DentaQuest Institute Safety Net Solutions

A Retrospective Study of Health Centers Served 2006-2011

April 2013

Safety Net Solutions: A Retrospective Study

Safety Net Solutions—a DentaQuest Institute program to provide practice management technical assistance to safety net dental programs—has grown drastically since it began in 2006. The first year, the program assisted four clinics, all in Massachusetts, with expectations of similar case loads in following years. But word spread about the service, which was relatively unheard of among safety net programs, and requests began pouring in. As of 2012, Safety Net Solutions (SNS) had expanded **forty-fold**, working with 160 programs in 23 states and anticipating continued major expansions in 2013. With new leadership now in place at the DentaQuest Institute, it is an opportune time to look back on SNS's impact, and how lessons from its work to date can inform future steps and align with the Institute's larger goals.

This report presents a retrospective analysis of Safety Net Solution's consultations with a wide range of safety net dental programs across nine states during the time period from 2006-2011. The study was guided by three primary research questions:

1. How has the Safety Net Solutions model evolved over time?
2. What effects has Safety Net Solution's work had on participating health centers?
3. What are the implications of these findings for Safety Net Solution's future work?

The main findings of this report are based on an evaluation of practice-related data from 65 dental programs (37 with two years of data following the SNS consultation, and an additional 28 with just one year of data), and interviews with Mark Doherty and Dori Bingham of Safety Net Solutions, who provided detailed descriptions of the SNS model and perceptions about safety net practices gained from deep experience with this work. In addition, opinions of health center leaders were essential to understanding client experiences with the SNS consultation, such as strategies that were most helpful or most challenging. To this end, Harder+Company conducted fourteen interviews with dental directors and executive leaders from a sample of nine health centers that is not representative of all health centers served, but nevertheless yielded insights worthy of consideration. For a full description of the evaluation methods and limitations of the study, please see Appendix A.

Organization of the Report

The report is organized as follows:

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The Safety Net Solutions Model

To accommodate the rapid and large-scale growth of Safety Net Solutions over the past several years, the SNS model has undergone continuous evolution to become what it is today (see *Essential Process Elements* box at right). **Major changes** have included:

- **A growing team of expert advisors.** In its early years, SNS relied on a two-expert team to conduct all assessments. Now up to 15 expert advisors (plus additional support staff including several dedicated to data analysis), standards must be well-established and communicated more deliberately to ensure consistent and high quality service across clients. Expert advisors are selected for their personality and experience, since an approach of mutual respect and deep knowledge are critical to connect with the health center and develop buy-in. The experts are also "calibrated" through meetings and trainings sessions to reinforce standards, procedures, goals, and responsibilities.
- **Increased oversight of clinic implementation process.** SNS staff recognized that despite initial buy-in and step-by-step action steps, some health centers were not accomplishing the changes they hoped to achieve. Taking a different approach from typical health care consulting, SNS decided to create a process of progress reporting and timelines continuing for a full twelve months, as well as ongoing technical assistance that would help sites overcome barriers to implementation such as the many competing demands on their time and energy.
- **A focus beyond the business aspects of the dental practice.** Early on, SNS saw its primary service as assisting safety net dental programs with managing the practice as a financially responsible business while still meeting their missions. But as one staff member commented, "What we learned is that it's

The SNS Model: Essential Process Elements

- **The Launch Call.** SNS experts introduce the SNS model to the health center, establishing a collaborative relationship and conveying the process as a series of steps that increases the center's understanding of its dental program and ability to make the dental program what they want it to be.
- **The Data.** SNS requests practice data from the dental program to understand clinical and financial challenges and opportunities at baseline.
- **The Observation.** SNS expert advisors spend a full day studying the dental program on site and speaking with staff to understand the structures, procedures, and culture of the practice, as well as hear staff perspectives on strengths and challenges. As an SNS staff member described it, "We observe carefully and listen hard."
- **The Big Meeting: Finding Light Bulb Moments.** Convening health center executives and dental program staff, SNS experts present in-depth findings and recommendations with an approach that strives for optimism, practicality, flexibility, and strategic decision-making. For many health centers, the presentation and discussion are a unique opportunity to have executives and staff at the same table looking closely at data that describe the dental program. As new understandings dawn, the group experiences "light bulb moments."
- **The Plan.** Based on the meeting discussion, SNS drafts a written improvement plan with recommendations and action steps. Upon review of this plan with health center staff, a timeframe is established for implementation.
- **Supported Implementation.** Throughout a 12-month implementation period, the health center sends SNS monthly progress reports and SNS provides technical assistance as needed. The center also sends practice data at six-month intervals for two years to monitor and demonstrate changes in financial and clinical indicators.

Between 2006 and 2012, Safety Net Solutions grew **forty-fold**, from a case load of four safety net dental programs in one state to 160 across 23 states.

equally important to think about quality and outcomes," as these were areas that many programs were not monitoring or addressing strategically.

With further expansion on the horizon, SNS sees that the upcoming evolution of their model will be challenging as they move toward more of a virtual approach. As one staff member put it, even beyond the highly trained expert advisor team, "we need to not only be on the ground, but enable, identify, educate, and empower others to do what we do."

Dental Practice Outcomes

One of the main goals of this study is to capture the outcomes health centers have experienced as a result of the technical assistance they received from Safety Net Solutions. This section paints a picture of dental program outcomes using both practice-related data and statements from a selection of the health centers served. While reviewing the practice-related data, there are a number of important considerations to keep in mind:

- **Seventy-two health centers served between 2006 and 2011 are represented in this report.** This represents all of the health centers SNS served during this time frame, with the exception of seven sites. These seven sites discontinued their involvement with SNS, and did not continue to submit clinical data.
- **Impact of technical assistance takes time to show up in practice-related data.** According to SNS staff, recommendations can take months to reach full implementation. While many clinics complete the recommendations within a year, it may take more time for improvements to visibly accumulate in the data.
- **Practice-related data is self-reported by health centers.** While SNS has spent much time and effort to ensure the accuracy of the data, data quality ultimately depends on the capacity of dental programs' data systems and the ability of health center staff to produce the necessary reports. Data points highlighted as questionable by SNS staff have been excluded for the purpose of this report.
- **It is challenging to make direct attributions to SNS.** There are many confounding factors that affect the number and types of patients served, as well as the financials of each dental program. Many of these factors are within the control of the program (scheduling, no-show policies, etc.) and many are not (reimbursement rates, adults Medicaid dental coverage). This report examines the connection between SNS's work and trends in the data, but drawing firm conclusions would require a control/comparison group study approach.

The findings of this section are organized according the types of recommendations made: dental program finances, efficiency and patient access, and quality of care. Findings with regard to the clinic's relationship to the greater health center are also presented.

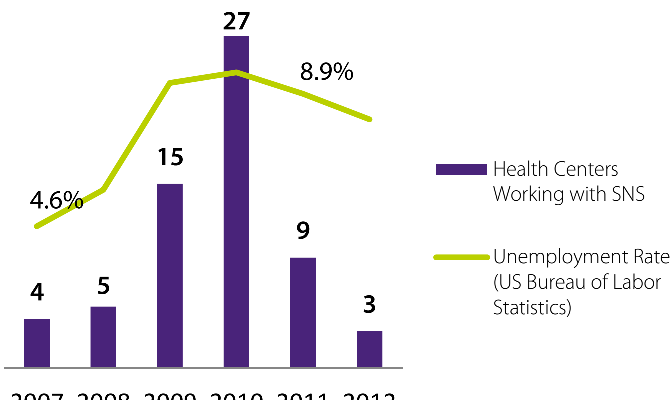
Dental Program Finances

A primary challenge of most dental programs assisted by SNS is a lack of financial viability. Community dental clinics struggle to stay in the black, with many operating at a loss and receiving subsidies from the medical side of the health center or associated hospital. SNS works closely with dental programs to implement policies and practices that help clinic doors stay open even in the face of economic challenges.

