

Utilization of Health Care: A Female Perspective

The exploitation of community-based investigation through Community Health Centers (CHCs) to build the bridge between population-based medicine and the evolving patient-centered medicine model.

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INTRODUCTION

Upon reflecting on my current medical focus, I attempted to combine my interests in women's health and significance of population-based medicine, when designing my Primary Care Leadership Program project. One of my OB/GYN attending physicians expressed the impact women's health providers have on primary prevention and treatment, by reiterating that a large cohort of women only see their OB/GYN for primary care. This spiked my curiosity, because as I began to think about it, I could definitely see that his postulation could be true in a certain population of women, due to their age and health status. This population represented an interesting cohort of women and exemplified the significance of community-based medicine for improvement of health outcomes. Community-based medicine can serve as an intermediate focus to bring population-based and patient-centered medicine into harmony. Understanding utilization of health care at the community level is of substantial importance to

improving the effectiveness and to the stop increasing health care cost, in order to maintain equality in access to care in both quality and quantity.

BACKGROUND

The US Healthcare System has faced several ongoing problems. Key findings released July 2011, in the Issues in International Health policy, highlighted some major concerns. Independent researchers performed a “cross-national comparison of health care systems to elucidate underlying areas, were through public policy a nation could improve and create benchmarks for high performance” (5). Twelve hundred health care measures analyzed 12 industrialized countries, including Australia, Canada, Denmark, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, and United Kingdom. Key measures ranged from population health status and non-medical determines nets of health to healthcare resources and utilization. The study found that the US outspends all other countries on healthcare by large margins. In 2008 US spends \$7,538 per capita compared to the median for the other countries of \$2,995; spending more than 16% of gross domestic product on health care, which is double the next highest country and is steadily on the rise at 3.4% annual adjusted rate (5).

Interestingly enough, compared to the other countries, US had relatively fewer practicing physicians per 1,000 (2.43) and fewer physicians, tied Switzerland for second fewest of the 12 countries listed above. The US also has the highest drug utilization, prices, and spending; 61% of American adults take at least one prescription medicine. There has also been an extremely vast proliferation of diagnostic and imaging technologies, hiking prices even higher. Based on a survey by the International Federation of Health Plans in 2012, Americans pay much more than

other countries do for the exact same things (4). For example, an angiogram in US, costs \$2,430 compared with the next most expensive country Chile at \$378. Despite having the highest health care spending of all the countries analyzed; US health outcomes and life expectancy fall substantially below the others. US have more hospital admissions for chronic conditions, with highest admission rates for asthma, congestive heart failure, and diabetes complications. US also ranks lower on survival rates in cancer patients (5). All of which indicate that although, healthcare costs more the quality and healthcare outcomes are substandard. Several factors have been noted to contribute to the increases in health care spending including; administrative complexity, an aging population, “defensive medicine” due to fear of litigation, large chronic disease burden, health care supply and utilization rates, access to care, resource allocation, and increased use of new technology (5). The US health care system is highly fragmented with most of the limited number of physicians working in specialties and utilizing expensive technology, not in primary care using cost-effective prevention measures.

As cost continue to rise, employers will began to eliminate benefits and some will actually cut insurance all together. This will cause the number of uninsured and underinsured individuals to grow, which will continue a cyclic perpetuation of poor health outcomes, inappropriate utilization of health care services, lack of preventative care leading to increases in more expensive emergent and urgent care, limited access to care and exhausted resources. This could eventually lead to the disenfranchisement of the middle class who maintain the country’s economy on their backs, due to decreased ability to pay astronomical premiums and limited eligibility for federal programs (5).

