Federally Qualified Health Center Dental Program Finances: A Case Study

Tryfon Beazoglou, PhD[a]
Howard Bailit, DMD, PhD[b]
Margaret Drozdowski Maule, DMD[c]

SYNOPSIS

Objectives. We analyzed the operation of one Connecticut federally qualified health center (FQHC) dental program with seven delivery sites. We assessed the financial operation of the different delivery sites and contrasted the overall performance of the FQHC with private practices.

Methods. We obtained data from a pretested financial survey instrument, electronic patient visit records, and site visits. To assess clinic productivity, we used two output measures: patient visits and market value of services. For the latter, we estimated the implicit fee of each service provided in patient visits.

Results. On average, these clinics were running a modest deficit, mainly due to startup costs of two new clinics. The primary factor that impacted net revenues was low reimbursement rates, including privately insured patients. When FQHC dental revenues were adjusted to market rates, revenues were close to expenses.

Conclusions. FQHC dental clinics are major components of the dental safety net system. This case study suggests that the established clinics use resources as effectively as private practices.

[a]School of Dental Medicine, University of Connecticut, Farmington, CT

[b]School of Medicine, University of Connecticut, Farmington, CT

[c]Community Health Center Inc., Middletown, CT

Address correspondence to: Tryfon Beazoglou, PhD, School of Dental Medicine, University of Connecticut, 263 Farmington Ave., Farmington, CT 06030; tel. 860-679-3814; fax 860-679-4078; e-mail <Beazoglou@nso1.uchc.edu>.

©2010 Association of Schools of Public Health

Disparities in access to dental care are well-documented and have received national attention by government agencies,[1] health professional organizations,[2] and researchers.[3,4] Populations that have low incomes, are behaviorally or physically disabled, or reside in rural areas obtain less care and have poorer oral health than more affluent, healthy, and urban/suburban populations.[1]

The two national strategies used to address these disparities are public dental insurance and the dental safety net. The limitations of the dental Medicaid program are well known. Most of the poor are not eligible, reimbursement is less than costs, and in some states program administration (e.g., preauthorization of elective services) is a barrier to dentist participation. Nationally, only 26% of private practitioners provide care to Medicaid patients.[5]

The dental safety net system comprises public and voluntary sector dental clinics that provide care to low-income populations. The size and composition of this system has never been fully documented, but it is estimated to care for about eight million people annually, or about 10% of the low-income population.[6]

Federally qualified health center (FQHC) dental programs are the most important component of the dental safety net system. In 2005, 803 (73%) of the nation's 1,100 FQHCs had dental facilities. Some 2.2 million patients received dental care in these clinics, averaging 2.3 visits per person for a total of 4.9 million visits. The clinics employed 1,738 full-time equivalent (FTE) dentists and 642 FTE dental hygienists.[7]

A key reason for the prominent role of FQHCs in the safety net system is their financial advantage over non-FQHC clinics. FQHCs receive an annual award under section 330 of the U.S. Public Health Service from the federal government to help cover the cost of providing care to self-paying indigent patients (i.e., those who are unable to pay for all the care received).[8] For example, if a self-paying indigent patient presents for dental care and, based on a sliding scale, is assessed a $30 fee when the FQHC fee per visit is $134, then the FQHC records the difference of $104 in uncompensated care provided. The federal 330 grant pays for about 52% of the services provided to indigent patients.[9] The methods used to calculate the 330 grant awards are complex, and visit payment rates vary among FQHCs.

In addition, FQHCs are entitled to a Medicaid payment methodology known as prospective payment, in which the FQHC applies for a rate based on costs to their state Medicaid authority. The FQHC is then reimbursed that preestablished rate, which may or may not be equal to the cost of providing the service. Furthermore, there is no guarantee that this rate will be adjusted as expenses change. On average, the prospective payment rate provides a 25% advantage over fee-for-service Medicaid payments.[9]

Nationally, in terms of FQHC revenues (all medical and dental services), 41.8% comes from grants and contracts, 6.5% from self-pay patients, 6.5% from private insurance, and 45.1% from public insurance (mainly Medicaid and Medicare).[10] No data are available on revenue sources for all FQHC dental programs, but it is likely that relatively more comes from grants and contracts and less from public insurance, as many state Medicaid programs do not cover adult dental care.