Key Findings: Dental Program Finances

- Despite the economic downturn, more than 60% of dental programs saw growth in net revenue—an average growth of 38% after one year and 75% after two years.
- More than half of the dental programs had improved their bottom lines with an average improvement of 118% after one year and 181% after two years.

Exhibit 1. Most Health Centers Implemented Changes in a Challenging Economic Context.



Most health centers that worked with SNS from 2006-2011 were implementing the recommendations in the midst of an economic crisis associated with the Great Recession. Many clinics found themselves operating at a loss while facing cuts in Medicaid and a growing population needing safety net services. As shown in Exhibit 1, the unemployment rate rose and stayed high as the bulk of health centers began working with SNS. **Of the dental programs that SNS served, nearly 70 percent were operating in the red at baseline.**

Dental Programs Improved Their Finances

Despite the economic context, more than sixty percent of participating dental programs experienced growth in net revenue after working with SNS (Exhibit 2). Of clinics that increased net revenues, the average increase was $351,987 in annual net revenue after one year (a 38 percent increase from baseline), and $586,224 after two years (a 75 percent increase from baseline).

Exhibit 2: Impact on Net Revenue

	After One Year *(n=65)*	After Two Years *(n=29)*
Increased net revenue	41 clinics *(63%)*	18 clinics *(62%)*
Of those experiencing an increase…		
Average dollar increase	$351,987	$586,224
Average percent increase	38%	75%

In addition, more than half of the dental programs experienced improvements in their bottom line (the margin between net revenues and expenses) within one-to-two years after working with SNS (Exhibit 3). The clinics that improved their bottom lines experienced an improvement of $162,930 after one year (a 118 percent improvement from baseline), and $289,097 after two years (a 181 percent improvement from baseline).

Exhibit 3: Impact on Bottom Line

	After One Year *(n=64)*	After Two Years *(n=28)*
Improved bottom line[a]	36 clinics *(56%)*	16 clinics *(57%)*
Of those experiencing improvement…		
Average dollar increase	$162,930	$289,097
Average percent increase	118%	181%

[a] It is possible for a clinic to have improved its bottom line but still be operating at a loss. This analysis looks at the degree of improvement regardless of whether they are in the red or in the black.

Interviews with health center staff provided further evidence of SNS's positive influence on dental program finances. Several respondents commented on the positive effect that SNS had on their fiscal performance. As one respondent shared, "The clinic did better financially after the consulting and [SNS] did contribute to the dental director's and billing [department]'s understanding [of clinic finances]." A third mentioned that "through what [SNS] did for us… we worked better with the finance department. Now we meet regularly with other departments so we all stay on the same page."

Three SNS Financial Strategies Emerged as Particularly Effective

Of the numerous recommendations that SNS provided with the intent of improving dental program finances, three stood out as particularly effective: management of patient mix, maintenance and use of data, and revision of fee schedules.

+ **Effective Strategy: Manage patient mix through designated access scheduling.** When clinics manage patient mix, they think strategically about patients as different payer types (including public and private coverage as well as out-of-pocket) and the implications that these various revenue sources have on clinic finances. For example, in states that provide Medicaid coverage for children but not adults, clinics might focus more on pediatric patients as a strategy to bring in more revenue and potentially cross-subsidize care for uninsured adults.

> "We've gone from having about fifty percent county dollars [supporting our dental program] to less than twenty-five percent county dollars, so we're almost self-sufficient."
>
> - *Health Center CEO*

Interview respondents highlighted management of patient mix as both the most challenging and most worthwhile recommendation they implemented. Among the small sample of interviewed health center leaders, managing patient mix rose to the top as an effective strategy. One CEO commented that "re-adjusting the dental departments from focusing on adults to pediatrics [was] crucial." Another respondent described how SNS had shed new light on the issue, explaining, "You really have to look at not just filling in [the schedule] but understanding the schedule and what it means to the bottom line." Regarding the challenges of limiting access to certain populations, one dental director remarked on not fully implementing the recommendation: "It was really difficult to change the mix we had. We would have had to ask people to leave the practice because we were full." Another asserted that implementing the appointment policy required the health center to lay off the dental manager "because she was not ready to do it and it drove her crazy," further describing that the change ultimately strengthened their program. One dental director described how the health center had addressed the challenge, noting that although they did still see patients that were outside of the ideal mix, "we had openings [that] we would block off for certain types of insurance groups."

> "Understanding how much it costs per visit…[and] having that data out in front of the whole staff, but especially the CEO, CFO, dental directors, and manager, is vital."
>
> - *Dental Director*

+ **Effective Strategy: Maintain and use data, particularly around expenses.** In each of its engagements, SNS highlighted the importance of maintaining practice-related data and using data to inform decision-making across all of its recommendations. This is particularly true with respect to clinic financials regarding how much the dental program is spending and how much revenue they bring in.

Multiple interview respondents mentioned that Safety Net Solutions had developed their awareness and skills regarding the use of data. Among these, one CEO stated that SNS "did help us… with data entry, training the front staff to enter data like they do in private practice." A dental director credited the use of data that SNS had compiled and analyzed for keeping the dental program

open, saying, "The county budget is very tight. Because there were county dollars in the [dental] program, eliminating the program was discussed, but… I presented [the data] to the commissioners and after the presentation they decided not to cut the program and actually gave us additional money."

> "Working with [SNS] helped us move to a new building and expand our practice. We went from six chairs to twelve chairs, and I know we wouldn't have been able to do that without Safety Net Solutions."
>
> - *Dental Director*

+ **Effective Strategy: Revise fee schedules.** Many dental programs were encouraged to revise their fee schedules by (1) increasing their rates to become more comparable to local customary rates, and (2) incorporating a sliding fee schedule so that those who can afford more pay more, and those who cannot pay less according to a sliding scale. Although health centers implemented the sliding fee schedule recommendation less commonly than other recommendations, as discussed later in this report, some of those that did saw marked financial improvements. In the practice-related data, one clinic more than tripled its annual gross revenue and two clinics more than doubled their annual gross revenue. While those three clinics were not interviewed for this report, SNS staffers that have worked closely with these clinics attribute these drastic increases in gross charges to increases in their fee schedules.

Efficiency and Patient Access

SNS works with dental programs to improve the efficiency of clinic operations as well as clinic finances. By improving how efficiently the dental program is run in regard to how many patients are seen, how many services are provided per visit, and how the program manages patients who fail to show up for appointments, programs can potentially serve more patients with existing resources. Patient access to safety net oral health care is influenced by other factors as well, for example health center finances to expand number of chairs, providers, and geographic locations. However, since efficiency and access are closely related, this section discusses findings for these two aspects of practice improvement together.

> **Key Findings: Efficiency and Patient Access**
>
> - Dental practices served by SNS are able to see about 2,000 more patients per year on average.
> - The share of clinics maintaining a reasonable no-show rate nearly doubled after one year and almost tripled after two years.
> - Although centers tended to exceed recommended numbers of visits per dentist, they increased services provided per visit.

Dental Programs Increased the Number of Patients Served

Exhibit 4 shows that the **dental programs served more patients after receiving SNS consultation**. Within one year of receiving SNS assistance, dental programs served 82,013 more patients across 43 clinics, an average of 1,907 more patients per clinic (a 47 percent increase). The 18 clinics with two years of data served 38,017 more patients, or 2,112 more patients per clinic (a 57 percent increase) compared to baseline.

