SCHOOL OF PUBLIC HEALTH
HEALTH POLICY AND MANAGEMENT
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# Strategic Plan: John Muir Health, Making the Case for Mobile Health

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# BACKGROUND

## *Introduction to John Muir Health*

John Muir Health is a health system in Contra Costa County, California that serves hundreds of thousands of patients annually. John Muir's facilities include a newly-expanded 416-bed acute care facility in Walnut Creek, a 259-bed facility in Concord, and several outpatient facilities in Walnut Creek, Brentwood and Antioch.[1] John Muir's two hospitals were recently ranked #2 and #4 respectively among hospitals in the San Francisco-Oakland metropolitan area.[2]

John Muir Health's mission is: *We are dedicated to improving the health of the communities we serve with quality and compassion.* In order to achieve this mission, John Muir recognizes that community health has to be an important part of the organization. John Muir takes a three-pronged approach to Community Benefit through Patient Financial Assistance, the Community Health Fund, and the Community Health Alliance. For the purposes of this plan, I will focus on the Community Health Alliance. Community Health Alliance programs are built on the premise that: *By connecting John Muir Health expertise with that of community-based organizations, we can do more than either entity could do alone.* By leveraging partnerships, the Alliance seeks to maximize the beneficial social impact of the hospital's Community Benefit responsibility, and to contribute to surrounding communities in ways that are meaningful and valuable.

## *Introduction to Mobile Health Clinics*

Over 2000 mobile health clinics in the US provide care to hundreds of thousands of patients across the country every year.[3] The focus of mobile health clinics is to provide access to screening and primary care for people who have been marginalized by our current system, especially the uninsured and underinsured. Mobile clinics have been shown to be a cost-

effective way to provide medical care[4,5,6] and an accessible entry point to the medical system for people who are either geographically or socially isolated.[7] The Mobile Health Clinics Network (MHCN) – a national trade association founded in 2005 that comprises over 300 members institutions – is spearheading efforts to assess and communicate the benefit and impact of mobile health care in the US.[8] MHCN has developed an algorithm for measuring Return on Investment for mobile health clinics as a way of measuring and communicating the value. Social Return on Investment (SROI), at its core, is a set of methods used to generate a ratio of the net present value of benefits to the net present value of investment. MHCN's basic algorithm for Mobile Health Clinic Return on Investment is:[7]

$$\frac{\text{ER Cost Avoided + Value of QALYs* Saved}}{\text{Cost of Mobile Health Clinic}} = \text{ROI}$$

* QALYs: Quality-Adjusted Life Years

## *John Muir's Mobile Health Clinic*

John Muir Health's Mobile Health Clinic is a project of the Community Health Alliance that has been serving uninsured residents of East and Central Contra Costa County for over ten years. The Mobile Health Clinic (MHC) provides free preventative and urgent medical care at regularly scheduled weekly clinics. In order to facilitate ongoing care, MHC collaborates with La Clínica de la Raza to connect patients to a medical home. The most common health conditions presented by patients at the MHC are women's health[a], allergies, hypertension, cold or flu, respiratory problems, and diabetes.

[a] Once a month, MHC provides a special women's health clinic which results in many women coming to the MHC for those services.

MHC operations are a partnership between John Muir, RotaCare, and the Contra Costa County Health Services (CCHS). John Muir directly operates a Saturday clinic in Brentwood, with care provided by volunteer doctors, nurses and support staff from within the organization. The MHC also operates two days a week in Concord and one day in Bay Point, with the Contra Costa County Public Health Department providing clinical and support staff while John Muir Health provides the van, supplies and driver. Similarly, the MHC operates one day a week in Antioch in partnership with RotaCare. In 2010, the MHC served approximately 3300 patients.[9]

John Muir's Mobile Health Clinic (MHC) Goals

1. Increase the number of residents in Central and Eastern Contra Costa County who have been provided with medical care services and connected to a "medical home" or source of primary care and coordination of other medical services.
2. Decrease the number of residents who use costly care unnecessarily, such as emergency services.

## Rationale for Strategic Plan

John Muir Health has requested a Strategic Plan that will help address two key strategic questions moving forward:

(I) Is the Mobile Health Clinic meeting the strategic priorities of John Muir Health and the needs of the communities it serves?

(II) What are the best ways to assess, measure and communicate the value and impact of the Mobile Health Clinic?

