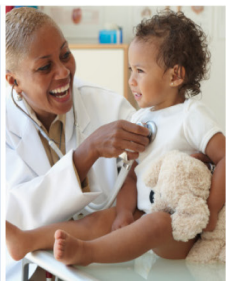



CPCA
California Primary Care Association
Health Care Access for All



Value of Community Health Centers Study

Partnership HealthPlan of California Case Study | January 2013

The California Primary Care Association (CPCA) has recognized that if federally qualified health centers (FQHCs) are strategically going to work towards Triple Aim goals of improved patient care, improved health, and improved cost effectiveness, one first step is to understand FQHC patients' total system utilization and associated costs.

CPCA set out with two original research questions:
How do managed care Medi-Cal patients with an FQHC as their usual source of care compare to non-FQHC patients on:

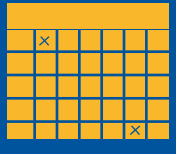
1. **High-cost value metrics** (hospital admissions, hospital bed days, 30-day hospital readmissions, emergency department visits)
2. **Total Cost of Care (TCC)** including all payments made on behalf of a defined group of individual Medi-Cal members.

John Snow, Inc. (JSI), a public health research and consulting organization with broad experience working in the safety net, conducted an analysis using two recent years (October 2009 – September 2011) of recent Medi-Cal claims from Partnership HealthPlan of California (PHC), a public/private organization designed to provide a cost-effective healthcare delivery system to Medi-Cal recipients in California's Solano, Napa, Yolo, and Sonoma Counties. Marin and Mendocino counties have also been added to PHC's services area.

FQHCs are demonstrating value.

FQHC patients were
less likely
than non-FQHC patients to have:

An inpatient stay



A 30-day readmission

An ED visit

The PHC Medi-Cal population was selected for this study because the PHC environment represents many aspects of the policy environment where the rest of the state is going under health reform.

Key reasons for selecting PHC for this study included:

- A high-quality, complete dataset for four diverse counties.
- Inclusion of Seniors and Persons with Disabilities (SPDs): PHC operates within a County Operated Health System environment where most Medi-Cal individuals, including SPDs, were enrolled in managed care well before the study period. Many other managed care counties just began the SPD transition into managed care as part of California's 1115 Waiver in July 2011, the very end of the study period.
- Payment rates most similar to health reform: On average, PHC pays non-FQHC primary care providers just under Medicare rates rather than much lower Medi-Cal rates. Beginning January 1, 2013, the Affordable Care Act requires that all primary care providers receive Medicare rates, a significant increase for California's Medicaid rates that are the 5th lowest in the nation.

Methodology

The total study population included 134,797 individuals who had been a member of PHC with six months of continuous enrollment over the two-year period, were not over 65 years of age, and not in Medicare. Approximately a quarter of the study population had a disability aid code.

While adult and pediatric populations were analyzed separately, the results focus on the adult population because of the policy implications; more adults will be moving into managed care under health reform, and adults have more inpatient utilization that primary care might influence.

The study defined each utilizing member as either an FQHC or non-FQHC member. The methodology was based on the literature and aimed at elucidating whether being an FQHC patient had an "effect" on hospital utilization compared to being a non-FQHC patient. The hypothesis was that the comprehensive and enabling services provided in an FQHC would help to prevent inpatient and emergency department utilization to a larger degree than if a patient sought care in a non-FQHC setting.

All patients with at least two outpatient visits during the study period were defined as either FQHC or non-FQHC patients. FQHC patients were defined as members with at least 75% of a select set of common outpatient visits at an FQHC. The analyses excluded patients with zero or only one qualifying visit in the two-year study period. The reason for excluding low utilizers of the health system was to focus the analysis on patients where an outpatient provider had a threshold amount of contact with a patient to theoretically have an influence on the patient's utilization in the rest of the health system. In other words, it was only deemed fair to attribute patients and their utilization to health providers who saw patients during the study period.