In light of the out of control healthcare spending and the increased mortality and morbidity in our society due to chronic and preventable diseases, our federal policymakers have at least agreed on the fact that Healthcare Reform in the US is absolutely necessary. The Affordable Care Act signed by President Obama in 2010 seeks to increase quality and affordability of healthcare by lowering the uninsured rate by expanding private and public insurance coverage and reducing price. The healthcare reform plan also seeks to decrease cost and improve quality by having a focus on primary care and prevention and reimbursement based on patient outcomes, not on number of patients seen. Previous research has shown that countries with a strong primary care foundation experience better population health outcomes, more equitable care, and greater efficiency of health services (2). This research emphasizes that patients with access to regular primary care physicians, obtain necessary treatment before more serious and costly problems develop, and have fewer preventable emergency department visits and hospital admissions relative to patients who do not (2). Some feel many of the current health care systems problems in the US can be linked to a weak primary care foundation. The new Affordable Health Care Act strives to strengthen the nation's primary care system through the use of innovative delivery models such as the patient-centered medical home (PCMH) model.

The PCMH model primary attributes include enhanced patient access to a regular source of primary care, stable and ongoing relationships with provider who coordinates care in a timely and well-organized fashion, with emphasize on prevention and chronic care management (2). Evidence suggests that PCMH have the potential to reduce the overall cost of care without sacrificing quality, while improving patient experience and outcomes by increasing

access to care. The ideal of PCMH has reformed the school of thought of many clinicians who had established population-based medicine into their practices. The American Medical Association defines population-based medicine as an approach “that allows one to assess the health status and health needs of a target population, implement, and evaluate interventions that are designed to improve the health of that population, and efficiently provide care for members of that population in a way that is consistent with the community’s cultural, policy, and health resources values (3).” Many clinicians have believed since the implementation of population-based medicine that the notion does not take away from individuality, but adds another dimension, because individuals would benefit from the guidelines developed by the populations to which they belong. I agree with Dr. Paul Kasuba, who states “that the two concepts align well.” He continues to say that both PCMH and population-based medicine, “point toward giving individuals the right kind of care in the right place at the right time. And that we need to keep both of them in mind by aligning financial incentives for providers and our members around similar outcomes in health and health measurement (3). “

Population-based medicine seems to lay-out the canvas on which the art of PCMH comes to life. In order to take a healthcare reform model to action, the stage must be set; which requires actual understanding of the make-up of a population. In other words casting a smaller net in a larger population, to understand the sub-populations within a community, in terms of what health care status and needs, as well as the resource essentials . This is the arena where community-based studies represents the paint on the brush or the tie that binds PCMH to population-based medicine.

The idea of community-based investigation, takes a population of individuals, for example the City of Jackson in Mississippi. This population that has a general allocation of resources in the area, for example the local hospitals, clinics, and health departments, including respective funding. The population in the city of Jackson has a unique cultural affect due its location in Deep South. These cultural distinctions touch every aspect of life in the community from the type of foods prepared and the level of physical activity. Which has subsequently led to issues of obesity and a high burden of associated chronic illnesses, such as heart disease and diabetes. The City of Jackson also has history steeped in racial conflict and inequality in access to healthcare that continues to underline current quality and utilization issues. The population in total is distinct from others in the US. However, within this population are communities or groups of individuals with similar specific needs. These needs can be understood through community-based studies at the clinic level to uncover the exact way to allocate resources, for the exact type of services and education that need to be available. This will help clinics create tools exclusive to the community they serve, and have these resources readily available as patients are accessed on an individual-basis under the PCMH model.

I wanted to determine if the use of community-based studies implemented from the clinic could provide insight into utilization of care. Utilization of care is an important concept in the patient-centered medicine model and health care reform. The PCMH supports utilizing ambulatory outpatient primary care clinicians on a regular, basis to decrease use of more costly emergent interventions. Evidence shows that appropriate and increased utilization of primary care will decrease the burden and expense on the US health care system of chronic illnesses and improve a patient's chance of primary prevention.

To test the theory of community-based studies, I was interested in understanding the utilization of care in a group where primary prevention could have the greatest impact. Primary prevention of obesity, diabetes and hypertension is crucial to the viability of health care resources and services in Jackson, MS a city plagued with the above aforementioned. I chose to study women between the ages of 15-35 years, who do not have chronic illnesses. This cohort was selected because of the decreased likelihood, that they would have a stable primary care provider outside of their OB/GYN. Most women between these child-bearing ages are no longer seeing pediatricians and are not actively being followed by internist or a family practice provider. Therefore, this population is distinct, because utilization of care maybe inappropriate due to lack of having a consistent primary care provider for prevention and ambulatory care.