Safety net dental clinic operations have been investigated in three states and nationally. In Table 1, the Connecticut (2008) and national (2005) data are shown for FQHC dental clinics; the Illinois (2002) and California (2004) data include all safety net dental clinics.[11–14] With the exception of Connecticut, the safety net dental clinics are small, with two to five operatories, two FTE dentists, and less than one FTE hygienist. One FTE dentist provides approximately 3,000 patients' visits annually, while nationwide one FTE hygienist provides 1,297 visits annually. Connecticut FQHC dental clinics are larger with more operatories, dentists, and allied dental health personnel.[11]

Based on national data for all FQHC patients, dental patients account for about 10% of FQHC visits and expenses (for FQHCs that provide dental care). Most patients (85%) have family incomes less than 150% of the federal poverty level (FPL).[8–10]

In terms of safety net dental program productivity, Beazoglou et al. compared the productivity of Connecticut community clinics (47% FQHCs) with private practitioners nationally. They reported that private practitioners were 46% more productive in terms of patient visits. The main reason for this difference was that community clinics employed 34% fewer allied health staff and had 48% fewer operatories per FTE dentist. Adjusting for differences in staff and operatories, there was no difference in the output (number of patient visits) of community clinics and private practices.[11]

Even though FQHC dental programs represent a substantial public investment in care for the underserved, little published information is available on their finances and clinical operations. The federal government requires all FQHC dental clinics to report annually on their activities (Uniform Data System [UDS] is a reporting requirement for FQHCs).[15] This UDS report focuses on revenues and does not provide detailed information on expenses and services.

This article presents detailed financial data on one Connecticut FQHC dental program with seven delivery sites and compares the financial operation of the clinics

Table 1. Operatories, dental manpower, and visits of safety net and FQHC dental clinics in three states and nationally

Per clinic	*Illinois*[a] N	*Connecticut*[b] N	*California*[c] N	*National*[d] N
Operatories	2.1	8.2	5.3	NA
FTE dentists[e]	1.4	3.0	1.8	2.1
FTE hygienists	0.5	1.9	0.2	0.8
FTE assistants	1.3	4.2	3.7	NA
FTE other staff	0.9	3.6	1.7	NA
Number of visits/dentist	3,150[f]	2,837	3,239	2,719
Number of visits/hygienist	NA	1,867	1,100	1,297

[a]All safety net dental clinics, 2002

[b]FQHC dental clinics, 2008

[c]In 2004

[d]FQHC dental clinics, 2005

[e]Does not include a small number of part-time dentists

[f]Includes dentist and hygienist visits combined

FQHC = federally qualified health center

FTE = full-time equivalent

NA = not available

with those of private dental practices. As a case study, it is intended to provide basic descriptive information and raise issues that need to be addressed in future investigations.

METHODS

We developed a survey instrument to collect data on dental clinic finances and operations. The instrument was based on instruments used by the American Dental Association (ADA) to survey private practices,[16] the California Pipeline program's assessment of FQHC dental programs (Personal communication, Paul Glassman, University of the Pacific, Dugoni School of Dentistry, July 2008), an Anthem Foundation of Ohio project to assess community dental clinics,[17] and the advice of several FQHC dental directors. The instrument was pretested for clarity and ease of use with a convenience sample of several nonparticipating FQHCs located in Connecticut and California. (The instrument is available on request from the corresponding author.)

In addition, the study FQHC provided downloads of its clinical information and financial statements (e.g., itemized revenues and expenses) for 2007. Finally, we conducted site visits to the FQHC central office and clinics, and interviewed administrators and staff about their financial and clinical operations.