Even within managed care, FQHCs ultimately receive a per-visit prospective payment system (PPS) payment partially through the health plan and partially through a "wrap around" payment from the State. In order to account for the full payment made to FQHCs, this study removed the managed care primary care payment made to CHCs and inserted the full PPS rates for PPS-eligible primary care visits to health centers and county FQHCs. These primary care costs were added to all the other claims (inpatient professional and technical claims, specialty outpatient, prescription, emergency department, etc.) for FQHC and non-FQHC patients. The study did not account for other "carved out" payments such as mental health services or California Children's Services (CCS).

Study Limitations and Notes

Risk Adjustment: The risk adjustment done in this analysis takes into account important demographic and disability variables but does not take into account clinical severity or other social factors (ex. homelessness, poverty, violence in the community) that can influence utilization and thus cost of care. No risk adjustment methodology is deemed a gold standard for underserved populations. We chose to risk adjust by demographic and disability factors because these factors are widely used by actuaries and have been employed in other studies. Data on social acuity factors was not available. While data showing clinical diagnoses was available, we chose not to pursue this method of risk adjustment because of variable quality of diagnosis code data and resource constraints. Similarly, while mental health and substance use can also influence utilization patterns, the analysis did not risk adjust for these factors. Future analyses could benefit from further levels of risk adjustment. It is also important to remember that the unadjusted utilization analyses present the actual numbers that health plans, hospitals, and health centers experience.

Dichotomous Categories of FQHC and non-FQHC: The primary purpose of the analysis was to compare how FQHC patients experience compares to the average experience of non-FQHC Medi-Cal patients. It should be noted that within the non-FQHC group, there is a group of primary care providers whose patients, compared to FQHCs, showed slightly higher adjusted odds of inpatient stays and readmissions, slightly lower odds of ED visits, and slightly lower adjusted costs. Partnership HealthPlan notes that such independent primary care providers are a dwindling group of providers, and in many communities, FQHCs are the only provider that will accept Medi-Cal patients. The study's focus on only two groups is rooted in the reality that in many communities the alternative to going to an FQHC for Medi-Cal patients is a mix of other settings and sources of care, including other primary care providers, outpatient hospitals, and EDs.

Exclusions: This study excluded Medi-Cal patients assigned to Kaiser Permanente, a provider known for providing cost-efficient care, because of limitations in being able to analyze the global payments to Kaiser and incomplete utilization data for these members across all settings in the PHC dataset. The study also did not include costs associated with "carved out" services, such as inpatient mental health, that are the responsibility of the state rather than PHC.