Exhibit 4: Increases per Dental Program in Unduplicated and New Patients Served

	After One Year	After Two Years
Unduplicated Patients	**+ 1,907 patients** **= 47% increase** *(average across 43 clinics)*	**+ 2,112 patients** **= 57% increase** *(average across 18 clinics)*
New Patients	+ 8 new patients = 1% increase *(average across 38 clinics)*	**+ 583 new patients** **= 39% increase** *(average across 18 clinics)*

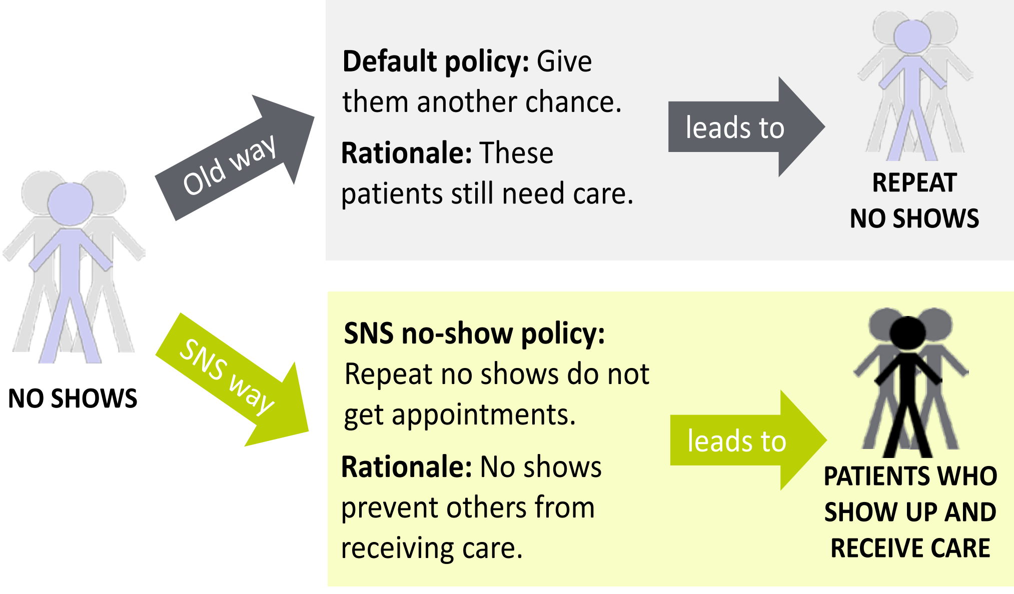
Note: Percentage increase was calculated using the baseline year (prior to SNS assistance) as the point of comparison.

According to SNS staff, clinics develop a greater capacity to see new patients over time as they start to "reduce the chaos" in their clinic by implementing clear and strategic policies regarding scheduling, emergency patients, and no-shows. This trend is reflected in Exhibit 4. While participating dental programs did not experience much of an increase in new patients in the first year, they were able to see 39 percent more new patients in the second year after new policies had time to become established and affect overall operations.

No-Show Policies Provided a Light Bulb Moment for Many Health Center Staff

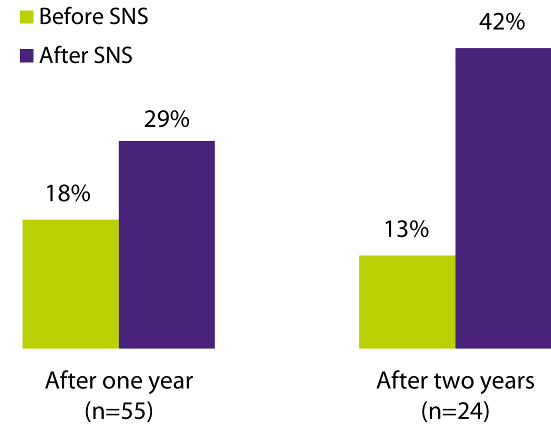
In interviews with health center staff, establishing a no-show policy was one of the two recommendations cited most commonly as highly worthwhile. Three respondents mentioned the no-show policy, concurring with one dental director who stated, "The no-show policy made a big deal." This sentiment is consistent with SNS's experiences to date. As Safety Net Solutions staff shared, "All the things that the clinics institute go down the tubes without the stability afforded by a low no-show rate. It is important for staff and patient satisfaction. Decreasing the no-show rate is a main focus." SNS staff further identified a change in health center perspectives on no-shows as a common "light bulb moment," or a key shift in understanding. This shift is illustrated in Exhibit 5, which shows that no-show policies ensure that patients show up, and the time and resources of the health center have not gone to waste.

Exhibit 5. No-Show Policy: Shifting Health Center and Patient Perspectives



With SNS's support, many dental programs were able to reduce their no-show rates. According to SNS, most programs have a no-show rate of about 30 percent at baseline. The goal is to help them reduce the rates to 15 percent or less. At that point, clinics experience greater stability and predictability regarding scheduling and workload for providers. Of the clinics that have one year of data, nearly one-third were able to achieve no-show rates of 15 percent or less (Exhibit 6). Of the clinics that have two years of data, 42 percent were able to reduce or maintain their no-show rates to meet this benchmark.

Exhibit 6. Clinics with Low No-show Rates



Note: No-show rates of 15% or under are considered low, per SNS staff.

However, adopting a no-show policy was not easy. One CEO described an SNS recommendation as seeming "to be more from the private side – like if you have people late three times or they miss a visit, you send strong letters or say they'll be terminated from the health center." More than one center found this recommendation to be challenging. Although one health center stated that they "chose not to implement" the no-show policy at all, others did implement it at least in part, despite it being challenging.

> "[With a no show policy] everyone's better off, including patients. There's nothing good about fragmented, episodic care."
>
> \- *Mark Doherty, SNS*

Many respondents identified improvements in no shows as a change that had an immediate effect on their practice. One dental director called the newly-implemented no-show policy a "whole shift in our culture," describing further: "We changed from being a soft, enabling community health center to a center that was not afraid to ask patients to own their own appointments and [be] responsible with us…Our no show rate got down to around ten percent and it was 28 percent before that. It made our office so much more busy and productive." As one respondent put it, their no show policy became "a lot more stringent, following SNS to the letter…When we did that it jumped about ten percent just immediately, and that was the first time we were in the green level" with 85 percent or more showing up for appointments.

Findings are Mixed Regarding Visits per Dentist and Services per Visit

Productivity rates—or the number of visits per dentist per year—ideally fall within a range of 2,500 to 3,200. Below that range, dentists' time is not being used efficiently, and above that range there may be an issue of churning, or failing to provide a reasonable amount of service at each visit to force patients to return for follow-up, providing another opportunity for reimbursement.[1] Exhibit 7 provides an assessment of the change in productivity regarding how many dental programs achieved the benchmark range. Although the majority of programs increased their visits per dentist per year (data not shown), many overshot the 3,200 upper boundary

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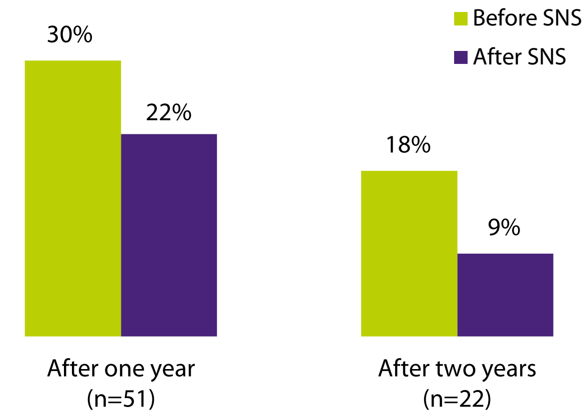
[1] For a description of churning, see the National Network for Oral Health Access *Quarterly Newsletter*, Fall 2010. www.nnoha.org/news/newsletterarchive.html

of the target range, leading to overall decreases in ideal productivity—a 3 percent decrease among programs with data after one year and a full 50 percent decrease among programs with data after two years.

