

US Medical Assistance Program

The High Burden of Cardiovascular Diseases on Free Clinics within the AmeriCares U.S. Medical Assistance Network

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Summary

To better understand the burden of cardiovascular disease at free clinics, AmeriCares conducted a survey amongst its partnership network in December 2012. A web-based survey was shared with 318 free clinic partners, of which 178 completed the survey. This reflects a 56% response rate. Clinics reported that 40% of all clinic visits are related to cardiovascular disease. Additionally, 50.6% of all patients have high blood pressure and 43.6% of all patients have high cholesterol. These prevalence rates are much higher than nationally reported statistics. This survey demonstrates that AmeriCares free clinic partners are heavily burdened by cardiovascular diseases, and there is a pressing need for increased cardiovascular care for the uninsured.

Background

Preliminary data analysis of 2011 mortality reports show that cardiovascular diseases (CVD) continue to be the leading cause of death in the U.S., accounting for almost a quarter of all deaths. CVD is one of the most prevalent diseases among U.S. adults and disproportionately affects low-income populations. Compared to higher-income adults, low-income populations consistently report higher rates of heart disease, hypertension and stroke. ii

People without insurance, and therefore with limited access to care, face additional risks and challenges. The Kaiser Commission on Medicaid and the Uninsured reported that 26% of uninsured, non-elderly adults with incomes at or below 138% of the federal poverty level (FPL) do not have a usual source of care, 25% report going without a checkup in the past two years, and 22% report that they were unable to access necessary medical care in the prior year. iii

The health care safety-net, particularly free and charitable clinics, intimately know the growing need for increased cardiovascular care. A survey published by AmeriCares on information from 332 clinics in 2011 showed that 32% of clinics already had cardiovascular specialty care services on site, with another 13% of clinics planning to expand to include cardiovascular services. When asked for top medication needs, clinics ranked cardiovascular medications second, after diabetic medications. iv

The term "free clinic" encapsulates many types of clinics, ranging from volunteer physicians providing care in a church basement once a month to a full-time, multi-practitioner facility with a substantial budget. In general, free clinics are non-profit clinics that predominantly provide primary care to uninsured and under-insured individuals for free. Free clinics do not typically receive federal funding. "Charitable clinic" refers to any clinic that reflects the above criteria and charges a nominal fee for services or administration. Through the rest of this report, any time the term "free clinic" is used it refers to both free and charitable clinics.

Little formal research has been conducted amongst the free clinic network. Research that has been published has largely focused on individual clinic experiences, or a small cohort of clinics within a certain area. Vi, Viii In 2010, Julie Darnell completed a study published in the Archives of Internal Medicine. It was the first nationwide census of free clinics conducted in 40 years, reflecting responses of 1,007 free clinics from 49 states and the District of Columbia. The 2010 report is the only recent, successful attempt to survey the entire free clinic network within the United States, and is used as a demographic comparison for the AmeriCares survey results presented here. Even less research has focused on cardiovascular disease and care at free clinics. Again, that which exists largely focuses on individual clinic experience or a particular intervention. In a survey is a small cohort of clinics within a certain area.

Methodology

In light of American Heart Month and the significant burden that CVD has on AmeriCares partners, a short survey was conducted in December 2012. This survey investigated the estimated prevalence of cardiovascular conditions amongst patients and total visits to the clinic to better understand the burden of cardiovascular disease at free clinics. Two hundred ten respondents completed the survey, with the vast majority of responses coming from free and charitable clinics. Seventeen federally qualified health centers (FQHCs) and community health centers (CHCs), one tribal health center and two charitable pharmacies also completed the survey. Due to the low response rate, these groups were not included in the analyses. The analysis presented here is based on responses from 178 free and charitable clinics that together operate 224 service delivery sites.

The web-based survey was sent to all clinics and health centers within the AmeriCares network. Single factor ANOVA tests and T-tests of two sample means were conducted using SPSS desktop 21.0.0 to determine statistical significance of differences between means, with statistical significance set at p-value < 0.05. Post-hoc tests, such as Tukey's HSD, were conducted when necessary.

The AmeriCares partnership network included 318 free clinics at the time of survey distribution. The response rate among the AmeriCares network was 56%. Based on the 2010 estimate of 1,007 free clinics nationwide, this sample represents approximately 18% of the national network.

