2000s


Reviews the cost effectiveness of health centers through reducing high-cost specialty and hospital care. For these reasons, the authors find that states could save money by increasing their investment in health centers.


Upon surveying patients and physicians on avoidable hospitalization conditions among children in Boston, authors found that between 13 to 46% of all hospitalizations could have been avoided through better parent education on their child’s condition and appropriate primary or outpatient care. Three quarters of the study subjects were publicly insured and 16% were uninsured, and asthmatic children, adolescents, children from low income working families, and uninsured children were at much greater risks for unnecessary hospitalizations. Moreover, the study found that states could save $17 billion annually by preventing avoidable hospitalizations.


Found that as the proportion of a state’s low income population served by health centers grows, the black/white and Hispanic/white health gap narrows (i.e., declines) in such key areas as infant mortality, prenatal care, tuberculosis case rates, and age-adjusted death rates. The study also concluded that Medicaid alone has little direct impact on health disparities, but Medicaid coverage for low income patients is key to health centers’ ability to serve more of the low income in states, and in so doing reducing disparities. As evidence of this the GW researchers found that health center penetration (defined as the proportion of state low income served by health centers) had its lowest impact in reducing disparities for heart disease and diabetes related death rates. These diseases
disproportionately affect older low income and working-age minority adults, who are the least likely to have Medicaid coverage. Hence, it is the combination of customized, supported health care with comprehensive health insurance that may most effectively reduce health disparities.


Estimates the amount of Medicaid savings generated by health centers and the potential savings for reducing avoidable hospitalizations by state.


Praised health centers for their “strong track record in chronic care management, electronic patient registries, and performance measurement…[that] contribute to providing care that is at least as good as, and in many cases superior to, the overall health system in terms of better quality and lower costs,” and recommended them as models for delivery of primary health care.


Compared quality of care for uninsured patients with diabetes in private physician’s offices and community/migrant health centers (C/MHC) by conducting a cross sectional medical record review in a convenience sample of eight physician offices and three C/MHC sites in rural North Carolina. They found that the medical records of patients in C/MHCs demonstrated higher rates on four of six process measures of quality of care including measurement of HbA (1c), cholesterol, and urine protein.


Upon examining the socioeconomic status of adult community health center users and their use of screening services for secondary prevention, found that users of minority or lower socioeconomic status were not less likely to receive preventive screenings and the screenings conducted were most often at a health center. The study concludes that health center are indeed providing preventive services to vulnerable populations that would otherwise not have access to certain services.

Finds that health center uninsured users tend to live in poverty-stricken areas, are poorly educated, and are African American or Hispanic; yet, uninsured users had more regular contact with a physician and a usual source of care whereas the overall uninsured did not.


Reviews literature showing that health centers improve access to preventive services, health outcomes, and have been successful in reducing or eliminating health disparities.


Preventable hospitalizations in communities served by health centers were lower than in other medically underserved communities not serviced by health centers. Patients in underserved areas served by these centers had 5.8 fewer preventable hospitalizations per 1,000 people over three years than those in underserved areas not served by a health center.


A study of Medicaid beneficiaries in 5 states in 2001 found that Medicaid beneficiaries who receive care at health centers were significantly less likely to be hospitalized or to visit hospital emergency rooms for ambulatory care sensitive conditions (ACSCs) than beneficiaries who receive care from other providers.


Evaluated the implementation of the Guidelines for Adolescent Preventive Services (GAPS) in Community and Migrant Health Centers and found that implementing GAP increased the receipt of preventive services at the health centers. After guideline implementation, adolescents reported increases in having discussed prevention content with providers in 19 out of 31 content areas, including increased discussion of topics such as physical or sexual abuse (10% before to 22% after), sexual orientation (13% to 27%), fighting (6% to 21%), peer relations (37% to 52%), suicides (7% to 22%), eating
disorders (11% to 28%), immunizations (19% to 48%), and others. The researchers conclude that GAPS implementation may help improve the quality of care for adolescents.


Assessed the quality of diabetes care in community health centers. In 55 Midwestern community health centers the charts of 2865 diabetic adults were reviewed to see if the American Diabetes Association’s measures of quality were met. Results found that on average, 70% of patients in each CHC had elevated measurements of glycosylated hemoglobin (an average value of 8.6%), 26% had dilated eye examinations, 66% had diet intervention, and 51% received foot care. It was concluded that rates of adherence to process measures of quality of were relatively low among community health centers, compared with targets established by the American Diabetes Association.


Evaluated the results of medical records reviews assessing the quality of care at Community Health Centers (CHCs) for acute otitis media, diabetes, asthma, and hypertension. It was found that the CHCs meet or exceeded prevailing practices across other health care settings (though some variation existed among sites).

1990s


Found that health center patients had hospitalization rates that were equal to patients who saw private physicians and lower than patients who attended hospital clinics.