# EXTERNAL ANALYSIS

## Contra Costa County – A Service Area Analysis

In 2008, the estimated population of Contra Costa County was 1,029,703. Between 2000 and 2008, the county gained 76,399, and nearly two-thirds of the new residents settled in four East County cities: Brentwood, Antioch, Pittsburg and Oakley.[10]

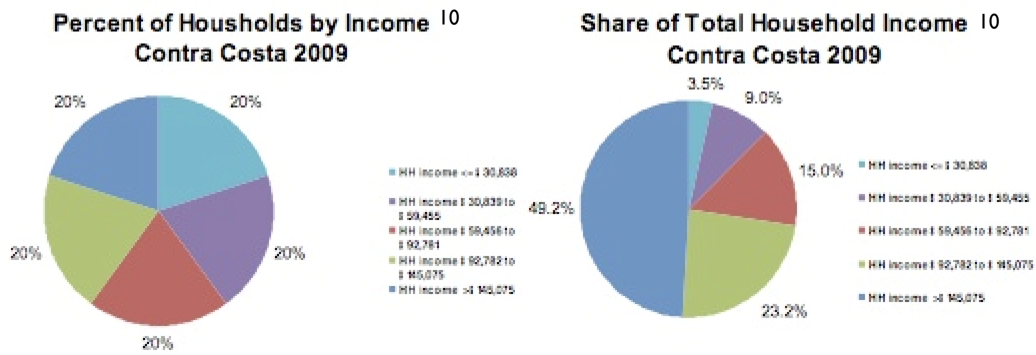
CONTRA COSTA COUNTY[10]

During that time, Eastern Contra Costa suburbs were also becoming more diverse. The 2010 Census reveals that the African American population in Oakland and Richmond dropped

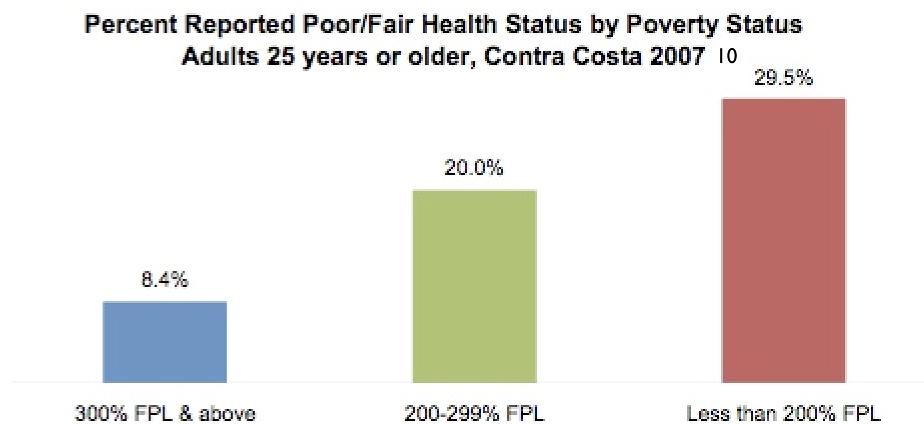
by 23% from 2000-2010. At the same time, Contra Costa's eastern suburbs experienced a rapid increase in African American population. Antioch's African American population doubled between 2000 and 2010, and Brentwood's almost quintupled.[11] Contra Costa County also became home to more immigrants, and the Latino population increased substantially. By 2008, one quarter of Contra Costa residents (248,583) were born outside the US, and nearly half of those foreign-born residents came from Latin America.

At the same time that Contra Costa County, and especially East County, was experiencing rapid population growth, suburban poverty was increasing throughout the US. By 2005, more people lived in poverty in suburbs than in central cities.[12] In Contra Costa, the percent of residents living below 200% of the Federal Poverty Level (FPL) increased from 16.5% in 2000 to 21.6% in 2008.[10] While the percent of uninsured in Contra Costa County is lower than the state average, the county has a substantial number of uninsured residents – 123,000 residents (13.5% of the population) were uninsured in 2007. With the recent economic recession, more people have been left without insurance or underinsured.[13] Clearly, the numbers of uninsured will change in the coming years as health care reform is implemented, but John Muir and Contra Costa County officials project that the number of underinsured in the County will continue to grow in the foreseeable future.[9,10]

Overall, Contra Costa County remains a comparatively wealthy county in California. The median household income in Contra Costa County was $78,000 in 2008 compared to $61,000 in California. However, there is a high level of income inequality in the county. In 2009, the poorest 20% of Contra Costa households earned only 3.5% of total household income in the county, while the wealthiest 20% earned almost half of all income in the county.