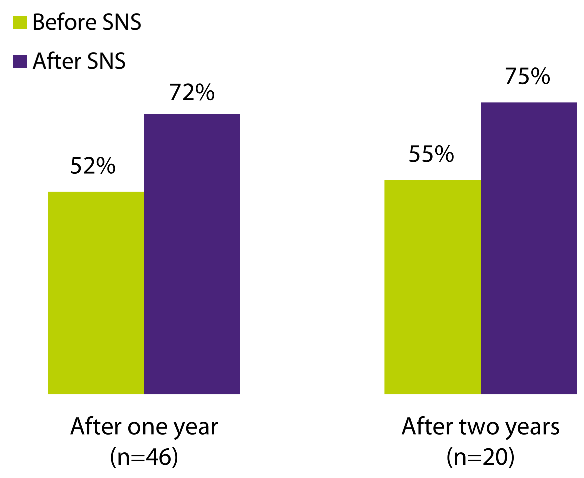
Exhibit 7. Clinics Meeting Productivity Benchmark



Note: Benchmark is defined as 2,500 to 3,200 visits per dentist per year..

In contrast, Exhibit 8 shows a positive finding that on average, dental programs increased the number of procedures per visit by 19 percent after one year following the SNS consultation, and 33 percent after two years. This notable increase in services provided to patients during each visit is one indication that higher productivity rates do not necessarily mean that churning is occurring.

Exhibit 8. Clinics with Two or More Procedures per Visit



The findings regarding efficiency and patient access are consistent with data from the clinic interviews. Multiple interview respondents identified productivity as having improved due to SNS consulting. A CEO at one center expressed high satisfaction with SNS's assistance establishing and meeting productivity goals. "It's exceeded what I thought was possible," he commented. "We used to be about 1,800 visits per dentist and the benchmark was around 2,700. I would have been very happy with that, but now we're over [the benchmark]." Furthermore, respondents from three different health centers mentioned that SNS has helped them expand their dental programs. One stated, "In 2009, we saw 11,000 encounters, and this year we're going to have 20,000, so we're almost doubling. Our gross charges have doubled. So we've seen a lot of changes and they've helped guide us… It really helped us a lot."

Quality of Care

Most health centers were not tracking at baseline the oral health care quality measures that Safety Net Solutions recommends. For this reason, progress on quality is presented as improvements in monitoring at the dental program level. Dental programs made the following improvements in data tracking related to quality measures:

Key Findings: Quality

- There has been a sharp rise in clinics that now have systems in place to track treatment completion after working with SNS.
- More clinics have started tracking sealant applications in their data systems after working with SNS.

- **Tracking treatment completion.** At baseline, 7 percent of clinics were tracking treatment completion. By one year after SNS assistance, this had sharply increased to 42 percent of clinics that were able to provide treatment completion data. (n=65)
- **Tracking sealant application.** Of the 32 clinics from which sealant data was requested, more than half (53 percent) were tracking sealant applications in their data systems at the completion of technical assistance. At baseline, only 31 percent of clinics had this capability.

Beyond the Dental Program

While Safety Net Solution's work focuses on the staff, policies, and procedures within the dental clinic, its influence goes beyond the dental program and into the program's relationship with the health center as a whole. Below are some of the ways in which dental program interactions with their centers have changed, according to interviewed health center staff.

Key Findings: Beyond the Dental Program

- Patients and health centers have greater awareness of the value of oral health services.
- Health centers see the importance of communication and collaboration between medical and dental.
- Communications between dental programs and their parent health centers have improved.

Expanded awareness and value placed on oral health. A dental director shared that SNS's work "brings an awareness to the rest of the organization on how oral health is different than general medicine." The same respondent elaborated that SNS's confirming that the dental program's "fees were far too low" led to "a paradigm shift in the way that I looked at our relationships with our patients… We want our clients to recognize that every service that we give them is deeply discounted… It helps them value the services." A different dental director commented that SNS played an important role in helping the CEO and CFO "understand how to run a dental health center, because most of the time they want to run a dental department like a medical department, and that's impossible." Likewise, a third stated that a major benefit of SNS's consultation was "getting senior management to realize that dental could be more profitable."

> "[SNS] brings an awareness to the rest of the organization on how oral health is different than general medicine."
>
> \- *Dental Director*

Medical-dental collaboration. SNS encourages communication and increased understanding across medical and dental departments within a health center. Interview respondents described improving medical-dental collaboration as a more drawn-out process than implementing some of the other SNS recommendations. Several noted that although SNS had improved their understanding of what needed to happen, they had not made as much progress on implementing changes as they had anticipated. This response was typical: "Understanding the collaboration between medical and dental—we still have a way to go there, but [the SNS consultation] opened some doors."

New internal relations. Interviewed health center staff remarked on the positive influence SNS had had on strengthening communications between health center executives and the dental program. In addition to several comments regarding the unusual and beneficial aspect of SNS bringing executives and dental program staff literally to the same table, one dental director noted that the SNS consulting "opened up the door for me to be involved with the CEO, CFO, [and] chief of operations." The respondent continued, "It put us all on the

right track... SNS has really made a difference in that regard." An executive at another health center articulated that, due to Safety Net Solutions, "communication has increased. We work together a lot more efficiently. [SNS] helped evolve the [dental] program a lot faster than had we not had them come."

Sustainability

> **Key Finding: Sustainability**
>
> - Interviewed health center executives and dental directors were highly confident that implemented changes would be sustained.

Interviews were conducted with only a small sample of health center leaders who were contacted in part because they had stayed in their positions since the SNS consultations had occurred. It is possible that other health centers, many of which were affected by turnover in leadership, may have been less successful with the sustainability of their changes. Nevertheless, we asked the respondents to comment on whether they expected the changes at their centers to last in order to better understand if positive changes were easily reversed.

Interview respondents from eight different health centers resoundingly agreed that SNS recommendations implemented at their health centers would be sustained. As one CEO put it, "[The changes] have become integrated. The numbers are still improving. I'm very happy." Another respondent commented that because she has emphasized the implementation "amongst my site directors and explained to them why we have to do it this way," she is confident that if she "were to leave or there were to be a change, one of them would take control over it and just continue it." A third described the changes as "part of our marrow. I'm very confident… [and] can't possibly see us going back." At these centers, at least, evidence indicates that the changes implemented are stable.

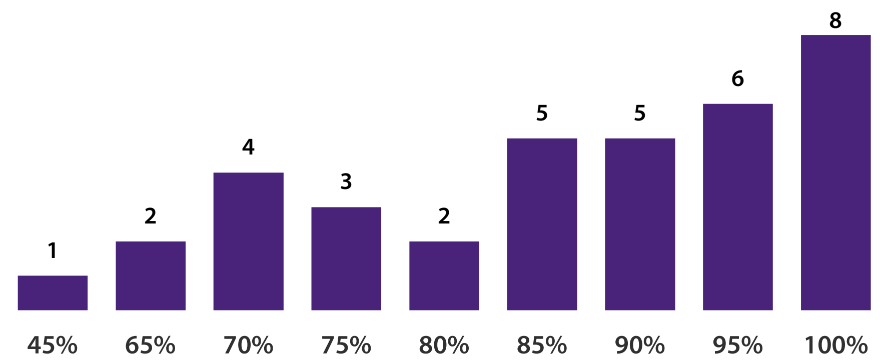
Implementation of SNS Recommendations

In addition to examining how dental programs have changed after receiving Safety Net Solutions assistance, it is instructive to look at the extent to which centers reported adopting SNS's advice. SNS experts provided tailored recommendations for health centers, with each center receiving an average of 24 recommendations. Exhibit 9 demonstrates that most health centers reported implementing 85 percent or more of the recommendations they received from SNS. Data are shown for the 36 health centers for which progress reports were available indicating their implemented recommendations. In the exhibit, the number above each bar shows how many health centers completed that percentage of SNS recommendations.