METHODS

A sample of women between the ages of 15-35 years was obtained over the course of 3.5 weeks who sought out OB/GYN services at CMHS Southwest Clinics in Jackson, MS. All patients were screened for age and chronic disease status prior to offering survey. An English survey was all that was required in this community. The survey contained the following questions:

- 1. Do you have a primary care physician?**
- 2. When was you last visit?**
- 3. Was it (last visit) a physical?**

4. Annually, do you see your OB/GYN more or your Family Medicine/Internal Medicine practitioner?

This group of question was intended to identify which women considered themselves to have a stable, ongoing primary care relationship. These questions were intended to reveal if these women obtained primary care services predominately from OB/GYN. Some of these questions served as a measure of the propensity to seek, regular, prevention services such as physicals and annual women's health care in this group.

5. When was your last visit to the Emergency Room?

6. What did you go to the ER for? Where you admitted?

7. How many times have you been to the ER in the last three years?

These questions were used to identify inappropriate utilization of health care. My hypothesis was that if women in this group did not identify any ongoing relationship with a primary care provider, other than their OB/GYN, they would seek ambulatory care services at urgent and emergent care facilities.

8. Have you been diagnosed with any chronic illnesses?

This question was used to confirm current chronic disease status and any past diagnose patient may/may not have been under primary or specialty care management.

RESULTS

Forty patients seen at CMHS Southwest clinic OB/GYN office met initial inclusion criteria for study. All surveys were in English. Of these patients, only 33 completely and correctly filled out survey. One survey of the 33, indicated the patient had chronic illnesses which excluded her data from results. Total number of surveys included and analyzed in survey was 32.

As listed in the appendix. According to Figure 1, 72% answered yes to having a primary care provider, and 28% answered no. Figure 2, shows that 97% of women in study have seen their PCP with in the last year, with 1% not being seen for over 5 years. Figure 3 indicates that 66% of participants sought preventative care at last PCP appointment, while 34% needed other services. Of all women surveyed, 72% identified their OB/GYN as their PCP, while 28% did not. Figure 5 shows that of study participants visited the ER, various numbers of times within the last three years, 19% had 0 to 1 visit, 47% had 2 to 5 visits, 25% had 5-10 visits, and 9% visited more than 10 times. Most participants (66%) had visited the ER with in the last 3 months as indicated in Figure 6, while 10% visited in the last 3 to 6 months, 9% within the last year, 6% in both the last 3 years and five years and 3% that have never visited ER at all. Figure 7, demonstrates that most visits (68%) to ER, were for non-emergent care, indicated in survey by the inclusion of the following diagnosis not complicated enough for admission; urinary tract

infection, strep throat, and upper respiratory viral syndrome, while the remaining 32% actually required emergent care.

CONCLUSION

The decrease likelihood of this population to receive chronic management of disease may be causing an increase and inappropriate use of emergency care; which further exacerbates high-cost of health care. Greater than 70% identified their OB/GYN as their PCP, with more than 90% seeking preventative care annually. However, most (70+%) of the women had visited the ER more than 3 times in the last three years. Majority (60+%) of the ER visits were for non-emergent care.