To compare revenues and expenses of FQHCs and private general practices, we obtained data from the ADA on the 2005 national survey of private dentists.[16] The ADA data included practice revenues and expenses for solo general practitioners (both incorporated and non-incorporated practices). Dentist income and fringe benefits were considered expenses.

For the assessment of clinic productivity, we used two output measures: number of patient visits and the market value of services.[18,19] The latter number was not readily available because FQHCs are mainly reimbursed per visit rather than per service. For self-pay, low-income patients, fees are adjusted based on an income-related sliding scale and do not reflect market rates.

To address this problem, we calculated the market value of clinic dental services based on the 70th percentile of 2005 national dental fees.[20] We estimated the implicit fee of each dental service provided at a visit. Because most visits included multiple services, we estimated the implicit fee for each service by allocating the actual visit fee to each service, weighted by the market value of that service. For example, a visit that included two services—an examination and a cleaning—has a visit charge of $150, yet the market fee for an examination and cleaning are $40 and $80, respectively. For this visit, the implicit fee for the examination is $50 [(150 * 40)/120] and for the cleaning is $100 [(150 * 80)/120].

For dental services requiring multiple visits, we estimated the implicit fee by aggregating the actual fee per visit charged across all visits. Then, we multiplied the frequency of each service provided per clinic by the implicit fee and aggregated the values by service category and clinic.

Finally, we calculated the market value and associated costs of the dental services produced by each FQHC. For the market value of each dental service, we used the 70th percentile of the national market fees of the 2005 National Dental Advisory Service Comprehensive Fee Report.[20] It should be noted that in 2008, Connecticut adapted these fees with minor modifications as the Medicaid reimbursement fees for children.

RESULTS

As background information, the Medicaid and State Children's Health Insurance Program (SCHIP) in Connecticut cover children and their parents up to 300% of FPL. Low-income adults are also covered by Medicaid, if their incomes are ≤100% FPL. In 2007, 220,000 children and 104,000 adults were eligible to receive Medicaid or SCHIP dental services. In 2006, 33% of enrolled children visited a dentist, and total Medicaid dental expenditures were $26 million.[21]

The state also has a special program to provide dental and other medical services to individuals and families who do not have enough money to meet their basic needs and are deemed unemployable or unable to work for medical reasons. This program, known as State-Administered General Assistance (SAGA), enrolled 35,000 members in 2005.[22]

Table 2 presents basic descriptive information on the structure, services, and finances of the seven delivery sites. The clinics averaged 6.3 operatories, 2.2 FTE dentists, 1.0 FTE dental hygienists, 3.0 FTE dental assistants, and 2.2 other FTE staff. With the exception of hygienists, there was substantial variation among clinics for these variables.

In 2007, the seven clinics treated 9,129 patients, 44.8% of whom were younger than 21 years of age. In terms of payers, 68.2% of patients were covered by the Medicaid program, 6.6% by a special state program (SAGA) for the indigent patients who were not enrolled in Medicaid, and 6.3% by private insurance; 18.9% were self-pay/no-pay patients.

Including hygiene services, the FTE dentists averaged 1,242 patients, 3,386 visits, and 5,680 services. In dollar volume (market value), about 51% of services were diagnostic/preventive and 27.4% were restorative. All other services accounted for 22% of revenues.

Financially, each FTE dentist averaged $356,727 in patient revenues, and another $115,271 came from the federal 330 grant, for a total mean of $471,998. In aggregate, this is $380 per patient and $139 per visit across all payers. The expenses per FTE dentist came to $545,608, or $439 per patient and $161 per visit. Total expenses exceeded revenues by $73,228 per FTE dentist and $1,153,352 for all seven dental clinics (data not shown).