As a result of the wide income distribution in the county, health inequities are particularly stark. Among adults in Contra Costa County, 29.5% of those living below 200% of the FPL reported "fair" or "poor" health status (compared to only 8.4% of people at 300% FPL and above).[10]




In addition to these differences in self-reported health, data from Contra Costa County also shows that life expectancy is up to ten years less for people living in high-poverty areas than in wealthy areas.[14] Some health conditions that raise particular health equity concerns in Contra Costa County are: heart disease, diabetes, obesity, oral health and asthma.[9,10,14] Some social conditions that raise particular health equity concerns in Contra Costa County are: jobs, assets, education, and violence.[9,14]

## Suburban Poverty and the Safety Net

A 2009 study by the Center for Studying Health System Change finds that in addition to the increased risk of being uninsured, low-income people living in suburban areas like Contra Costa County face additional challenges in accessing health care because of inadequate transportation, language barriers, lack of awareness of health care options, and less available options proximate to home.[15] Overall in the US, the availability of health care services for low-income and uninsured people in the suburbs has not kept pace with the increases in suburban poverty. Even more than their urban counterparts, low-income people in the suburbs fall back on hospital emergency departments for health care. Health care providers and government officials in suburban areas must confront the geographic dispersion of low-income populations as well as jurisdictional issues when designing, funding and implementing safety net services. Some of the challenges in expanding safety net services in suburban areas include: less safety net infrastructure for primary care and specialty care, transportation challenges, and generating revenues to support safety net services. The Center for Studying Health System Change provides two main recommendations for overcoming these challenges and maximizing available resources: (1) Maximize effectiveness and capacity through regional collaboration and partnerships to share resources, and (2) Target geographic pockets of need when allocating resources for safety net services and infrastructure.[b]

## Competitors and Partners

John Muir has three main competitors in Contra Costa County: Kaiser Permanente (Antioch, Richmond, Walnut Creek), Contra Costa Regional Medical Center in Martinez, and Sutter Delta Medical Center in Antioch. All three of these hospital systems are competitors

[b] It is important to note that John Muir's Community Benefit model is built around these same two principles. John Muir's Community Benefit model will be discussed further in the Internal Analysis.

for acute care, surgical and outpatient procedures. In addition, Kaiser and Sutter Delta are competitors in provision of Community Benefit Programs.

John Muir utilizes a partnership model for all Community Health Alliance programs. In fact, long-term partners are crucial to the success of the Mobile Health Clinic and other community programs funded by John Muir.

John Muir's Mobile Health Clinic (MHC) Key Partners

- John Muir Health Board of Directors
- John Muir Health clinical and administrative staff
- La Clínica de la Raza
- RotaCare
- Contra Costa County Health Services
- Mobile Health Clinic Network
- Schools
- Community Based Organizations, including faith communities
- Contra Costa County Board of Supervisors
- Contra Costa Crisis Center

## *Policies that Impact the Mobile Health Clinic*

A number of policies – local, state and federal – have substantial implications for the external environment surrounding mobile health clinics in the coming years.

Local: The housing and economic crises have hit city and county governments very hard as tax revenues have gone down and the need for services has gone up. Local budget decisions have profound effects on low-income residents, including the level of access they have to health care. In 2009, the Contra Costa County Board of Supervisors cut non-emergency health care services for undocumented immigrant adults to save $6 Million. As a result, 6,000-10,000 undocumented adults in Contra Costa County no longer have access to health care at County

clinics.[16] The County has arranged to provide partial reimbursement to La Clínica for one to two primary care visits per undocumented patient per year. While the bridge to La Clínica is useful, it is insufficient, and in the long-term this policy increases pressure on all local Emergency Rooms including John Muir Medical Centers in Concord and Walnut Creek. This policy reinforces both the financial and moral imperatives for programs like the Mobile Health Clinic that continue to focus on primary care services for undocumented patients.

State: State budget cuts will almost certainly include cuts in eligibility for Medi-Cal and other safety net health care programs. These cuts will leave a portion of low-income Contra Costa County residents uninsured and looking for a source of primary care. On a positive note, the state of California is taking the lead in establishing a functioning Health Insurance Exchange for implementation of federal health care reform.