Key Findings: Implementation of Recommendations

- The majority of health centers implemented 85% or more of the recommendations they received from SNS.
- The most frequently recommended and most frequently implemented strategies include management of self-pay patients and patient mix, as well as changes to scheduling policy.

Exhibit 9. Histogram showing Number of Health Centers by Percentage of Recommendations Implemented (n=36)



Percentage of SNS Recommendations Implemented

SNS's recommendations fell into five categories: financial, access, administration, productivity, and quality. Within each, SNS suggested specific action steps. Exhibit 10 (next page) summarizes the recommendation types within the five categories, the number of health centers that received one or more recommendations regarding each item, and the share of recommendations implemented (according to health center self-report).

Exhibit 10 demonstrates that recommendations varied in how successfully they were implemented. Although in the majority of recommendation types, 80 percent or more were implemented (green dots), a substantial number of recommendations were implemented at a more moderate rate of 60 to 79 percent of the time (gray dots)—most frequently in the financial category. According to SNS staff, some recommendations require big changes by clinics, while others are much smaller. For instance, some recommendations may have lower implementation rates because they require other steps to be taken first (e.g., a clinic cannot hire new staff until they improve their bottom line), so these changes cannot be implemented as quickly. Nevertheless, an assessment of this nature can highlight areas where health centers might benefit from increased support to successfully implement changes.

Exhibit 10: Types of Recommendations Implemented by Health Centers (n=36)[a]

	Centers that Received Recommendation(s)	Total Recommendations	*Percent Implemented*[b]
All Recommendations	**36**	**858**	80-100%
Administrative and Policy Recommendations	**36**	**175**	80-100%
Provider Education	**23**	46	80-100%
Staffing	**21**	62	80-100%
Scope of Service	**10**	14	60-79%
Accountability *(staff education, monthly reporting)*	**7**	14	80-100%
Clinic Policies and Procedures	**7**	14	80-100%
Leadership	**5**	9	80-100%
Business Plan	**4**	6	80-100%
Front Desk	**3**	9	60-79%
Access Recommendations	**35**	**261**	80-100%
Scheduling Policy	29	102	80-100%
No-Show Policy	25	65	60-79%
Patient Eligibility *(patient education, documents)*	19	60	80-100%
Emergency Care Policy	15	25	80-100%
Allocation of Resources to Improve Access	3	5	80-100%
Front Desk Operations	1	4	< 60%
Financial Recommendations	**34**	**279**	80-100%
Self-Pay Patients *(policies, patient education)*	29	87	80-100%
Payer Mix / Designated Access Scheduling	29	71	80-100%
Increases to Fee Schedule	23	29	80-100%
Billing Process and Procedures	15	35	60-79%
Sliding Scale Fee Schedule	14	29	60-79%
Financial and Productivity Goals	10	12	60-79%
Review of Expenses	7	10	60-79%
Collection of Fees Owed After 90 Days	3	7	80-100%
Quality Recommendations	**25**	**58**	80-100%
Completion of Phase 1	21	46	80-100%
Quality Assurance Plans and Policies	8	12	80-100%
Productivity Recommendations	**24**	**85**	80-100%
Policies to Improve Productivity	21	62	80-100%
Documentation of Encounters	10	14	60-79%
Transactions / Procedures	6	9	60-79%

[a] This is the number of health centers for which progress reports were available indicating implemented recommendations.

[b] "Percent Implemented" is calculated as total steps implemented out of total steps recommended. For example, a value of 90% means that, on average, the clinics completed 90% of the steps recommended. Please note that each recommendation entailed two to five steps.

Key: *< 60%* *60-79%* *80-100%*

Challenges with implementation

A small sample of health center staff shared through interviews some of the challenges they faced with the process of implementing recommendations from Safety Net Solutions. These include:

- **Timeline.** As one dental director noted, "I had to extend the timeline. Some processes took longer or required board approval." Another agreed that there was a lot to do with in the 60-day timeframe that SNS proposed. This dental director acknowledged that "if you go to a long timeline, it's easy to fall back into mediocrity," but still indicated that the short timeline was a challenge. A second site visit or second phase of implementation could be a useful consideration for health centers that get overwhelmed by implementation.
- **Resources.** One respondent mentioned that a lack of financial resources prevented the health center from making some recommended changes that included purchase of new equipment. Another identified limited human resources in the dental department to support the changes.
- **Opposition from staff.** Four respondents said that staff resistance to the SNS recommendations raised initial barriers to implementation, and two of these noted that personnel changes opened new opportunities to implement. In one case, an SNS recommendation to drastically shift focus from adult dentistry to pediatric was challenging, given than not every provider is prepared for pediatrics. "That's a change for the dentists," the CEO remarked. "There were reasons why they didn't work with the kids."
- **Limited CEO engagement.** The interview process revealed that CEOs in six of the nine health centers contacted had not been closely involved in the implementation process. Three CEOs refused or were highly reluctant to participate in the interview, stating even after the general nature of the interview was explained that they needed to defer to their dental director for all of the questions. In another case, a CEO described that his health center, to his knowledge, had not carried through with implementation because "we changed the management on the dental side and I'm really not familiar with what happened after that." In two remaining health centers with limited CEO engagement, respondents described the CEOs as supportive of the implementation of SNS recommendations, but very hands-off.

The Technical Assistance Process: Health Center Perspectives

In this study of the SNS model and its impact, it is useful to know not only how dental programs fared after receiving SNS consulting, but what they thought of the process itself. Health center and dental program leadership offered first-hand impressions about the effectiveness of Safety Net Solutions' technical assistance process. Although the opinions of the fourteen executives and dental directors interviewed cannot be assumed to represent those of other leaders, their insights shed light on aspects of the SNS model that are meaningful from the client's point of view and reflect nuances of the process that are not captured by quantitative clinical data.

Key Findings: The TA Process

- Interviewed health centers were overwhelmingly satisfied with the Safety Net Solutions consulting process.
- When asked what they would improve, health center staff suggested more site visits, more staff trainings, and more webinars.

Interviewed health centers overwhelmingly reported satisfaction with the SNS consulting process

All nine of the interviewed health centers reported having a positive consulting experience with Safety Net Solutions. Respondents appreciated the deep knowledge that SNS brought to the consulting, the way the recommendations fostered local ownership of proposed solutions, and the continued support even after the consulting process had ended. In some cases, the SNS team was also able to serve as a neutral outsider or candid collaborator to address sensitive issues in the clinic.

SNS staff was accessible and responsive to providing ongoing support even after the formal consulting process was complete. For many respondents, having a connection to someone who could answer questions that came up well after the consultation ended was valuable. According to its model, SNS agrees to provide assistance to each health center during the twelve months following the development of the implementation plan, but interviews with health center staff made clear that the supportive relationship continues well beyond that year. "To this day, I can pick up the phone and call [SNS staff] and they help in any way," noted one, echoing several others.

SNS skillfully and sensitively addressed tough issues with health center staff through a collaborative approach. Several respondents expressed appreciation for SNS's optimistic, collaborative, and practical attitude. "They don't shy away from the tough things that we need to talk about," said one executive. Another agreed, "They made us comfortable with the mistakes we had made and recommendations for what we should do."

SNS brought deep knowledge to the consulting process. Many of the interviewed health center leaders praised the SNS team for the valuable experience that they brought to the consulting process. "The big thing for me," reported one dental director, "was to have all that experience and expertise behind [the consulting]." Others highlighted SNS's attention to familiarizing themselves with the specifics of each clinic: "They really took the time to tour around and talk to us," said a dental director.