Table 3 gives clinic revenues per patient by payer. There was wide variation in clinical revenues per patient across payers ($227–$427) and a large gap between these revenues and the mean cost per patient. These clinic revenues are supplemented by the 330 federal grants, but we were unable to allocate revenues for uncompensated care (330 grants) by payer. We estimated the mean revenue per patient for uncompensated care to be $94.40 for all patients and $100.80 for non-privately insured patients. Because most patients were covered by Medicaid, this payer accounted for about 50% of the losses before the allocation of 330

Table 2. FQHC dental clinic structure, treatments, and finances: U.S., 2007

Clinic structure	*Mean or percent*	*Range*
Mean FTE personnel/clinic		
Dentists	2.2	1.0–4.0
Hygienists	1.0	1.0–1.2
Dental assistants	3.0	1.0–4.6
Other	2.2	1.0–3.0
Mean operatories/clinic	6.3	3.0–8.0
Patients aged <21 years (percent)	44.8	27.0–62.8
Payers (percent)		
Medicaid	68.2	48.2–80.3
SAGA program	6.6	4.3–10.8
Private insurance	6.3	1.4–10.6
Self-pay/no pay	18.9	10.5–41.5
Treatment (*N*)		
Patients/dentist	1,242	754–1,976
Visits/dentist	3,386	1,893–5,480
Services/dentist	5,680	3,637–9,332
Services (percent)		
Diagnostic/preventive	51.0	44.5–61.5
Restorative	27.4	20.2–34.5
Prosthetic	9.5	5.4–15.0
Surgery	5.0	2.4–8.6
Other	7.0	2.6–10.0
Finances (in dollars)		
Mean revenues/dentist	$471,998	$308,340–$638,705
Patient services	$356,727	$194,727–$521,786
Grants	$115,271	$58,688–$197,918
Mean expenses/dentist	$545,608	$277,617–$845,832

Source: Unpublished report to the Connecticut Health Foundation. Improving the dental safety net in Connecticut. January 2009.

FQHC = federally qualified health center

FTE = full-time equivalent

SAGA = State-Administered General Assistance

Table 3. Number of dental patients and mean revenues per patient by payer: Connecticut, 2007

Payer	*Number of patients*	*Revenues*
Medicaid	13,045	$360
SAGA program	1,205	$427
Self-pay	3,615	$227
Privately insured	1,205	$381

Source: Unpublished report to the Connecticut Health Foundation. Improving the dental safety net in Connecticut. January 2009.

SAGA = State-Administered General Assistance

Table 4. Billed charges and market value of dental services by clinic: Connecticut, 2007

Clinic	*Billed services*	*Market value*[a]	*Ratio*
A	$887,393	$1,250,633	1.41
B	$1,154,645	$1,682,744	1.46
C	$1,372,390	$1,934,102	1.41
D	$879,022	$1,212,491	1.38
E	$371,169	$486,067	1.31
F	$543,861	$768,548	1.41
G	$624,361	$912,053	1.46
All	$5,832,841	$8,246,638	1.41

Source: Unpublished report to the Connecticut Health Foundation. Improving the dental safety net in Connecticut. January 2009.

[a]Based on the 70th percentile of 2005 national dental fees

grant funds. On a per-patient basis, losses were greatest for self-pay patients.

Table 4 shows the revenues generated from services, based on estimated implicit reimbursement rates (billed services) and the market value of these services. In total, market values exceeded billed values by 41%. The difference between billed services and their market value was $126 per patient.

Table 5 examines the revenues generated by service category, based on implicit reimbursement rates and market fees. Implicit rates for diagnostic and preventive services were competitive with market rates; restorative services, removable prosthetics, and other services were below market rates.

Table 6 shows clinic revenues, total revenues, expenses, net income, the market value of services produced, and their difference from expenses. In 2007, expenses exceeded total revenues by $1,153,352 (net income). Expenses exceeded the market value of services by $303,035.

The negative net income was primarily attributed to two recently acquired clinics, E and G (Table 7). Without these two clinics, the negative net income is reduced to $58,954, and the market value of services exceeds expenses by $791,363.