Federal: Implementation of the Patient Protection and Affordable Care Act, including the Health Insurance Exchanges, has the potential to dramatically reduce the number of uninsured in the long-run. However, in the short-term, John Muir predicts that many of the newly insured will have difficulty finding providers and will be underinsured. Another concern is that many of these newly insured patients will be quite sick and in need of many services after years of going without preventive health services.[9] Overall, John Muir sees a continuing opportunity and need for innovative, cost-effective preventive and primary care services that serve chronically underinsured populations in the county.

Federal budget cuts and restructuring of Medicaid and Medicare reimbursement have major implications for John Muir system-wide. As it relates to the Mobile Health Clinic, two areas of particular concern are reimbursement for primary care services and availability of grants for underserved populations. As the profile of mobile health clinics grow, there may be

more opportunities to earn revenue for services provided. On the other hand, budget cuts mean that government grants and pilot programs are less likely to be available for operational expansion of services such as the Mobile Dental Clinic.

## *The Value of Mobile Health*

The Mobile Health Clinic Network (MHCN) was founded in 2005 because, despite evidence about the cost-effectiveness of mobile health clinics and their ability to serve populations that are otherwise completely marginalized from the health care system,[4,5,6] their contributions to the health care system in the US have been under-recognized. MHCN members saw the mobile health clinic model as a model that can be scaled to help achieve dual imperatives of enhancing access to health care and shifting care to more cost-effective settings. However, they found that little work had been done to formally evaluate the efficiency and impact of mobile health clinics. Like the rest of the safety net system, mobile health clinics need to be able to shift from a purely grant or charity-based financial structure to at least a partial fee-for-service model.

As such, MHCN determined that mobile health clinics need to be able to quantify the value of mobile health clinic services in order to make the case for increased investment. This led to the development of the ROI algorithm for mobile health clinics. In piloting the ROI algorithm in 2008, the Harvard Family Van calculated a Return on Investment of 36:1.[7] In other words, for every dollar invested in funding the mobile clinic, $36 in benefits were accrued in the form of ED costs avoided and life years saved. Subsequently, MCHN members across the country have calculated the ROIs of their mobile clinics, and ROIs range from 4 to 40.[17] From the perspective of the MHCN, this data only becomes meaningful as a critical mass of mobile health clinic providers use the same algorithm to demonstrate the value of mobile health in

communities across the country. Once there is a body of evidence from diverse communities, it will be easier to shift the national profile of mobile health to that of a vital health care delivery system that (1) improves access to quality health care and (2) provides a more cost-effective way to deliver preventive and primary care services. From the perspective of a provider like John Muir, the shift in national acceptance is important but there are also stakeholders closer to home that are a more immediate audience.

## *Diverse SROI Methods*

Social Return on Investment (SROI) was pioneered in the 1990s by the Roberts Enterprise Development Fund (REDF), a San Francisco-based venture philanthropy fund. Eventually, REDF's SROI framework morphed into a focus on measuring and reporting social outcomes in terms of changed lives without monetizing the outcomes.[18] Some of the challenges that REDF ran into with monetizing SROI are:[19]

- There was a tendency to focus attention on cost savings to society but the formula did not adequately incorporate many ways that the social services improved peoples' lives.
- Difficulty in collecting complete information on cost-effectiveness makes comparison across programs challenging.
- The model could not prove causality, and attributing the costs and benefits was difficult.
- Social benefits were undervalued because of conservative estimates used in the analysis.
- Emphasis on public savings could have unintended long-term effects (by creating perverse incentives in the system, etc).

In order to contend with these challenges, there are three criteria to keep in mind when designing an SROI algorithm: comparability, credibility, and usefulness. In addition, some process elements that can improve SROI calculation include:[20,21] Conduct stakeholder analysis; Develop an approach to SROI that is practical and easy-to-use; Project outcomes over shorter timeframes (one or two years max); Measure only what is important, don't try to measure

everything; Account for social and environmental value created.[c]