Sample Population

The survey sample of free clinics is geographically diverse. Fifty-six percent of the responding clinics are from the South, 18% are from the Midwest, 15.5% are from the Northeast and 10.6% are from the West. This geographic split reflects what is known about the free clinic network in the United States; according

to a 2012 Congressional Report on the health care safety net, approximately 75% of free clinics exist in the South and Midwest regions of the United States. This geographic split is also reflective of free clinics working with AmeriCares.

Responding clinics are able to care for high volumes of patients with scarce resources. More than half of responding clinics have just one site in operation and the vast majority (91.5%) see only under- and uninsured patients. The average annual operating budget is \$481,830, with the lowest budget reported as \$1,200 and the highest as \$4,370,000. The clinics have a mean of 7.5 paid staff; however 25% have less than 2 full-time employees (FTEs). The number of hours they are open for patient care varies widely, from 1 day per month to 72 hours per week. On average though, clinics provide nearly 30 hours of patient care per week. Despite modest operating budgets and few full-time staff, the clinics see an average of 2,043 unique patients per year, for an average of 7,176 annual patient visits.

The AmeriCares survey sample is better resourced than the average free clinic, with more funds and the ability to see more patients. The 2010 national survey of free clinics reported network averages of 1,796 annual unique patients, 3,217 annual visits and 18 hours of care per week. The mean operating budget reported in the national survey was \$287,810. When statistics from the 2010 national survey are compared to those reported in this survey, it is clear that the AmeriCares survey sample has a higher mean operating budget, is open more hours per week, and sees more patients per year.

Findings

High blood pressure is the most common CVD diagnosis amongst the sampled clinics. As reported by clinic staff, approximately 51% of their total patient population has high blood pressure, and 44% has high cholesterol. Thirty-three percent of all patients have other cardiovascular conditions.

The burden of CVD on clinic visits is particularly high. Clinics report that 40% of all clinic visits are related to cardiovascular disease. The impact a condition has on the total annual visits a clinic conducts has implications for clinic operations, including the types of equipment, diagnostics and staff required to appropriately care for the patient population.

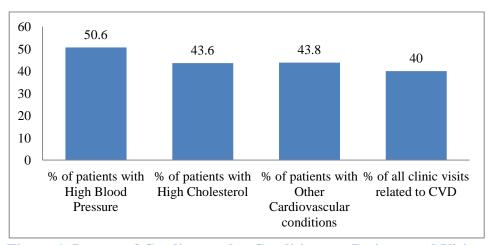


Figure 1. Impact of Cardiovascular Conditions on Patients and Visits at Free Clinics

With limited budgets, free clinics constantly struggle to obtain medications at low-cost for their patient population. The five most-needed CVD medications reported by survey participants are ACE-Inhibitors (79%), Diuretics (63%), Calcium Channel Blockers (61%), Angiotension II Receptor Blockers (ARBs) (57%) and Antihyperlipidemic Agents (54%). Many free clinics dispense medications. Those that do not dispense medications try to prescribe generics to keep costs down. All clinics likely need greater access to these five medications.

Region

Free clinics within this sample located in the Western region of the United States report a lower prevalence of CVD. The difference between means of the South and the West, and the Midwest and the West, were statistically significant in the case of each variable. Additionally, the Northeast was statistically different from the South regarding percent of patients with high blood pressure. These findings indicate that the West has the lowest burden of cardiovascular disease, whereas the Midwest and the South have the highest. This is consistent with national trends of cardiovascular disease prevalence.^{xv}

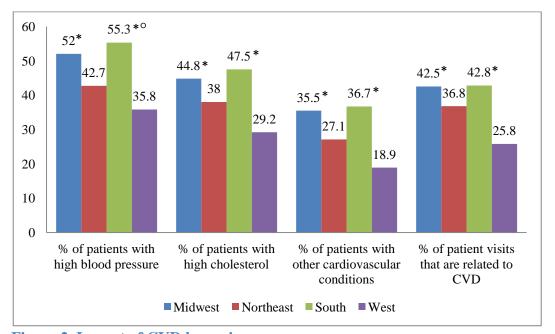


Figure 2. Impact of CVD by region

Further variables of interest were investigated and stratified by operating budget, number of paid staff, number of hours open for patient care, and region to determine if there were any statistically significant differences. No clinically significant findings on the burden of cardiovascular diseases were discovered, except for the distribution of CVD across geographic region.