Table 8 compares the seven FQHC dental clinics and private solo general (incorporated and unincorporated) practices. The clinics used about the same number of ancillary staff per FTE dentist (not including central administrative staff), considering that the private practice data included full- and part-time hygienists, dental assistants, and other staff. The clinic dentists worked 4.5 more hours per week (12.6%). The number of patient visits (including hygiene visits) was less for clinic dentists, but they saw slightly more patients. As expected, revenues were higher in private practices, but expenses were similar.

Table 5. Patient revenues for dental safety net clinics based on current FQHC payment rates and market fees by service category: Connecticut, 2007

Service category	*Number*	*Billed services*	*Market value*[a]	*Ratio*
Diagnostic	37,220	$1,653,202	$1,665,180	1.00
Preventive	34,154	1,876,773	$1,628,285	0.86
Restorative	17,481	1,648,972	$2,727,528	1.65
Endodontics	1,810	216,597	$514,182	2.37
Periodontics	275	29,669	$49,298	1.66
Removable prosthetics	5,236	566,952	$1,602,630	2.82
Fixed prosthetics	67	10,383	$11,822	1.13
Oral surgery	4,066	320,912	$529,558	1.65
Orthodontics	NA	NA	NA	NA
Adjunctive	1,587	164,201	$167,022	1.01
Other	32,945	10,954	$0	NA
All	134,841	$6,498,615	$8,895,505	1.36

Source: Unpublished report to the Connecticut Health Foundation. Improving the dental safety net in Connecticut. January 2009.

[a]Based on the 70th percentile of 2005 national dental fees

FQHC = federally qualified health center

NA = not applicable

Table 6. Revenues, expenses, net income, and market value of services, for all dental safety net clinics: Connecticut, 2007

Variable	*Amount*
Clinic revenues	$5,589,912
Total revenues[a]	$7,396,321
Expenses	$8,549,673
Net income	–$1,153,352
MVS[b]	$8,246,638
MVS minus expenses	–$303,035

Source: Unpublished report to the Connecticut Health Foundation. Improving the dental safety net in Connecticut. January 2009.

[a]Includes 330 grant

[b]Based on the 70th percentile of 2005 national dental fees

MVS = market value of services

Table 7. Market value of services, expenses, and differences by dental safety net clinic: Connecticut, 2007

Clinic	*Market value of services*[a]	*Expenses*	*Difference*
A	$1,250,633	$1,273,086	−$22,453
B	$1,682,744	$1,338,722	$344,022
C	$1,934,102	$1,747,252	$186,850
D	$1,212,491	$1,027,004	$185,487
E	$486,067	$843,160	−$357,093
F	$768,548	$671,091	$97,457
G	$912,053	$1,649,358	−$737,305
All	$8,246,638	$8,549,673	−$303,035

Source: Unpublished report to the Connecticut Health Foundation. Improving the dental safety net in Connecticut. January 2009.

[a]Based on the 70th percentile of 2005 national dental fees

Table 9 compares practice expenses per FTE dentist in the clinics and private solo general practices. The FQHC data are for the year 2007, and the private practice data are for the year 2005. Compared with solo practitioners, clinic personnel costs were modestly lower. The clinics were allocated a portion of central FQHC administrative expenses (mainly administrative staff), and this came to 18% of total dental program expenses. Rent/taxes and interest charges were larger in private practices, and bad debt was higher in the clinics.

DISCUSSION

As a case study, caution must be used in generalizing these results to other FQHC dental programs. The clinics in this study tended to (*1*) have more operatories per clinic (and per FTE dentist), (*2*) employ more hygienists, and (*3*) produce more visits per FTE dentist than other safety net dental clinics. Further, more clinic patients were enrolled in the Medicaid program. Thus, study clinics appear to be different from FQHC clinics nationally on several important dimensions.[11–14]

Table 8. Comparison of FQHC dental programs/ FTE dentist (2007) and private solo general dental practices (2005)