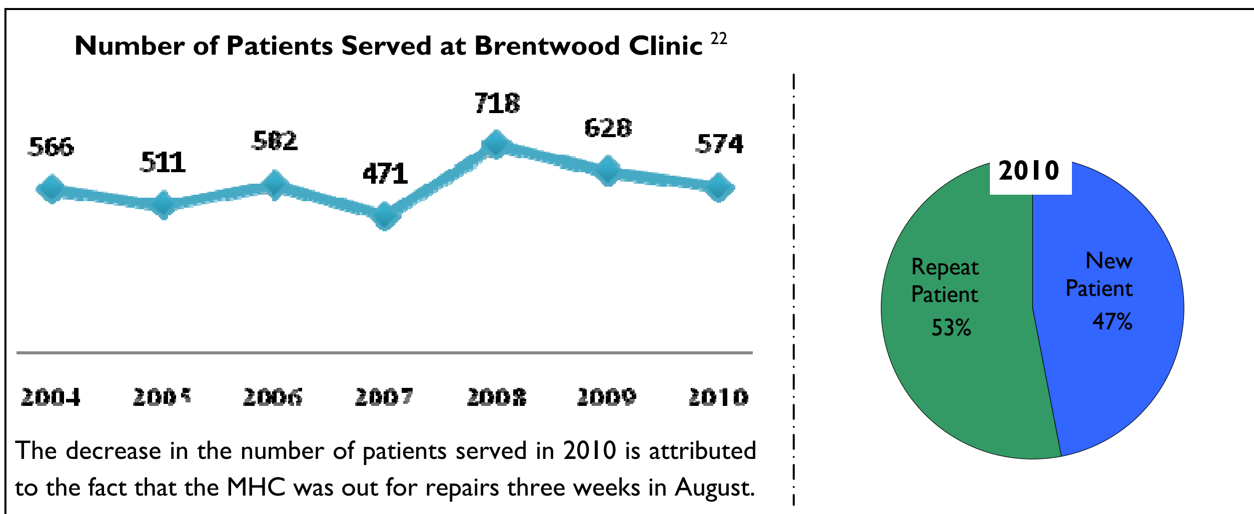
Despite the challenges, many entities including REDF, continue to work to modify SROI to be more comparable, credible and useful. In our society, and especially in the health care delivery space, monetized value is critical to making the business case for services. However, it is important to keep in mind that a monetized ROI is only a part of assessing, measuring and communicating the value of Mobile Health Clinics.

# INTERNAL ANALYSIS

## *Mobile Health Clinic Stats*[22]

Total Patient Numbers

| Year = 2010 | John Muir | Rotacare | County Health Department | Total |
|---|---|---|---|---|
| | Brentwood | Antioch | Concord & Bay Point | |
| | 574 | 973 | ~1795 | ~3342 |



The decrease in the number of patients served in 2010 is attributed to the fact that the MHC was out for repairs three weeks in August.

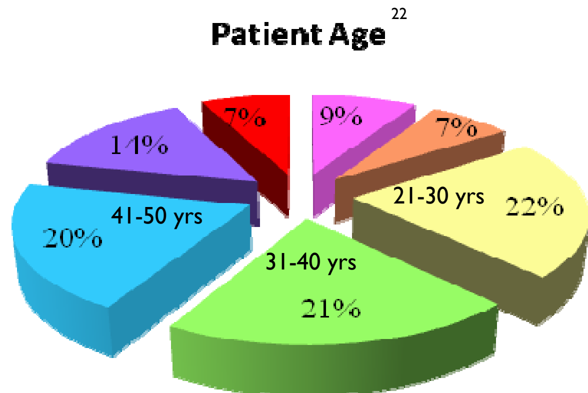
In total, the MHC served approximately 3300 patients through both direct service at the Saturday Brentwood Clinic and partnerships with Rotacare and the County Health Department. One of the challenges related to providing services through partnerships is unified data

[c] As you will note, all of these modifications have been incorporated into the Mobile Health Clinic ROI described above.

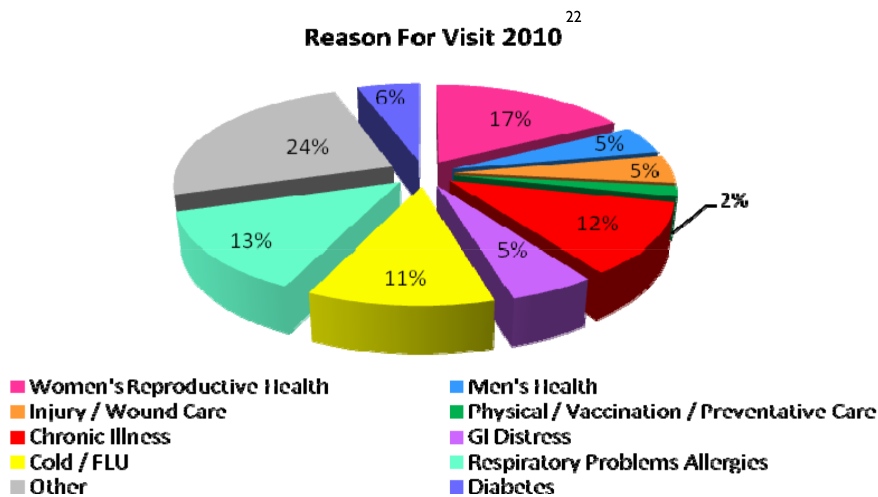
collection and reporting. John Muir, Rotacare, and the County Health Department all use separate data collection mechanisms. Thus, much of John Muir's data reporting for the MHC focuses only on the patients served directly by John Muir staff at the Brentwood Clinic, representing about 17% of the total patient population served by the MHC in 2010.