Results and Analysis

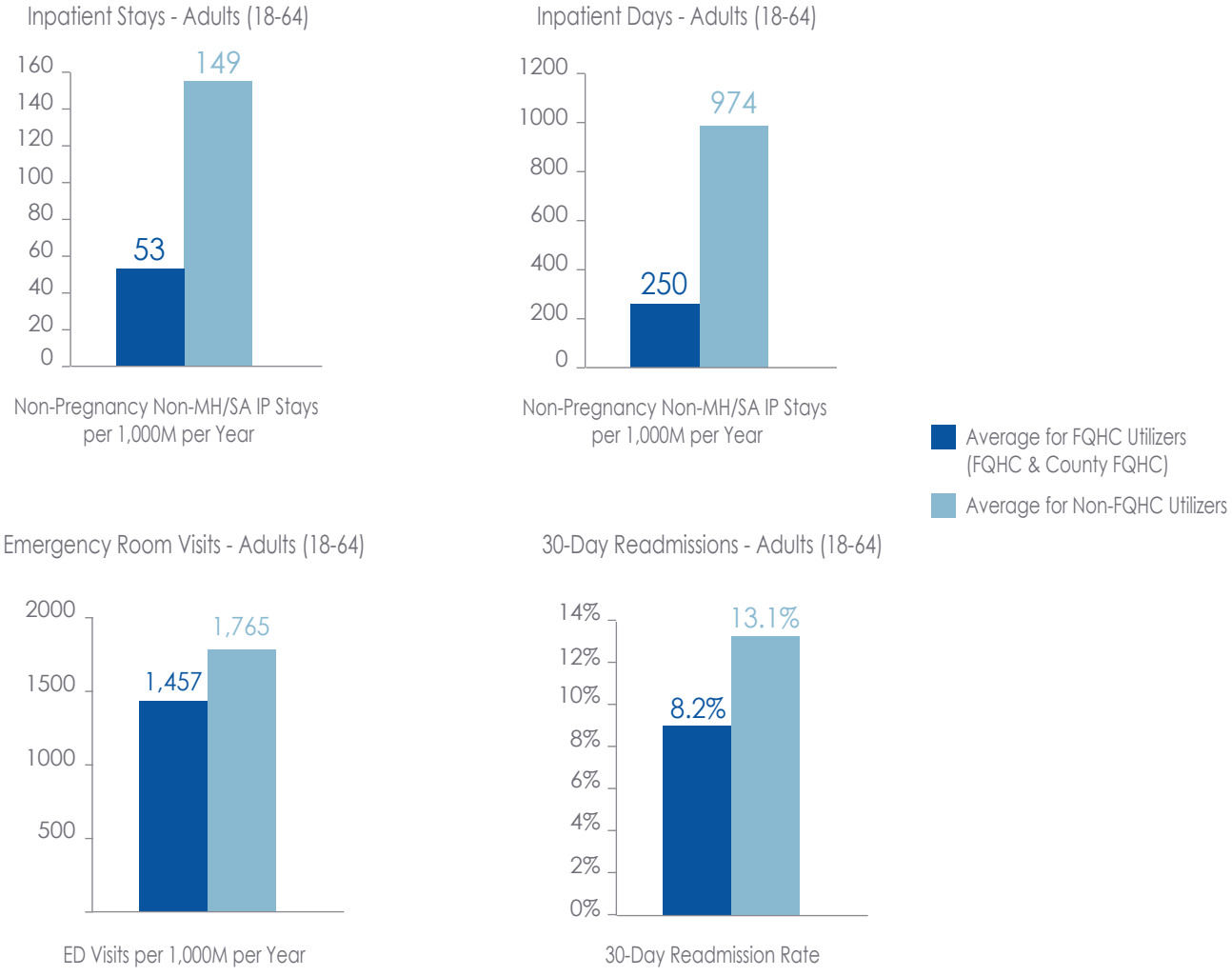
Utilization Findings for Adult Population

As shown in Figure 1, adult FQHC patients showed lower unadjusted hospital utilization rates compared to adult non-FQHC patients.

Compared to non-FQHC adult patients, adult FQHC patients had:

- 64% lower rates of multi-day admissions (non-pregnancy, non-mental health/substance abuse)
- Approximately 1/4 of the total inpatient bed days
- 18% lower rates of ED visits
- 4.9% lower 30-day readmission rates

Figure 1. Unadjusted Inpatient Utilization for FQHC and Non-FQHC Patients



Adjusted utilization results (controlling for disability status, age, gender and months of enrollment) showed adult FQHC patients were statistically less likely than non-FQHC patients to experience a:

- multi-day admission (non-pregnancy, non-mental health/substance abuse)
- emergency department visit
- 30-day readmission

Table 1. Adjusted Odds of Inpatient and ED Events for Adult (18-64) Non-FQHC Compared to FQHC Patients

	Measure	Odds Ratio (*indicates $p < 0.05$)	Interpretation
Reference Group: All FQHCs			
Non-FQHCs	Inpatient Stays, excluding pregnancy & MH/SA	1.99*	Compared to FQHC patients, non-FQHC patients have roughly twice the odds of experiencing a non-pregnancy, non-mental health, non-substance abuse inpatient stay at a statistically significant level.
	Readmission within 30-days	2.62*	Compared to FQHC patients, non-FQHC patients have more than twice the odds of experiencing a readmission within 30 days at a statistically significant level.
	Emergency Department Visit	1.27*	Compared to FQHC patients, non-FQHC patients have a 1.27 times statistically greater odds of experiencing an ED visit.