Variable	*FQHC dental program/FTE dentist*	*Private solo general dental practices*[a]
Staff, facilities, and work hours		
Hygienists	0.5	1.4
Dental assistants	1.2	1.6
Other staff	1.0[b]	1.6
Operatories	2.9	3.6
Hours worked/week	40.0	35.5
Patients/services[c]		
Patient visits/year	3,328	3,842
Patients/year	1,221	1,164
Finances		
Revenues	$471,998	$542,900
Expenses	$545,608	$542,900

[a]Full- and part-time dentists

[b]Does not include central administrative staff

[c]Includes hygienist visits

FQHC = federally qualified health center

FTE = full-time equivalent

Table 9. Percent allocation of expenses: FQHC clinics/dentist (2007) vs. private solo general practices[a] (2005) in Connecticut

Expense category	*FQHC dental program/FTE dentist expenses (percent)*	*Private solo general practice*[b] *expenses (percent)*
Total expenses	$545,608 (100.0)	$542,900 (100.0)
Payroll	$281,534 (51.6)	$315,425 (58.1)
Central administration	$98,209 (18.0)	NA
Dental laboratory	$52,378 (9.6)	$33,117 (6.1)
Dental/office supplies	$38,736 (7.1)	$39,632 (7.3)
Rent/mortgage/taxes	$4,910 (0.9)	$44,518 (8.2)
Depreciation	$13,641 (2.5)	$12,487 (2.3)
Bad debt	$13,640 (2.5)	$4,886 (0.9)
Interest	$1,637 (0.3)	$8,143 (1.5)
Other	$40,921 (7.5)	$84,692 (15.6)

[a]Includes incorporated and unincorporated solo general private practices

[b]Because every dentist surveyed did not answer every question, the percentages do not equal 100%.

FQHC = federally qualified health center

FTE = full-time equivalent

NA = not applicable

Perhaps the most important finding was that the FQHC dental clinics produced equivalent amounts of services as private practices when reimbursement rates were adjusted to market rates. In addition, the cost of dental services produced by the FQHC clinics was close to that of private practices.

Although the clinics generated a loss ($1.15 million), it is important to put this deficit in perspective. It represents about 15% of dental program revenues but less than 2% of total FQHC revenues (revenues from both medical and dental services). Thus, the dental clinic losses were not a serious financial threat to the parent FQHC.

In large part, the losses stem from the recent (less than two years) acquisition of two clinics and should be seen as part of the FQHCs' expansion efforts. These newly acquired clinics were operating at a deficit when purchased, but the deficit is likely to decrease over the next few years as clinic management improves and reimbursement rates increase.

On the revenue side, the major reasons for the deficits were relatively low reimbursement rates. If these same services were paid for at private practice fees, the clinics could generate 41% more revenue for a total deficit of about $303,035.

The 330 grant is intended to cover uncompensated care, both the cost of self-pay indigent patients and any gap between Medicaid expenses and revenues. Total uncompensated care was about $2.1 million, and the 330 grant was $1.8 million, leaving a deficit of about $278,000. Thus, the subsidies for the dental clinics were about 13% less than required to break even. This figure varied greatly by clinic, and one clinic accounted for most of the loss.

Although relatively few patients were covered by private insurance, the clinics lost about $58 per insured patient. We investigated the reasons for this loss and found that the fees charged to private insurers were low. If private insurer fees were increased to the private practice fees, revenues per privately insured patient could increase 60%, generating a surplus of about $195,000.

The clinics also need more operatories per FTE dentist. If more hygienists were employed, there should be about three to four operatories per FTE dentist. Based on the work of Beazoglou et al.,[11] more operatories would increase the number of patient visits per dentist.

A related problem is the relative compensation level for different services. We allocated the per-visit charge among services provided at a visit or over time for services requiring more than one visit. Fees for diagnostic and preventive services were competitive with market fees. In contrast, fees for restorative, prosthetic, and surgical services were well below market levels. This fee structure may have a negative effect on clinic efficiency. That is, as dentists provide restorative, prosthetic, and surgical services more efficiently, they are likely to increase clinic losses. This is because the reduction in the unit cost of production that comes with more efficiency is unlikely to make up for the losses associated with more services. Ideally, the financial margins associated with different services should be the same and at a level that the clinics can cover their costs and profit from greater operational efficiency.