Patient Characteristics – Brentwood Clinic

In 2010, the largest share of patients seen at the Brentwood Clinic were between the ages of 21-30 (22%), followed by 31-40 (21%), and 41-50 (20%).

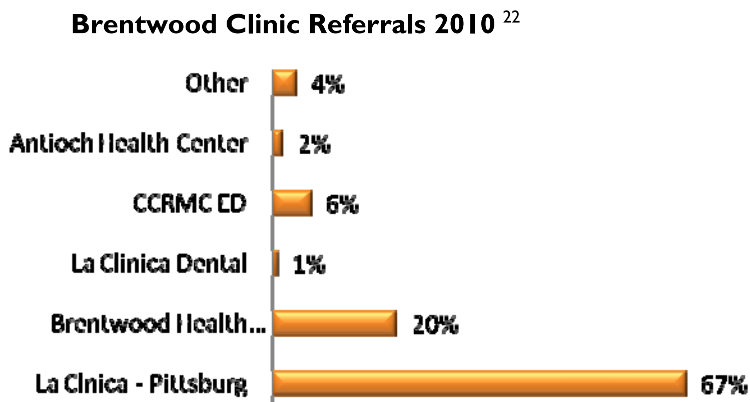



The most common reasons patients came to the MHC were related to Women's Health (17%), Respiratory Health (13%), Chronic Illness (12%), and Cold/Flu (11%).



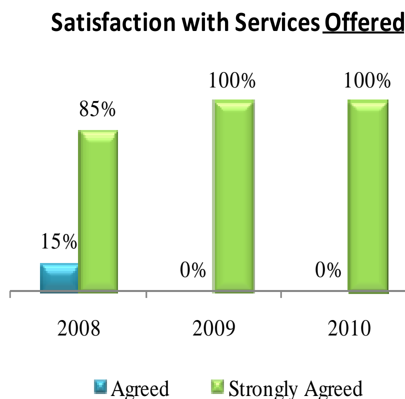

Notably, nearly 100% of MHC patients are uninsured – the clinic does not serve people with insurance except under extenuating circumstances. MHC staff also report that the majority of the patients they see are Spanish-speaking and undocumented. However, in light of the recent economic downturn, the patient population has become more diverse.[9]

Referrals – Brentwood Clinic

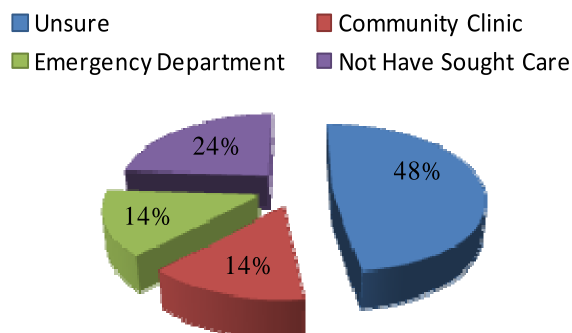



In 2010, the Brentwood Clinic made 129 referrals, toward the goal of increasing the number of residents connected to a "medical home". Referrals were prioritized for patients that required urgent care, specialty care and chronic disease management. Research shows referral of mobile health clinic patients is particularly challenging and time-intensive because of the patients' level of marginalization from the health care system and the dearth of providers that serve these uninsured populations.[4,5,7]

Patient Satisfaction Survey 2010 – Brentwood Clinic[22]



**If the MHC were not available, where would you have sought care?**




The Patient Satisfaction Survey shows that the MHC serves patients who don't otherwise have access to primary care. The vast majority of patients surveyed either did not know where else to seek care (48%), would not have sought care without the MHC (24%), or would have gone to the Emergency Department (14%).

