School-Based Comprehensive Oral Health Services Grant Program
Final Report

Project Identifier Information

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I. PROGRESS

A. Planning & Implementation

During the grant period, Sheridan Health Service's School Based Health Center (SHS SBHC), transitioned from a traditional school based health center into a multi-site Federally Qualified Health Center (FQHC). Partnering with the University of Colorado, School of Dental Medicine (SODM) to operationalize a mobile dental van on school property was conveniently symbiotic. On November 30, 2011, operations officially began on the dental van. With three working operatories, patients were seen for comprehensive dental treatment by faculty and fourth year dental students. Additionally, a sliding scale fee schedule was created in order for patients who are ineligible for Medicaid to obtain dental services at an affordable rate based on income levels. Dental scheduling for appointments was integrated into a front desk roll, where all SHS staff receptionists/medical assistants were trained and informed on the proper procedure to schedule and answer questions relative to dentistry services. Billing was performed by the dental assistant, who also maintained logs for data tracking.

Space constraints at the SBHC negated the installation of dental operatories and the dental van was being under-utilized. Further, the dual mission of Sheridan Health Services (SHS) was parallel to the SODM. Both entities provided care to the underserved and educated the future workforce. We were fortunate in many ways. First, we were able to establish a MOU with the SODM and retain experienced staff, a dentist and hygienist that worked on the dental van. The dentist was accustomed to having three operatories, a myriad of dental students, and limited physical space. The hygienist was comfortable providing necessary trainings for scheduling, billing, and workflow. The van was equipped with an electronic health record (EHR), accessible from the SODM. The EHR did not link to the EHR for primary and behavioral health, however, it was sufficient for the arrangement.

The timeline was on point. We were able to launch accessible, affordable, quality dental care for students and their families. Efforts were focused both on prevention, diagnosed issues related to the health and function of the smile, including the treatment and repair of broken, infected, or otherwise damaged teeth, gums, and tissue. General dentists served as the primary care provider for their patients, managing their oral health care needs and coordinating treatment with specialists when necessary. Services in the dental van focused on preventative care (sealants and routine cleaning); restorative care (composite/amalgam fillings, crowns, and basic root canals); and rehabilitative care (dentures, implants, and bridges). Emergency services (extractions, nerve removal, and abscess care) for acute pain relief were available through the SODM and a partnership with Comfort Dental.

Additionally, children under three received regular screenings and fluoride treatments from nurse practitioners. The statewide initiate 'Cavity Free at Three' program enabled providers to apply fluoride varnish, to disseminate education materials along with toothbrush kits. These items are distributed during routine primary care visits.

The bilingual Medicaid Benefits Counselors conduct financial screenings and assist in enrollment activities. The case coordinators tracked referrals and developed comprehensive care planning for primary care, mental health, oral health, and substance abuse treatment. The funding enabled the prevention and control of oral disease; provided increased access to care; and improved oral health and wellness of the population we serve.

Delivery System Design

The delivery system design was appropriate for the limited resources we had in 2011. It made sense to utilize the SOFDM dental van as a means of establishing oral health services (photo,p.14). The mobile dental clinic experienced many challenges to include interruption of services due to frozen pipes, treacherous conditions to gain access to the van, which was onerous to move for the proper disposal of waste. Irregular student rotations from the SODM contributed to staffing limitations. Taking into consideration all of these factors, SHS received permission to move the services indoors. Since being relocated, patients with physical disabilities can be afforded comprehensive oral health services, as the new operatories are ADA compliant, unlike the mobile unit that had stairs, a point of concern that emerged in year 1.

In conjunction with the new operatories, a fully-integrated electronic dental record was launched. The SuccessEHS/MediaDent systems are cloud-based and run on thin-client operations. The system provides the ability to completely integrate systems and share records between providers. Progress notes are shared and the internal referrals from/to primary care, dental, and behavioral health are tracked within the software. MediaDent has computer recorded imaging, documentation, and referral functionality. Nurse practitioners apply fluoride varnish to children 3 years and under. All clinic users are offered dental services and bi-directional referrals occur within all specialty areas for children and adults. Pregnant women are highly encouraged to have oral health examinations.

Services were strategically relocated from the mobile dental clinic to a fixed operatory earlier than originally projected. The decision to migrate from a mobile unit to building out operatories within the community clinic was due to a myriad of issues to include frozen pipes, proper waste disposal, ADA barriers, and electrical problems). Complexities of integrated care were heightened due to the physical separation of staff in a vehicle parked adjacent to the facility. We anticipated the two-tiered approach but did not anticipate moving as quickly. Regardless, the initials challenges informed decision making, allowing the program to move more towards sustainability.

Effective strategies were designed to improve outreach, early screening, and treatment. The methodology for launching the mobile unit was sound. The transition from the mobile unit to the permanent infrastructure was a bit more complicated. Construction and staffing delays were onerous and required a request for funding extension. We initially delayed the hire of a hygienist because the decay present for most patients required a dentist to conduct scaling and deep cleaning. It was determined a third dentist would be more advantageous than having a hygienist.