In terms of expense-related factors, the central administrative costs—mainly personnel—allocated to clinics accounted for 18% of total expenses, or about $1.5 million. It should be noted, however, that this FQHC has multiple sites. Each dental clinic enjoys the benefits of and shares in the cost of the centrally organized administrative and support services. These services range from billing and collections to facility management, legal and accounting, information technology, grants management, purchasing, human resources, and other costs associated with infrastructure support. This issue needs to be examined in future studies. The other expense differences between clinics and private practices are associated with the characteristics of the two delivery systems (e.g., bad debt is higher and rents and taxes are lower in the clinics).

There was considerable variation among clinics in per-dentist visits, revenues, and net revenues. We attempted to assess the effect of patient and payer mix, staffing, and physical facilities on these outcome measures; however, because of the small number of clinics in this study, we were unable to identify statistically significant associations.

Even though the study of these FQHCs' dental programs may not be representative of FQHC dental programs nationally, findings from this investigation have policy implications. First, the FQHC reimbursement system has limitations. Medicaid visit rates and the 330 federal grants do not cover the operating costs of treating Medicaid and self-pay indigent patients. Uncompensated care funds need to increase by at least 13%.

A second reimbursement concern is paying per visit rather than per service. Because reimbursement rates are so low, clinics have strong financial incentives to schedule more patient visits. More research is needed to explore the effect of reimbursement type on FQHC dental clinic productivity.

Another policy issue relates to the current organization of FQHC dental programs. Most have small clinics with one or two dentists. This is a problem because

dental revenues comprise perhaps 10% of total FQHC revenues and, as such, may not receive adequate management attention. Likewise, the FQHC management team may have little experience operating dental clinics. An alternative is to have one FQHC manage (under contract) all dental clinics within a region. A related option is an FQHC that only provides dental services. Either approach would promote greater efficiency through economies of scale and better management.

Finally, we found that the cost per patient for providing dental services in the FQHC clinics was about the same as in private dental practices. This is remarkable considering that the patient population of FQHCs is low income, is behaviorally or physically disabled, or resides in rural areas and has poorer oral health than more affluent, healthy, and urban/suburban populations.

Certainly, FQHC dental clinics will always be needed to provide care to underserved patients in areas where private dentists will not open practices, even if they are adequately compensated. But in other areas, contracting with selected private practices and paying competitive fees to provide care to disadvantaged patients is an option, if safety net clinics are more costly.

We appreciate that these policy issues are controversial, but they need to be addressed. The current dental safety net system is limited relative to the size of the underserved population[6] and needs to be expanded and operated more efficiently.

CONCLUSIONS

FQHC medical and dental clinics represent a large public investment to address the health needs of low-income populations. Little published information is available on the financial and clinical operations of these clinics. This case study suggests that the established clinics use resources as effectively as private practices. However, much more research is needed to provide the information necessary to manage these facilities more efficiently and to inform the public debate on the best way to provide care to the underserved.

This article was supported, in part, by grants from the Connecticut Health Foundation and The California Endowment.

The authors appreciate the support and cooperation of the Community Health Center, Inc., leadership and staff in providing the data for the analyses and reviewing this article.