^{*}Significantly different from the West

[°] Significantly different from the Northeast

Discussion

Anecdotal information from free clinic partners indicates that the majority of patients seen at free clinics are between the ages of 18-64. This is likely because all states have a public insurance program targeting uninsured children, and people 65 years and older are eligible for Medicaid. As a result, we feel that it is appropriate to compare data from the National Health and Nutrition Examination Surveys (NHANES) to the findings presented in this report.

The prevalence of hypertension, high cholesterol and other cardiovascular conditions reported in this survey are higher than national averages reported by the CDC. Based on NHANES data from 2005-2008, the prevalence of hypertension among all adults aged \geq 18 years was found to be 29.9%. The prevalence amongst just the uninsured, less than 65 years old, was found to be 20.0%. Both of these statistics are lower than the 50.6% prevalence reported in this survey.

Additionally, the prevalence of high cholesterol is much higher in this survey than national averages. The prevalence of high total cholesterol among all adults aged \geq 20 years, based on NHANES 2009-2010 data, was 13.4%. This is also much lower than the 43.6% prevalence reported in this survey.

Using national statistics as a comparison, though imperfect, indicates that this sample of free clinics is experiencing a higher than average burden of cardiovascular patients. This may be attributed to the fact that the uninsured are less likely to receive preventative care and more likely to be diagnosed in later stages of disease, xviii leading to a greater need for clinical monitoring. Additionally, national data from FQHCs has shown that patients with chronic conditions are more likely than other patients to make multiple visits to a health center. Despite these caveats, the need for cardiovascular care in a free clinic setting is evident, and the burden of cardiovascular diseases on this sample of free clinics is staggering.

It is important to note that with only 1,007 free clinics nationwide, there are many uninsured that have no place to seek care. Approximately 36% of FQHC patients in 2011 had no insurance^{xx} but even with this additional point of care, there are still uninsured people who do not have access to low-cost or free care due to geographic or scheduling restrictions. If diagnosed early, chronic conditions are more easily controlled and exact a lower cost on individual patients and the health care system. Many uninsured people living in areas without a free clinic or FQHC cannot access care regularly to be diagnosed at an early stage. This survey indicates a high need for primary and specialty care services for the uninsured, which would be all the more important in geographic areas without access to low-cost healthcare sites.

The AmeriCares survey has several limitations. All responses were self-reported, however, the clinic demographics align closely with data that AmeriCares clinic partners must update on an annual basis so there is confidence in the self-reported statistics. Standardized medical definitions were not provided in the survey, nor were clinics asked to differentiate between uncontrolled and controlled hypertension; therefore the comparison to NHANES data may not be exact. An additional limitation is that each free clinic sets its own financial eligibility requirements and they vary widely. Many will see uninsured patients whose incomes are at or below 200% of the FPL. This is different from the cutoff of 138% or below of the FPL that is used in national surveys.

Implications

The health care landscape is rapidly changing and with the implementation of the Affordable Care Act (ACA), the question has been raised whether free clinics will continue to be needed. Massachusetts, even with expanded health care coverage, has seen an increase in unmet need due to difficulty scheduling appointments and increased patient load on health care providers. The latest projections from the Congressional Budget Office estimate that 29 million people will remain uninsured after the ACA is in full effect. Free clinics play a vital role within the U.S. caring for the uninsured and underinsured, and their low-cost services will continue to be needed during and after ACA implementation.

As a result of this survey, it is clear that chronic cardiovascular conditions constitute a large burden on free clinics and will most likely remain so. As free clinics adapt to the new healthcare landscape they also need to adapt to the greater need presented by chronic illnesses.

About AmeriCares

AmeriCares is a nonprofit global health and disaster relief organization that delivers medicines, medical supplies and aid to people in need around the world and across the United States. Since it was established in 1982, AmeriCares has distributed more than \$11 billion in humanitarian aid to 164 countries. For more information, visit americares.org

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