DISCUSSION

The results of this study highlight the importance of understanding utilization of care and the dynamics that affect it. This cohort of women are in a special sub-set of the community, with a majority of them not having a dedicated primary care provider, while over-utilizing emergency departments for ambulatory care. Dr. Peter Cunningham presented a statement on Non-Urgent use of Emergency Department to US Senate, Subcommittee on Primary Health and Aging. Evidence suggested that although most emergency care is sought out by those privately insured, the cost savings is greatest when individuals under federal insurance programs like Medicare and Medicaid (1) reduced ER visits. This group of women represents the underserved

population served at CMHS, where more than 70% are covered by Medicare/Medicaid. The results above are congruent with Dr. Cunningham's findings, "that Medicaid enrollees have by far the highest per person use of the Emergency Department and the cost savings to the Medicaid program is substantial (1). The study indicates this cost-savings by comparing the average ER visit cost without admission around \$1,200 dollars to a clinic/office visit of \$20-\$60 (1). The report to the Senate also identified that most ER visits were for non-urgent care as seen in my community-based study; where this cohort of women went to EC to receive care for uncomplicated abscesses, urinary tract infections, upper respiratory viral syndromes, and strep throat. Dr. Cunningham also revealed that the overcrowding seen in most ER is due to uninsured and underinsured populations. This is a major problem, because overcrowding of patients seeking non-urgent care decreases the ability and the space available to emergency departments to respond to true emergencies such as public health crisis or mass-causality event (1). This committee determined that the increase in ED use reflected the general increase in demand for ambulatory care. Ambulatory care that can be coordinated and executed in a more cost-effective and efficient manner in Community Health Clinics (CHCs), with better surveillance and management of patients can occur, to bolster improved health outcomes.

RECOMMENDATIONS

This study validated the ability of a community-based study performed at the clinic level to identify specific areas in desperate need of strategic application of education and resources to improve care and utilization of healthcare services. This group of women clearly demonstrated

that individuals without chronic illnesses have increased likelihood to underutilize ambulatory care and overuse emergency services. This inappropriate utilization of care has tremendous ramifications on costs in our healthcare system as mentioned above, but more importantly on the quality of care and health of the patient.

In light of evidence that indicated those who have ongoing primary care have better reported health, it is imperative that this group of women be redirected from OB/GYN to a family physician or internist. The chronic disease burden in Jackson, MS follows the current trend of increasingly younger ages for hypertension, diabetes, and obesity. Patients that do not have an ongoing relationship with a primary care provider, may not have certain risk factors noted or worked up, and prevention strategies will not be able to catch disease prior to onset or exacerbation of disease, which is when most patients seek help. These women between 15-35, need to be assessed for obesity and family related risk factors, in addition to their annual women's health prevention measures. OB/GYN can screen for these certain conditions, but most non-OB/GYN issues are managed by generalist.

I recommend that other community health centers collaborate or add OB/GYN services to their repertoire. This will bring this group of patients to the CHC facility, where they can then be redirected to other primary care services, necessary for adequate ambulatory issues. Although, these patients may not need ambulatory care as frequently as those with chronic illnesses, creative means to maintain relationships with these women can be successfully accomplished. First, OB/GYN patients can be educated on the benefits of having a PCP, other than OB/GYN, for non-women's health issues. Secondly, these women can be introduced to the providers at the

respective clinic to lay foundation of engagement. If these women are not seen over a 6 months period, they can have emails and reminders sent electronically or in the mail to check up on patient status and reiterate the services provided by the clinic. Clinics can also have dedicated appointments for patients identified at their OB/GYN with risks factors, for a fast and effective hand-off. In this population women's health services will be utilized the most and the relationship with the OB/GYN may be well established, however, it is important that both CHC and OB/GYN demonstrate a high-level of cooperation and alliance to foster the patient-centered model. CMHS has done an excellent job incorporated OB/GYN services and has implemented discrete processes to educate and redirect women in the sub-population to appropriate ambulatory and preventative care. Funding and incentives should be provided to CHCs and PCMHs who perform community-based studies from their clinics to further individualize and optimize care and health.