Finds that incorporating principles of Total Quality Management (TQM) is easy to do in a community health center setting and can enhance the effectiveness of health care delivery to a community and its members.

In a review of Maryland Medicaid patient records, health centers scored highest among all providers for the proportion of their pediatric patients who had received preventive services, including immunizations.


In a review of Maryland Medicaid patient records, health centers consistently scored at or near the highest in 21 separate measures of quality assessment, even though their costs of care were among the lowest of the various provider types reviewed. Patients in medium-cost community health centers had the lowest total costs, lowest cost per ambulatory visit, lowest incidence of hospital inpatient days and lowest inpatient care costs, when compared with Medicaid patients of 106 private physicians and 19 hospital outpatient departments.


New York health center patients in 1994 were 22-30% less expensive overall, and had 41% lower total inpatient costs; diabetics and asthmatics who were regular health center users had 62% and 44% lower inpatient costs, respectively.


California health center patients in 1993 were 33% less expensive overall (controlling for maternity services), and had 27% less total hospital costs.


Health center patients in Washington State in 1992 were found to be 36% less expensive for all services than patients of other primary care providers and used 31% fewer emergency room services.
Maryland health center patients in 1993 had lowest total payments, ambulatory visit cost, incidence of inpatient days, and inpatient day cost. Health center patients were one-third as likely as hospital outpatient unit patients to be admitted on an inpatient basis and were half as likely to have unstable chronic medical diagnoses as patients of other providers.


The per capita cost of care at all U.S. health centers in 1988 was $183, compared to $238 for all Americans below 200% of poverty.

1980s


Studied 36 communities served by health centers to examine the relationship between outpatient medical care obtained at federally funded rural community health centers and inpatient care. Health center patients and selected groups based on their age, sex, and insurance status (specifically Medicaid or Medicare) had statistically lower rates of hospital admissions and days. Researchers did not detect any differences in hospital use between health center community and comparison populations, thereby suggesting that treatment, and hospitalization incentives, of health centers may reduce hospitalization.


The Municipal Health Services Program (MHSP) was created by 5 cities as networks of primary care clinics for the underserved. The evaluation found that MHSPs did reach most of the targeted groups, and may have improved improper use of emergency room services. However, MHSP did not provide continuity of care nor high patient satisfaction. Per capita expenditures for medical care for MHSP users were no about the same as for others. However, for Medicare eligible MHSP users, expenditures by Medicare were significantly less.
Communities served by health centers have infant mortality rates that are lower than communities not served by health centers, and health center services have produced improvements in the use of prenatal care and reductions in the incidence of low birth weight.


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Compared hospitalization rates and emergency room use for patients of health centers in 5 cities at two points in time (1969 and 1975), and found that hospitalization rates declined 44% and ER visits 37% over the period.

¹ Taken together, these studies show that Health Centers have infant mortality rates that are between 10 and 40% lower than communities not served by Health Centers.

Found that Medicaid patients of more than 20 health centers in 4 states (Colorado, Kentucky, Michigan and Minnesota) had 30% to 65% lower hospitalization rates, 33% fewer annual hospital days per patient, and 12% to 48% lower total Medicaid costs than a similar group of non-health-center Medicaid patients.


Okada and Wan found that patients of at least 11 CHCs in 5 cities (Boston, Charleston, Atlanta, Kansas City and Palo Alto) were hospitalized 34% less often than users of private physicians or hospital clinics.

**1970s**


Use of health centers led to lower utilization of more costly emergency rooms and improved health outcomes.


Authors found that nationally:

- The cost of care at health centers in 1975 was $204, compared with $240 for other providers (principally private physicians);
- The cost of hospital care was $65 lower for health center patients than for those served by other providers; and
- Health centers had reduced hospital admission rates by anywhere from 22% to 67%, as well as the number of patients admitted and average lengths of stay, compared with patients of other providers.


The authors studied costs and benefits of community care for a patient needing chronic care at a neighborhood health center after eight years of hospitalization. Cost
comparisons were made between the neighborhood center and a public hospital, the center and a day program of a community mental health center, and the center and the inpatient unit of a community mental health center. Cost of care in the neighborhood health center fell from $2110 in the first year to $640 in the third, while costs in the alternative settings increased substantially. The patient's clinical status was rated "much improved" in the community.


Use of health centers led to lower utilization of more costly emergency rooms and improved health outcomes.


Zwick found that the annual hospital use rate for patients of a CHC in Chicago was reduced from 1000 days/year to 750 days/year over 3 years.


Sparer and Anderson found that, for 6 health centers studied, the cost of care and cost per registrant was comparable to that for prepaid group practices.


Use of health centers led to lower utilization of more costly emergency rooms and improved health outcomes.


Found that pediatric patients of 4 health centers in Rochester, NY, had 38% lower hospitalization rates and fewer days than non-health-center-patients living in the same area.