SNS fostered buy-in among health center executives and staff. Some health centers reported that through participatory meetings and discussions, the SNS team worked to develop local ownership of the

changes that the center chose to implement. "SNS gave us a forum for self-examination… They were very good at bringing things up and then stepping back and letting us decide," said a dental director. Another director reported using SNS information and ideas in internal meetings on an ongoing basis, remarking, "About two to three times a year, I go back to the [SNS] presentation and pull out a slide to use for our executive meetings."

> "I would recommend it to anyone. It was a great experience for us."
>
> - Health Center CEO

For some clinics, the SNS team served as a neutral outsider who could address issues that were known internally. "We knew we had to [change our patient mix]," said one dental director, "but my boss wanted to hear it from a third party." By getting the whole management team together to work on issues, SNS could serve as a convener and facilitator. "They involve all the executives and management," noted another dental director, adding, "Sometimes you don't have the executive team on board with the dental department."

Suggestions for TA improvement include more contact and training opportunities from SNS

Interview respondents were asked to provide suggestions for improvement of Safety Net Solution's services. The theme across the interviews was that, given their positive opinions of the assistance, more would be even better. Respondents identified a desire for more contact with SNS in several forms: site visits, trainings and webinars.

- **More comprehensive visits.** Visiting all of the health center's sites would allow SNS to see site-specific challenges. Two health centers noted that SNS was not able to visit all of their sites due to time and distance barriers. Health center staff "needed at least another day to really show them everything," explained one dental director. In hindsight, respondents from both centers commented, they would have benefited more from SNS visiting all of their sites to fully address site-specific challenges and, as one put it, "standardize operations."
- **More frequent visits.** Clinics would like to see SNS conduct more site visits and on-site trainings. Two respondents suggested that a second site visit would be helpful. As one explained, "[SNS] gave a huge amount of information verbally and in their report. It would be hard for any practice to assimilate all of that… A return visit [would] keep the practice on track about the changes." Several other respondents, however, indicated that one initial site visit with follow-up by phone and email was sufficient support.
- **More staff trainings.** Clinics also expressed a need for staff trainings on data management and customer service. One respondent requested that SNS work with clinical software companies "to put together a dental dashboard" to help with data management and establish the role of oral health data in the medical home. The same respondent offered the idea of SNS "having trainings for front line staff on…customer service" during an extra site visit day.
- **More webinars.** Webinars are another way that clinics would like to receive information. One respondent noted that SNS had recently begun "doing more hour-long webinars" that were "very helpful… It's beneficial to hear what is working well at other sites. It helped to reinforce the recommendations they'd given to me."

As Safety Net Solutions considers its future approaches, an effort to further scale up the model may not fit well with providing *more* services per site. However, positive feedback on virtual options like webinars could open up more possibilities for reaching great numbers of dental programs with training and support.

Concluding Thoughts

Safety Net Solutions receives high praise from health centers it advises regarding the collaborative, inclusive, and long-term technical assistance process as well as the sustained impact of that assistance on dental practice performance. Quantitative measures bear out these benefits:

- **In the midst of a national economic crisis, over sixty percent of dental programs increased revenues and over half improved their financial bottom lines after SNS assistance.**
- **After implementing SNS recommendations, health centers increased the dental provider productivity, provided more oral health services per visit, and increased the numbers of unduplicated and new patients served.**
- **Dental programs that implemented the recommended no-show policy saw a substantial decrease in the proportion of scheduled patients that failed to show up for appointments.**

In short, the evidence considered in this study describes Safety Net Solutions services as valued and effective. A complementary question of interest for SNS is where opportunities exist to improve its services and impact. Both practice-related data and interview findings revealed several potential areas for consideration of new strategies, detailed as follows:

Despite SNS's broad inclusiveness at site visits, health center staff faced challenges with CEO engagement and staff opposition. SNS has procedures in place to meet with CEOs and include both executives and all dental program staff in site visit meetings. However, challenges with CEO engagement and staff reluctant to implement changes still emerged as a theme in health center staff interviews. To increase CEO and staff buy-in of SNS recommendations, consider these additional approaches:

- Establish **peer networking opportunities** for executives and separately for dental program staff, connecting newcomers to those who have had successful experiences. For example:
  - Consider an online peer sharing forum (perhaps an expanded or more strongly promoted function of the SNS Learning Center) where SNS can communicate information to health centers and health centers can use each other as resources for ideas and trouble shooting.
  - Host more webinars targeted to specific positions (CEOs, dental directors, other dental staff) to highlight issues of interest to them and emphasize their roles in the process.
- Recruit **champions** among CEOs and dental directors who have had positive experiences implementing changes. These champions could serve as speakers on webinars or at other forums, or even provide occasional peer-to-peer mentoring with sites that face challenges that match a champion's past experience.
- Provide prior **testimony** from CEOs and dental staff when orienting new clients on the SNS process.

Dental program difficulties with tracking data limit SNS's and their own abilities to understand challenges and opportunities. There were limitations with the practice-related data that provided the bulk of the outcomes evidence in this study. Likely due to low staff capacity and lack of systems to capture data at the dental practice level, many key statistics were missing from baseline data sets submitted by health centers. Of the 72 health centers considered for this analysis, over 30 percent did not provide baseline figures for

unduplicated and new patients, number of transactions, and procedures per visit. Almost no dental programs were tracking completed treatments at baseline, and this did not improve greatly after SNS assistance. Measurement of quality is a new frontier in the oral health field and is one area in which SNS could help the safety net field grow in terms of understanding impact. Compliance with data tracking overall is essential for SNS to monitor its impact, in part due to the high turnover among health center staff and leadership that jeopardizes institutional memory of recommendations. Specific considerations for improving data collection include these:

- Consider offering **assistance with data tracking** as a separate and preliminary service. Because data are central to SNS's ability to identify and discuss recommended changes with health centers, SNS could provide support to programs to help meet a more stringent requirement for baseline data.
- Identify opportunities to **streamline or automate the data reporting process** for dental programs. Working with dental practice software providers to enable dental programs to run automated reports of practice-related data to share with SNS is an area of interest noted by DentaQuest Institute leadership. Building an online software program that allows (or requires) centers to submit data electronically in a way that automatically populates a database would also achieve economies of scale given that the number of health centers SNS works with each year continues to grow. Ideally, dental programs could see their own progress through a report automatically generated through this system for real-time feedback.

Comparison with centers that did not receive assistance would help determine causality. Although the present data show a clear sequence of SNS assistance followed by dental practice improvements at a range of health centers, the evidence cannot exclude the possibility that factors outside of SNS's assistance caused or contributed to the improvements. A comparison set of data from health centers not receiving SNS assistance would provide an opportunity to examine whether changes in assisted health centers differed from changes in the comparison set. To better enable attribution of strengthened dental safety net programs to SNS, consider the following:

- Use the Strengthening the Oral Health Safety Net initiative as an opportunity to request practice-related data at multiple points in time from health centers not receiving SNS assistance. An incentive for their participation could include the promise of future SNS assistance. These health centers could be matched with those that *are* receiving assistance in the same state, and would be experiencing a common economic and policy context within that state.

In conclusion, as Safety Net Solutions and DentaQuest Institute look forward with an interest in growing their impact, this study raises several questions that invite reflection and strategic thinking for the future.

- *What opportunities exist for standardizing the SNS model?*
- *To what extent can the SNS elements of specialized expertise and personal connection with programs be scaled up? How else can key messages be spread to more programs?*
- *Are technologies like webinars and more automated data collection and analysis promising contributors to cost-effective growth?*
- *What trends does SNS see among safety net health centers in terms of technological advances or preparations for health reform that might affect the SNS approach?*
- *Which components of the SNS model will be most relevant in the long term?*

Appendix A: Evaluation Methods and Limitations

This study included data from 72 health centers that Safety Net Solutions worked with from 2006 to 2011. Specifically, the evaluation team analyzed practice-related data for 65 dental programs, reviewed TA-related documentation for 36, and interviewed representatives from nine health centers. A full list of the health centers represented in this report is available in Appendix B.