Method: logistic regression, controlling for age, sex, duration of enrollment (member months), and Medi-Cal disability status. Disabled included any member with aid codes of disabled, CCS, and/or BCCPT. Non-FQHC includes outpatient hospital, other primary care providers, specialty care providers, mixed sources of care, and no usual source of care.

Value/Quality Finding

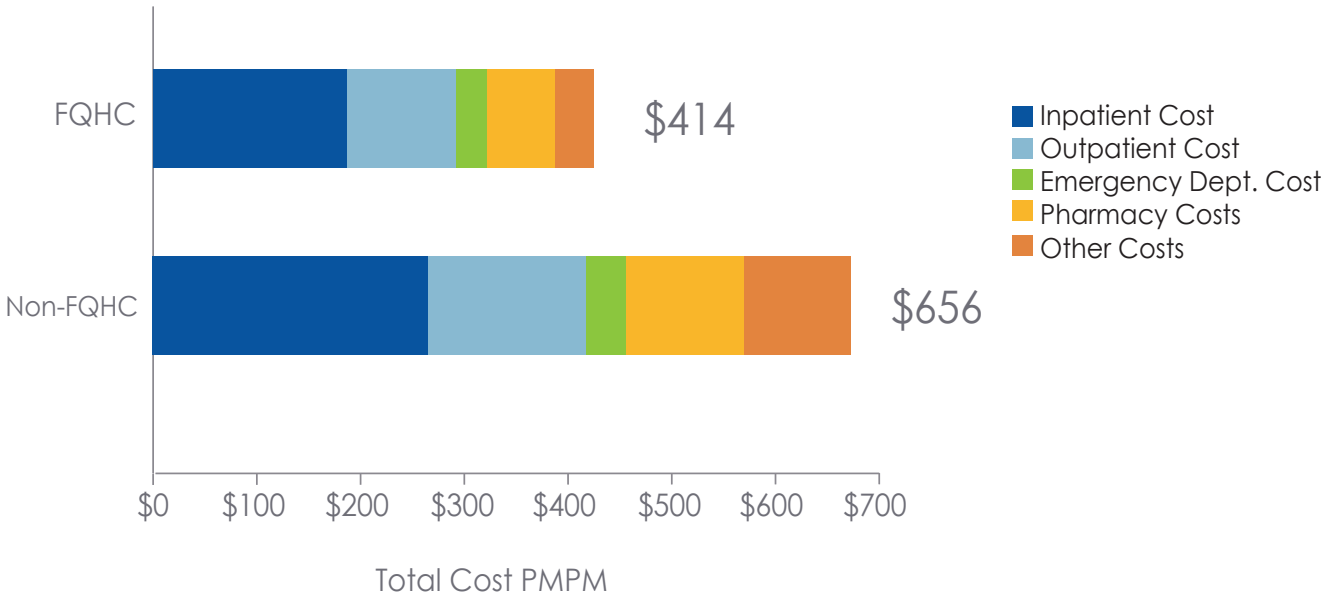
Lower readmission rates of FQHC patients compared to non-FQHC patients is evidence of FQHC value in the broader health system.

30-day readmission rates for FQHC patients were substantively and statistically significantly lower than for non-FQHC patients. Any hospital readmissions, regardless of underlying risk in the patient population, can be considered a lapse in quality in the overall health system (leading payers such as Medicare to not pay for readmissions). Thus, hospital readmissions have both a cost and a quality dimension. This finding also suggests that hospitals and primary care clinics can be strong allies in reducing hospital readmissions.