## *Measuring the Value of Community Benefit at John Muir*

All John Muir Community Health Alliance programs are evaluated annually in December on three criteria: (1) serving a vulnerable population, (2) strength of partnerships, (3) impact.[9] In order to evaluate impact, programs must answer the following questions: How much was done and how many people were served? How well were services provided from the perspective of the patient? Is anyone better off? The evaluations are presented to the Community Benefit Advisory Board for review in January and each program is rated on a scale of 1-3. At the same time, the Community Benefit Advisory Board and staff run a goal setting session to determine priority areas for community benefit. In 2010, the priority areas were violence prevention, diabetes and childhood obesity. For 2011, a new priority area has been added related to facilitating access for the uninsured and underinsured to a continuum of care that is well-coordinated in a cost-effective and appropriate setting. Most existing Community Benefit programs receive good evaluations and continue to operate. The priority areas are particularly important in decision-making about expansion of existing programs and creation of new partnerships.[9]

John Muir continues to look for practical ways to more accurately evaluate and articulate the value and impact of Community Benefit.[9,23] John Muir's Board of Directors generally sees three levels of why Community Benefit programs are important: (1) As a nonprofit hospital, the state requires John Muir Health to give back Community Benefit to the surrounding communities each year. (2) John Muir wants to fulfill its mission and be a good corporate citizen. (3) John Muir wants to be a smart about corporate social responsibility and know that they are creating value and getting good returns from their Community Benefit investments. The work to calculate ROI will help John Muir board and staff better assess how to be smart about their Community Benefit investments.

# CALCULATION: RETURN ON INVESTMENT

ER Cost Avoided + Value of QALYs* Saved / Cost of Mobile Health Clinic = ROI

$$\frac{\text{ER Cost Avoided} + \text{Value of QALYs* Saved}}{\text{Cost of Mobile Health Clinic}} = \text{ROI}$$

* QALYs: Quality-Adjusted Life Years

*Calculation based on algorithm developed by the Mobile Health Clinic Network (MHCN)* [7]

| **ER COST AVOIDED** | | | | |
|---|---|---|---|---|
| | | | | |
| | Total Visits | | | Number Counted Visits [d] |
| JM (1/1/2010 – 12/31/2010): | 574 | | | 120 |
| | | | | |
| CCHS (3/1/2010 - 2/28/2011):[e] | ~1795 | | | 359 |
| | | | | |
| Rota (1/1/2010 – 12/31/2010): | 973 | | | 208 |
| | | | | |
| Total Visits Counted for ED Avoidance | | | | 687 |
| Annual Mobile Health Clinic Costs [f] | | | | $374,918 |
| Average Cost per Visit | | | | $112 |
| Cost of Preventable ED Visit [g] | | | | $825 |
| **Estimated ED Cost Avoided >>>>>>** | | | | **$489,533** |
| | | | | |
| **QALYs** | | | | |
| | Services Delivered | Avg QALYs Saved Per Ind. [h] | Total Num QALYs Saved | Est. Value of QALYs Saved [i] |
| Asthma & Acute Respiratory | 129 | 0.04 | 5.16 | $361,200 |
| Diabetes | 156 | 0.04 | 6.24 | $436,800 |
| Hypertension | 249 | 0.04 | 9.96 | $697,200 |
| "Chronic Illness" | 67 | 0.04 | 2.68 | $187,600 |
| Urgent | 53 | 0.04 | 2.12 | $148,400 |
| Abdominal Pain | 20 | 0.002 | 0.04 | $2,800 |
| Cellulitis | 13 | 0.002 | 0.026 | $1,820 |
| **Total QALYs >>>>>>** | 687 | | 26.226 | **$1,835,820** |
| | | | | |
| | | | | |
| **RETURN ON INVESTMENT >>>>>** | | | | **6.20** |

## Notes on ROI Calculation

[d] Per request from John Muir, and in keeping with MHCN's algorithm, the ROI is calculated by counting only visits that are classified as urgent or related to chronic disease management. You can see a list of conditions counted in the QALYs section of the calculation above.

[e] Total Visits to CCHS-run clinics estimated from the number of counted visits that were reported. Assumption is that those counted visits account for 20% of total visits, based on percentages observed at John Muir and RotaCare clinics. The actual value of Total Visits can be obtained from CCHS and substituted.

[f] Annual Mobile Health Clinic Costs may need to be adjusted. Specifically, there is some ongoing discussion about the best way to calculate employee benefits.

[g] Cost of Preventable ED visit may need to be adjusted. The current projected cost comes from CA OSHPD data on a Level 2 ED visit to John Muir.