The evaluation incorporated the following data sources and methods. They were designed to impose as little burden as possible for SNS staff and clinics, while still providing the depth of information needed to develop critical lessons for SNS and the Institute.

Review and analysis of clinic data and TA-related documents. As part of its work with each clinic, SNS maintains up to two years of practice-related data as well as documentation on the recommendations made and implemented. This report considers one-year data for 65 clinics, and two-year data for 37 clinics. This represents all of the clinics SNS served between 2006 and 2011, with the exception of seven sites. These seven sites discontinued their involvement with SNS, and therefore follow-up practice-related data are unavailable.

Interviews with Safety Net Solutions staff. The evaluation team conducted interviews with Mark Doherty and Dori Bingham to learn more about the evolution of the SNS model and their insights from deep experience of providing expert consultation to dozens of safety net dental programs. Interviews took place in September 2012. Additional informal conversations with these and other SNS staff between September 2012 and April 2013 also provided invaluable context and interpretations of findings based on their first-hand experience with the health centers studied.

Interviews with a sample of health centers. Hearing perspectives from health center leaders was important for understanding challenges faced by safety net dental programs as well as the value of the SNS consultation and its specific recommendations as perceived by staff. In February and March 2013, Harder+Company conducted 14 interviews with a selection of dental directors and executives from nine health centers served, speaking with dental directors and executive leaders from the same sites when possible. We worked with SNS staff to identify as interview sites a range of health centers served (center type, dental program size and structure, tenure, payer mix) and geographical coverage. There were several challenges to achieving an ideally diverse sample. Staff and leadership turnover at safety net health centers tends to be high, and in many cases, the leaders who had worked directly with SNS were no longer employed at the health centers. In several cases, potential respondents did not reply to multiple attempts to schedule, and in one case actively declined to be interviewed. The 14 leaders we secured interviews with provided perspectives from nine different health centers across five states. Their comments provided key windows into their experiences, but should not be interpreted as representative of all of the sites served by SNS.

Limitations of the Study

As with any analysis, there are limitations to consider in interpreting the findings of this report:

- **Interview respondents are subject to recall bias.** Interview respondents were asked to recall their TA experiences with SNS. Interviewed health centers received TA as early as 2008 and as late as 2011. Although respondents did their best to think back to their experiences, many noted that they could not remember specifics due to the passage of time.

- **Interviewed health centers are not representative of all health centers served.** Interviews were conducted with a small sample of health centers that may differ in meaningful ways from the health centers not interviewed. For instance, we only spoke with executives or dental directors who had been employed at the center at the time of SNS consultation so they could speak directly to their experience with SNS. Because of high staff turnover at these centers, this criterion excluded many from the interviews. The interview findings from centers with more stable leadership over time may differ substantially from those where turnover occurred in the years following SNS assistance. Moreover, those who agreed to be interviewed may differ substantially from those who declined or did not respond to an interview request.

  In addition, the interviewed health centers are located in five of the twelve states in which SNS worked during this time period. The policy and demographic context varies from state to state, and these factors may have differently affected dental programs' ability to implement SNS recommendations in the states where no interviews were conducted. Finally, there is substantial variation among health centers themselves in terms of organizational structure, internal politics, and population served, among other differences. The interview respondents were able to speak only of their own experiences and therefore cannot be assumed to represent a common view across health centers.

- **Potential difference between clinics with one year of data and clinics with two years of data.** Practice-related data is available for clinics participating in technical assistance from 2006 through 2011. Within this data, there are two cohorts of clinics—a set for whom there is one year of data (65 clinics) and a set for whom there are two years of data (37 clinics). Clinics with two years of data provide a glimpse into the longer term impacts of SNS technical assistance. However, underlying differences might exist between the cohorts—those who have chosen to submit data for two years may have been more receptive to technical assistance or had greater capacity to follow through on recommendations.

- **Impact of technical assistance takes time to show up in practice-related data.** According to SNS staff, recommendations can take months to reach full implementation. For example, new policies will require the clinic managers to draft the policy, take it to their Board of Directors for review and approval, train staff on the new policy, and then execute the new policy. While many clinics complete the recommendations within a year, it may take more time for these improvements to show up in the data. A more conclusive analysis would require a larger sample of clinics with two years of data.

- **Practice-related data is self-reported by clinics.** The practice measures data is self-reported by clinics according to guidelines provided by SNS. While SNS staff members have spent much time and effort to ensure the accuracy of the data, data quality ultimately depends on the capacity of clinics' data systems and the ability of clinic staff to produce the necessary reports. Data points highlighted as questionable by SNS staff have been ignored for the purpose of this analysis.

- **Challenges with attribution.** There are many confounding factors that affect the number and types of patients served as well as the financials of each clinic. Many of these factors are within the control of the clinic (scheduling, no-show policies, etc.) and many of these factors are not (reimbursement rates, adults Medicaid dental coverage). While this analysis identifies trends for clinics served by SNS, it *does not allow for a direct attribution of these improvements to SNS* due to a lack of control group data for comparison.

In spite of these limitations, the evaluation team believes this study provides important insights regarding SNS's accomplishments to date and the value of technical assistance to the clinics served.

Appendix B: Health Centers Served by Safety Net Solutions, 2006-2011

Exhibit B1: Participating Health Centers (n=72)

Interviews conducted with an executive and/or dental director at centers listed in red.

California	
Clinicas de Salud del Pueblo (2009-2010)	Mission Community Hospital (2009-2010)
Community Oral Health Services (2009-2010)	Native American Health Center (2009-2010)
Inland Behavioral Health Center (2009-2010)	North East Medical Services (2010-2011)
Marin County Dental Services (2009-2010)	Vista Community Clinic (2009-2010)
Connecticut	
Charter Oak Health Center (2010-2011)	Optimus Health Center (?)
Community Health Services (2010-2011)	Southwest Community Health Center (2008-2009)
Cornell Scott Hill Health Center (2008-2009)	Staywell Health Center (?)
East Hartford Community HealthCare (2009-2010)	United Community and Family Services (2008-2009)
Florida	
Borinquen Health Care Center (2009-2010)	Jessie Trice Community Health Center (2009-2010)
Community Health South Florida (2009-2010)	NCEF Pediatric Dental Center (2010-2011)
Community Smiles (2011-2012)	
Iowa	
Crescent Community Health Center (2012-2013)	
Kansas	
First Care Health Center (2010-2011)	
Maine	
Community Dental of Portland (2011-2012)	Downeast Health Services (2011-2012)
Community Dental of Rumford (2011-2012)	Health Access (?)
Community Dental of Waterville (2011-2012)	Penobscot Community Health Center (2011-2012)
Community Smiles (?)	
Massachusetts	
Caring Health Center (2007-2008)	Harbor Health Services (2010-2011)
Codman Square Health Center (2007-2008)	Health First Family Care Center (2007-2008)
Dorchester House Multi-Service Center (2008-2009)	Holyoke Health Center(2010-2011)
Fitchburg Community Health Connections (2010-2011)	Lynn Community Health Center (2008-2009)
Missouri	
Access Family Healthcare (2011-2012)	Clay County Public Health Center (?)
New York	
Hudson Headwaters (2012-2013)	
North Carolina	
Blue Ridge Hospital, Toe River Project Access (2010-11)	Haywood County (2010-2011)
Carolina Family Health Centers (2010-2011)	Lincoln Community Health Center (?)
Clay County (?)	Mission Medical Associates (2010-2011)
Columbus County Health Department (2010-2011)	Rural Health Group (2010-2011)
Dare County Department of Public Health (2010-2011)	Surry County (2010-2011)
Durham County Health Department (2010-2011)	UNC Hospitals (2010-2011)
Gaston Community Health Center (2010-2011)	Wake County Human Services Center (2010-2011)
Greene County Health Care, Inc. (2010-2011)	Wake Health Services (2010-2011)
Guilford Health Care Center (2010-2011)	
Ohio	
Allen County Health Partners (2009-2010)	Fremont Community Health Clinic (2011-2012)
Blanchard Valley Dental Clinic (2009-2010)	HealthSource of Ohio (2009-2010)
Canton Community Clinic (2009-2010)	Mercy Medical Center (2010-2011)
Community Action Agency of Columbiana County (2010-2011)	Miami County Public Health (2010-2011)
Community Health Services Fremont (2007-2008)	Nisonger Center, Johnstown Road Dental Program (2011-2012)
Dental Center of Northwest Ohio (?)	St. Elizabeth's Health Center (2009-2010)
Family Health Care (2012-2013)	
South Carolina	
New Horizons (2011-2012)	