REFERENCES

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- 4 International Federation of Health Plans. *2012 Comparative Price Report*. www.ifhp.com
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Appendix

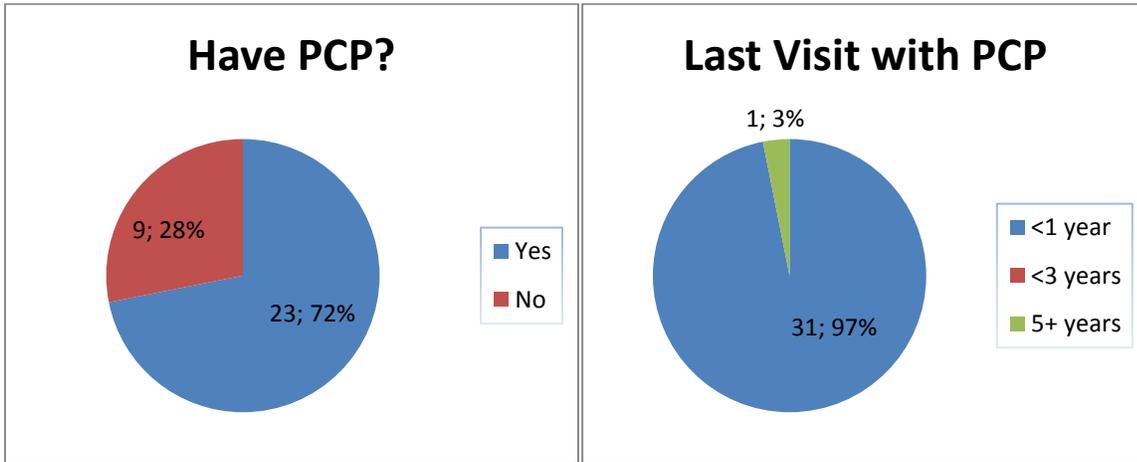


Figure 1

Figure 2