Total Cost of Care Findings for Adult Population

- The unadjusted per-member-per-month (PMPM) total health system costs showed that FQHC adults' total costs were 37% lower than non-FQHC adults total costs. (Figure 2).
- The analysis also showed that outpatient costs, including both primary care and specialty professional costs, constituted 22-24% of total health system costs.

Figure 2. Unadjusted Total Cost PMPM by Component - Adults (18-64)



Adjusting for disability status, age, gender and months of enrollment, FQHC adult patients had 19% predicted lower total costs compared to non-FQHC adult patients on average, and results were statistically significant ($p<.01$).

Despite the cost findings, one key implication of the study (discussed below) is that hospital utilization may still represent the best proxy for how health centers influence total system cost.

Key Implication of the Study

Inpatient utilization may represent the best proxy for how FQHCs influence total cost of care in the health system.

Inpatient utilization may represent the best proxy for how FQHCs influence total cost of care in the health system for the following reasons:

1. Total costs tend to be skewed by inpatient costs. Inpatient costs are driven by the volume of inpatient services and hospital contracted rates. FQHCs can only influence the volume portion of the equation. Health plans negotiate the rates. The details of this reasoning are as follows:
    - Inpatient and emergency department costs constitute the largest portion of the total cost of care and thus can greatly influence the outcome of a total cost analysis. Preliminary cost analysis showed inpatient costs constituted approximately 40-55% of total average costs per capita compared to approximately 10-15% of total costs are primary care (~15% pharma, 10-15% specialty care, ~5% ED, ~8% Other).
    - Hospital rates for the same procedure or admission differ significantly across hospitals even within the same geographic region. Other studies designed to monitor total cost should be cautioned regarding viewing differences in total costs as a difference in underlying utilization and value when it could actually reflect a difference in hospital rates.
    - Negotiating hospital reimbursement rates is not within primary care's control. By comparison, FQHCs have some degree of influence over preventing patients from going to the hospital through prevention and care management and influencing whether a patient is re-admitted to the hospital after discharge by coordinating care transitions.
2. Total cost is also influenced by the fact that outpatient costs for FQHCs and non-FQHCs cannot be considered an "apples to apples" comparison for two key reasons:
    - Medi-Cal reimbursement rates for non-FQHC primary care providers are not equal to their costs. This leads most non-FQHC primary care providers to provide limited access to safety-net patients, while using revenues from their privately insured patients to supplement operational expenses for caring for a small number Medi-Cal patients. By comparison, FQHCs tend to see predominantly Medi-Cal and uninsured populations.
    - FQHCs' rates account for provision of additional enabling services to patients (ex. assistance with insurance enrollment, coordination with other social service providers in the community) which non-FQHC primary care providers do not provide because they cannot bill for these services.

Summary and Looking Toward the Future

FQHCs are demonstrating value. The investment in primary care, through FQHC PPS rates and enabling services, is associated with reduced inpatient utilization, lower readmission rates, and fewer ED visits for their patient populations. There are also opportunities for further improving value through expanded investment in primary care and stronger partnerships between health centers and hospitals to improve care coordination and care transitions.

- FQHCs are demonstrating some of the attributes of a health home through acheiving Triple Aim goals. This trend is likely to continue through CPCA, individual health center, and consortia efforts to embrace the health home model.

- This study represents a new frontier of FQHCs taking a critical first step in strategically analyzing system-wide Triple Aim goals of improved patient care, improved health, and reduced per-capita total costs. Understanding FQHC patients' total system utilization as a proxy for how FQHCs are influencing total health system costs is a first step in managing them better.

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Health Care Access for All

www.cpca.org
916.440.8170
1231 I Street, Suite 400
Sacramento, CA 95814

Questions or feedback? Contact Rachel Tobey, JSI | rtobey@jsi.com