Appendix C: Additional Practice-Related Data

Notes

- Because not all clinics submitted complete data or data for each indicator, the n's for each table may be slightly different.
- In addition, four sites were excluded from this analysis (all tables) due to being clear outliers compared to the rest of the data. Outliers in this case are defined as clinics with gross charges and/or net revenue of over 200 percent. The four sites are: CommWell Health, Staywell Health Care, Cornell Scott Hill Health Center (year two data only) and Johnstown Road Nisonger Dental (year two data only).

Exhibit C1: Total Number of Patients Served for All Clinics

	Year 1 (n=38-43)			Year 2 (n=18)		
	Baseline	**Y1**	***Change***	**Baseline**	**Y2**	***Change***
Unduplicated Patients	172,727	254,740	*47%*	69,562	107,579	*55%*
New Patients	55,265	55,569	*1%*	26,663	37,154	*39%*

Exhibit C2: Impact of Clinic Size on Implementation of Recommendations

Implementation of Recommendations*	Avg. # of Sites	Avg. # of Operatories	Avg. # of FTE DDS	Avg. # of FTE Hygienists	Avg. # of FTE All Staff
Low Implementation (n=5)	2.0	12.4	3.8	3.4	7.2
Medium Implementation (n=8)	1.6	8.9	3.1	1.1	4.2
High Implementation (n=19)	1.6	7.0	2.5	0.9	3.3

*Clinics ranged from implementing 47 percent of all SNS recommendations to 100 percent. Clinics in the lower third percentile of implementation were categorized as *low* (n=5), the middle third percentile was categorized as *medium* (n=8), and the highest was categorized as *high* (n=19).

Implementation of Recommendations

During TA, clinics were given recommendations in five categories: financial, access, admin, productivity, and quality (listed in bold, below). Within each category, clinics were given various specific recommendations to take to improve in each category, which we grouped into recommendations (listed in plain text), and may have contained many steps within them. The exhibit below shows which categories and recommendations clinics were given, how many they implemented, and the percent implemented.

Exhibit C3: Types of Recommendations Implemented by Clinics

(n=36)	Centers that Received Recommendation(s)	Total Recommendations	*Percent Implemented*[b]
All Recommendations	**36**	**858**	
Administrative and Policy Recommendations	**36**	**175**	***87%***
Provider Education	**23**	46	*85%*
Staffing	**21**	62	*85%*
Scope of Service	**10**	14	*79%*
Accountability *(staff education, monthly reporting)*	**7**	14	*100%*
Clinic Policies and Procedures	**7**	14	*93%*
Leadership	**5**	9	*100%*
Business Plan	**4**	6	*78%*
Front Desk	**3**	9	*100%*
Access Recommendations	**35**	**261**	***80%***
Scheduling Policy	29	102	*80%*
No-Show Policy	25	65	*75%*
Patient Eligibility *(patient education, documents)*	19	60	*83%*
Emergency Care Policy	15	25	*88%*
Allocation of Resources to Improve Access	3	5	*100%*
Front Desk Operations	1	4	*25%*
Financial Recommendations	**34**	**279**	***87%***
Self-Pay Patients *(policies, patient education)*	29	87	*95%*
Payer Mix / Designated Access Scheduling	29	71	*89%*
Increases to Fee Schedule	23	29	*90%*
Billing Process and Procedures	15	35	*71%*
Sliding Scale Fee Schedule	14	29	*79%*
Financial and Productivity Goals	10	12	*75%*
Review of Expenses	7	10	*70%*
Collection of Fees Owed After 90 Days	3	7	*100%*
Quality Recommendations	**25**	**58**	***86%***
Completion of Phase 1	21	46	*85%*
Quality Assurance Plans and Policies	8	12	*92%*
Productivity Recommendations	**24**	**85**	***81%***
Policies to Improve Productivity	21	62	*85%*
Documentation of Encounters	10	14	*71%*
Transactions / Procedures	6	9	*67%*

[a]This is the number of health centers for which progress reports were available indicating implemented recommendations.

[b]"Percent Implemented" is calculated as total steps implemented out of total steps recommended. For example, a value of 90% means that, on average, the clinics completed 90% of the steps recommended. Please note that each recommendation entailed two to five steps.

Productivity

Exhibit C4: Impact on No-Show Rates

	After One Year *(n=55)*		After Two Years *(n=24)*	
	Baseline	Year 1	Baseline	Year 2
Reached the no-show rate benchmark[a]	10 clinics (18%)	16 clinics (29%)	3 clinics (13%)	10 clinics (42%)
Average decrease across all clinics…				
Average decrease in no-show rates	-5 percentage points		-4 percentage points	
Average percent decrease	-20%		-15%	

[a] The benchmark is defined as a no-show rate of 15% or under

Exhibit C5: Impact on Procedures per Visit

	After One Year *(n=46)*		After Two Years *(n=20)*	
	Baseline	Year 1	Baseline	Year 2
Reached the procedures/visit benchmark[a]	24 clinics (52%)	33 clinics *(72%)*	11 clinics (55%)	15 clinics *(75%)*
Average increase across all clinics…				
Average increase in procedures/visit	+0.4 procedures/visit		+0.7 procedures/visit	
Average percent increase	+19%		+33%	

[a] The benchmark is defined as an average of two or more procedures per visit

Exhibit C6: Impact on Visits per Dentist Per Year

	After One Year *(n=51)*		After Two Years *(n=22)*	
	Baseline	Year 1	Baseline	Year 2
Reached the visits/dentist/year benchmark[a]	15 clinics (30%)	11 clinics (22%)	4 clinics (18%)	2 clinics (9%)
Average increase across all clinics…				
Average increase in visits/dentist/year[b]	+427 visits/dentist/yr		+510 visits/dentist/yr	
Average percent increase	+13%		+19%	

[a] The benchmark is defined as between 2,500 and 3,200 visits per dentist per year

[b] Because many clinics had large increases in their number of visits per dentist per year, many clinics began to meet and then exceed the recommended benchmark range of 2,500 to 3,200 visits per dentist per year.

Financials

Exhibit C7: Impact on Net Revenue

	After One Year *(n=65)*	After Two Years *(n=29)*
Increased net revenue	41 clinics *(63%)*	18 clinics *(62%)*
Average increase across all clinics…		
Average dollar increase	+$25,912	+$218,161
Average percent increase	+3%	+24%

Exhibit C8: Impact on Bottom Line

	After One Year *(n=64)*	After Two Years *(n=28)*
Increased bottom line[a]	36 clinics (56%)	16 clinics *(57%)*
Average increase across all clinics…		
Average dollar increase	+$8,448	+$19,243
Average percent increase	+15%	+22%

[a] It is possible for a clinic to have increased its bottom line but still be operating at a loss. This analysis looks at the degree of improvement regardless of whether they are in the red or in the black.