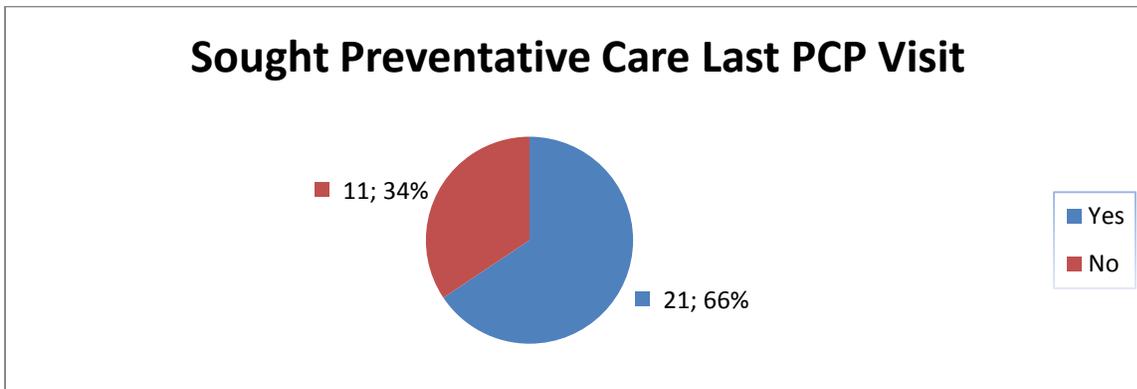


Figure 3

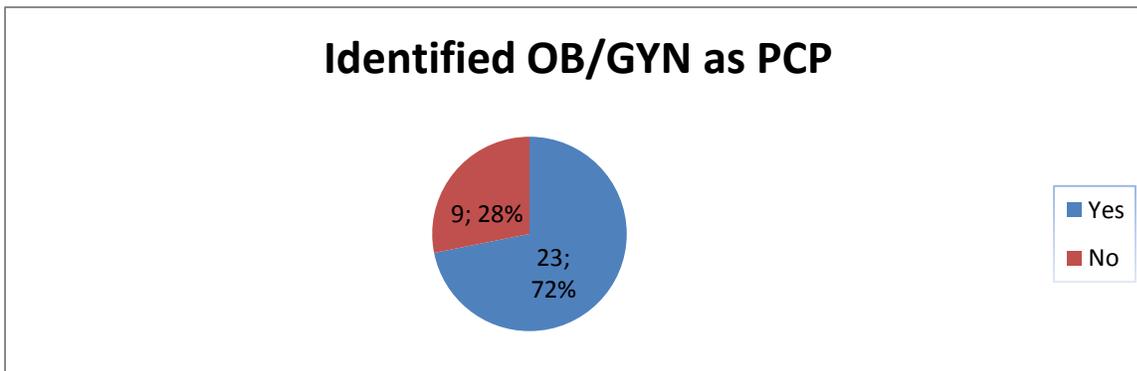


Figure 4

Number of ER Visits in 3 years

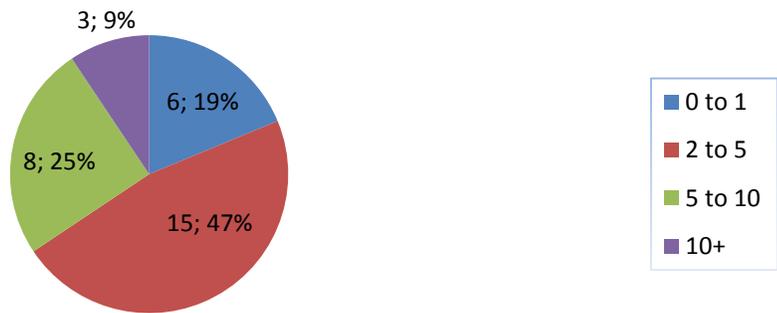


Figure 5

Most Recent ER Visit

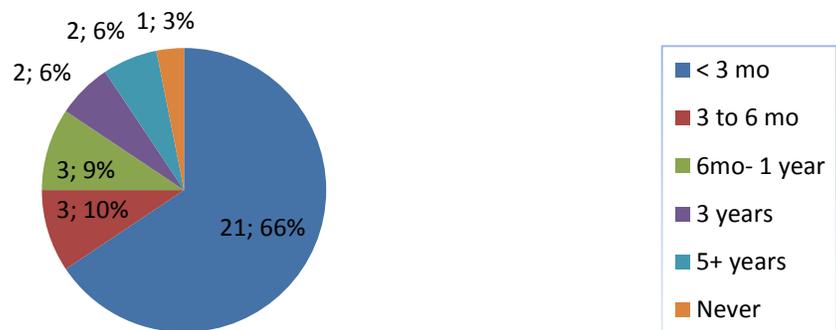


Figure 6

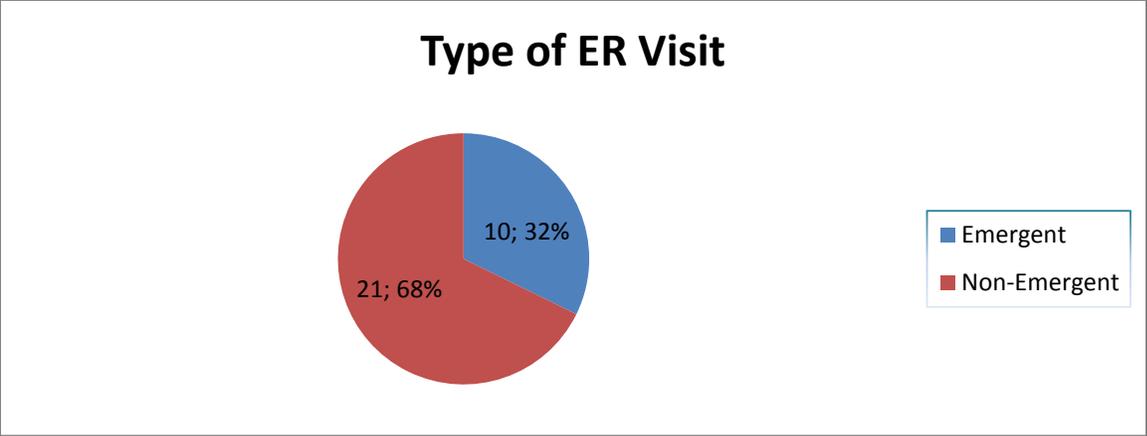


Figure 7