadek, K., Goeken, R., Schroeder, M.B., & Sobek, M. (2010). Integrated public use microdata series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota.
- Shields, A.E., Shin, P., Leu, M.G., Levy, D.E., Betancourt, R.M., Hawkins, D., & Proser, M. (2007). Adoption of health information technology in community health centers: Results of a national survey. *Health Affairs*, 26(5), 1373-1383.

- Solomon, N. (2009). Understanding common reasons for patient referrals in difficult-to-access specialties. Retrieved from http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/U/PDF%20UnderstandingSpecialtyReferralsInTheSafetyNet.pdf
- United States Census Bureau. (n.d.) American Community Survey 3-Year estimates. Retrieved from http://www.census.gov/acs/www/
- <u>Wilson, L.</u> (2012). Measuring adoption and use of health information technology to reduce health care disparities and improve quality. A progress report: 2006-2013. *Robert Wood Johnson Foundation*. Retrieved from http://www.rwjf.org/en/research-publications/find-rwjf-research/2012/08/measuring-adoption-and-use-of-health-information-technology-to-r.html
- Wisconsin Collaborative for Healthcare Quality. (2013). Time to third next available appointment. *Robert Wood Johnson Foundation*. Retrieved from http://www.wchq.org/reporting/third avail appt.php?category id=0&topic id=®io n=9&providerType=0&measure id=1

APPENDICES

Note: The Safety Net Provider Surveys can be found in separate pdfs for Safety Net Clinic Organizations, Safety Net Clinic Sites, Hospital Emergency Departments and Private Providers.