REFERENCES

1. Department of Health and Human Services (US). Oral health in America: a report of the Surgeon General. Rockville (MD): HHS, National Institute of Dental and Craniofacial Research, National Institutes of Health (US); 2000.
2. American Dental Association. Future of dentistry. Chicago: ADA, Health Policy Resources Center; 2001.
3. Riedy CA, Ly KA, Ybarra V, Milgrom P. An FQHC research network in oral health: enhancing the workforce and reducing disparities. Public Health Rep 2007;122:592-601.
4. Bolin KA, Shulman JD. Nationwide survey of work environment perceptions and dentists' salaries in community health centers. J Am Dent Assoc 2005;136:214-20.
5. American Dental Association, Survey Center. 2000 survey of current issues in dentistry: dentists' participation in Medicaid programs. Vol. 1. Chicago: ADA; 2001–2002.
6. Bailit H, Beazoglou T, Demby N, McFarland J, Robinson P, Weaver R. Dental safety net: current capacity and potential for expansion. J Am Dent Assoc 2006;137:807-15.
7. Ruddy G. Health centers' role in addressing the oral health needs of the medically underserved. Bethesda (MD): National Association of Community Health Centers; August 2007. Also available from: URL: http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/Oral-Health-Report-FINAL.pdf [cited 2008 Jun 11].
8. Office of Management and Budget (US). Bureau of Primary Health Care program information notice. Report No. 0915-0142. Washington: OMB; 2003.
9. National Association of Community Health Centers. A sketch of community health centers: chart book 2006 [cited 2008 Nov 3]. Available from: URL: http://www.mpca.net/files/healthpolicy/NACHC%20reports/ChartBook2006.pdf
10. National Association of Community Health Centers. Annual report 2007. Bethesda (MD): NACHC; January 2008. Also available from: URL: http://www.nachc.com/client/documents/2008NACHCAR.pdf [cited 2008 Nov 3].
11. Beazoglou T, Heffley D, Lepowsky S, Douglass J, Lopez M, Bailit H. The dental safety net in Connecticut. J Am Dent Assoc 2005;136:1457-62.
12. Byck GR, Russinof HJ, Cooksey JA. Safety net dental clinics in Illinois: their role in oral health care. Chicago: Illinois Regional Health Workforce Center, University of Illinois School of Public Health; January 2002. Also available from: URL: http://www.uic.edu/sph/irhwc/il%20safety%20net%20.pdf [cited 2008 Nov 12].
13. Byck GR, Cooksey JA, Russinof HJ. Safety-net dental clinics: a viable model for access to dental care. J Am Dent Assoc 2005; 136:1013-21.
14. Glassman P, Subar P. The California Community Clinic Oral Health Capacity Study: the capacity of California's community clinics to provide oral health services and host dental student and dental resident rotations: report to the California Endowment. December 2005.
15. Bureau of Primary Health Care. User's manual: Uniform Data System (UDS). Washington: Health Resources and Services Administration, Department of Health and Human Services (US); 2007.
16. American Dental Association. Survey of dental practice, 2006. Chicago: ADA; 2008.
17. Ellis R, Neale JF. Oral health capacity building project: sustainable safety net dental clinics. Presentation at the 2007 Ohio Oral Health Summit; 2007 Nov 27–28; Columbus, Ohio. Also available from: URL: http://www.dentalclinicmanual.com/doc_download/NealeOHDentalSummit.pdf [cited 2008 Nov 11].
18. Beazoglou T, Heffley D, Brown LJ, Bailit H. The importance of productivity in estimating need for dentists. J Am Dent Assoc 2002;133:1399-404.
19. Wang NJ. Productivity in dental care for children. Factors influencing the time spent delivering dental care. Community Dent Health 1994;11:227-32.
20. National Dental Advisory Service. 2005 National Dental Advisory Service comprehensive fee report. 23rd ed. Milwaukee: Wasserman Medical Publishers, Ltd.; 2005.
21. Henry J. Kaiser Family Foundation. Connecticut: Medicaid/CHIP eligibility [cited 2008 Nov 3]. Available from: URL: http://www.statehealthfacts.org/profileind.jsp?sub=54&rgn=8&cat=4
22. United Way of Connecticut. SAGA cash and SAGA medical [cited 2008 Nov 17]. Available from: URL: http://www.infoline.org/InformationLibrary/Documents/SAGA%20Cash%20Assistance%20cw.asp