[h] Some additional work remains to define the correct value for these QALY multipliers. The multipliers used here were chosen conservatively so as not to create an inflated ROI. MHCN has thus far only recommended multipliers for screening services; they are currently working on providing recommended multipliers for primary care services. In the meantime, I will summarize the available evidence on multipliers in a short appendix to be finalized in the coming weeks.

[i] Estimated Value of QALYs Saved is calculated based on a Value of Statistical Life Years Saved (VASLYS) of $70,000 per QALY. MHCN conducted a literature review and recommends the $70,000 valuation as a conservative estimate of VASLYS, based on research by Tolley et al from 1994.[24]

# CORE STRATEGIES & RECOMMENDATIONS

## *Improving ROI Calculation*

In addition to the notes above regarding adjustments to the calculation, I recommend that John Muir consider these additional ways to optimize the ROI for the Mobile Health Clinic:

- Incorporate valuation of partnership synergies and volunteer time. Partnerships and volunteers are two of the strongest elements of John Muir's MHC program, and their value is not currently fully captured in the ROI. The value of John Muir's partnership model of Community Benefit should not be underestimated. There is significant and growing interest among both academic researchers and funders (public and private) in the benefits and superior impact of high-functioning partnerships.[25]

- Establish more uniform data collection across the different MHC sites. Ongoing

calculation of ROI will be much easier if data compilation is streamlined. Specifically, I would recommend working toward using ICD-9 coding since it is an industry standard. John Muir's additional "urgent" coding is useful and I would recommend that it be adopted at the other sites as well.

- Make a presentation to Senior Leadership to solicit feedback and build consensus around ROI. I would recommend contacting providers in the region that have effectively utilized ROI calculation to enhance the business case for mobile health care.

- Make the effort to stay connected to MHCN's ROI Calculator. Certainly, adjustments do need to be made to the MHCN calculation in order to make the ROI accurate and relevant to the context at John Muir. At the same time, in order to achieve a more favorable policy and funding environment, it is also important to be a part of a critical mass of mobile health clinic providers that use similar methods to demonstrate ROI in communities across the country.

- Take a leadership role in developing ROI for the Mobile Dental Clinic. John Muir has a very compelling story to tell about the value of its Mobile Dental Clinic, especially because of its focus on serving children in under-resourced East Contra Costa County. The MHCN is interested in expanding their ROI model into dental, but have not done so yet. This is an opportunity for John Muir to position itself as an industry leader in mobile dental care. The calculation for mobile dental also has the potential to be more straightforward because the patients present with less diverse conditions, and there is a growing evidence base on the value of child and adolescent oral health.

## Making the Case for Mobile Health Clinics

There are strong internal and external factors that make ROI calculation an

advantageous strategy for assessing and communicating the value and impact of the Mobile Health Clinic. However, it is important for John Muir to maintain a multi-faceted approach to making the case for the Mobile Health Clinic and other Community Benefit programs.

- Use ROI to supplement other quantitative and qualitative measures of impact. John Muir should continue to utilize existing evaluation of Community Benefit impact. Monetized ROI is only a part of assessing, measuring and communicating the value of Mobile Health Clinics and other Community Benefit programs. In addition to optimizing ROI and other quantitative measurements of impact and value, John Muir should also optimize qualitative data collection to frame a compelling and powerful story about mobile health care's value in Contra Costa County. [25]

- Create a loose regional network of mobile health care providers. There are a number of providers throughout the Bay Area that are also building capacity to assess and communicate the value of mobile health, and it would be advantageous to share lessons learned and discuss whether it makes sense to develop a state or local policy agenda to support the mobile health care model.

- Communication is crucial for effectively making the case for Community Benefit programs. John Muir must continue to build effective communication strategies in order to make impact and value assessment relevant, credible and useful. The first step is to clarify the different audiences you want to target and decide upon communication strategies that will be persuasive. It seems that there are at least four audiences that John Muir needs to focus on: organizational leadership; public policymakers; foundations and other private funders; and public communication through the media.

- Continue to work with partners across the county to pinpoint underserved populations

and target services to those groups. One specific recommendation would be to collect zipcode data at registration, which would help in understanding the service area and reach of each of the MHC sites.[26] I would also recommend conducting a more in-depth survey of patients, maybe in conjunction with university professors or students, that could help to better define vulnerabilities and assets in East County as a way of informing future investments. The ROI is a good way of demonstrating the overall value of mobile health care, but it does not provide information about geographies or subpopulations to target future expansion.

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