Though this is true, it also the case that dentists are not fond of doing routine cleanings. The dissatisfaction is understandable when working at the lower end of scope. Colorado has not granted licensure for dental therapists. A hygienist was ultimately hired towards the end of the project period. Since fall 2013, we have been building volume by increasing staff. Oral health services are provided 4 days per week, 3 of which are staffed by dentists and 1 day by the hygienist (photo,p.14).

Interdisciplinary Care

Comprehensive, integrated dental services came to fruition early in the project period. Strategic planning efforts for oral health implementation were very effective. The partnership with the SODM was symbiotic. We adopted policies and procedures and worked with administrators to launch the mobile unit while creating a clinical site for dental students. Integrated care is part of the foundation of Sheridan Health Services. The provision of dental service and then subsequently pharmacy are highly valued within the community. Collaboration is a key component of integrated care. Faculty and staff meet monthly to discuss goals, analyze processes, and discuss performance measures. The bi-directional medical record interface promotes continuity of care. The system interfaces seamlessly with primary and behavioral health. Dental students work closely with pharmacy, nursing, and behavioral health interns. Care plans are developed by the integrated team to assist with the optimization of health and wellness. The total number of dental encounters have quadrupled since 2013. Demand has increased and a third operatory is a necessity to meet patient demand for services.

Patient/Community Education: Partnerships with Sheridan School District, Addiction Research and Treatment Services (ARTS), South Suburban Recreation Center, and the School of Dental Medicine exist to promote service expansion, access, and the provision of comprehensive, quality care. The Sheridan School District Board of Directors approved our proposal to enroll all students into the SBHC unless they chose to opt out of enrollment for any reason. Patients are given materials on health promotion and disease prevention. Faculty and staff routinely communicate with student and administrators within the schools.

Representatives from Sheridan Health Services participated in a variety of events to promote dental services, which included multi-cultural events as well as 9News Health Fairs. From their efforts, a media segment was developed and aired over 200 times. Outreach and enrollment personnel successfully promote our integrated model of care and are instrumental in educating the community to include participation in an annual community event, Sheridan Celebrates, school registration days, National Night Out, Back-to-School Night, parent-teacher conferences, and school health fairs. Outreach was also conducted in the form of reverse calls to the parents and sending home of flyers.

B. **Continuous Quality Improvement**

Sheridan Health Services updated its Quality Assurance Quality Improvement plan in October of 2015 (refer to attachment). The plan is based upon sound principles of quality management and is inclusive of all specialty areas. The Dental Director

coordinates and conducts peer reviews on an annual basis. Dentists are provided with an assessment tool, specific to the topic of the chart review. Each reviews a number of charts and assesses the performance of their peers. The dentists then have an opportunity to share their findings with each one another for best practice. Quality assessment and quality improvement is under the purview of the Continuous Quality Improvement (CQI) Committee. The administrator responsible for dental clinic is Dr. Mark Kessler.

CQI meets quarterly with the Board of Directors QA Committee to address risk management, monitoring performance measures, occurrence reviews and patient satisfaction. Since programmatic inception, there have been 4 reports that follow under these three categories: 1) treatment Issues- Complications of procedures; adverse reaction to treatment or medication; or treatment provided without proper infection control; 2) medical emergencies in the clinic or supportive measures given to patient or 911 called, and/or 3) patient Interaction/behavior. A dental resident performed a procedure under direct supervision if the dentist. They were unable to locate the tip of the scaler after the procedure. The patient received an x-ray, which confirmed that the apparatus was not located in the patient's mouth or GI cavity. Risk management was notified and follow-up care was provided. A patient fall occurred during the winter as she walked from the clinic to the mobile dental van. No injury was reported. Two patient complaints were received in 2015 regarding the inability to receive timely responses from messages left on voicemail.

A Workflow and Information Management Core Group was developed to optimize the EHR and improve efficiencies. Transformational work continues towards Patient Centered Medical Home (PCMH) designation through National Committee for Quality Assurance (NCQA). The application date was delayed due to clinic expansions and is scheduled for the end of 2016. Dental providers attested for the 2013 Adoption, Implementation, and Upgrade stage of Meaningful Use through the Medicaid benefit. SHS will be submitting data for Stage 1 of Meaningful Use in 2016.

C. Sustainability

Funding through the HRSA Oral Healthcare Access grant, awarded in 2011, has created a sustainable infrastructure. This is evidenced by the development from part-time service provided by a mobile unit posted outside of the school-based health center, to the inclusion of two permanent dental operatories. Oral health screenings are routinely provided to all children presenting as first time patients at the school-based health center. Dental services are now provided 4 days/week to the full age range of patients. Both preventive and restorative services are provided, in addition to dental hygiene services. We have plans to add a 3rd operatory and an additional day per week to meet the growing demand for oral health services. We have contracted with Colorado Access and Anthem insurance companies. Eight other managed care contracts are currently in process. Patient revenue stream diversification, expansion of clinical hours, and effective outreach efforts should help us be sustainable. It is essential that we maintain our status an FQHC. A sliding fee scale has been designed for those who qualify. SHS retained a billing agency, RCM,

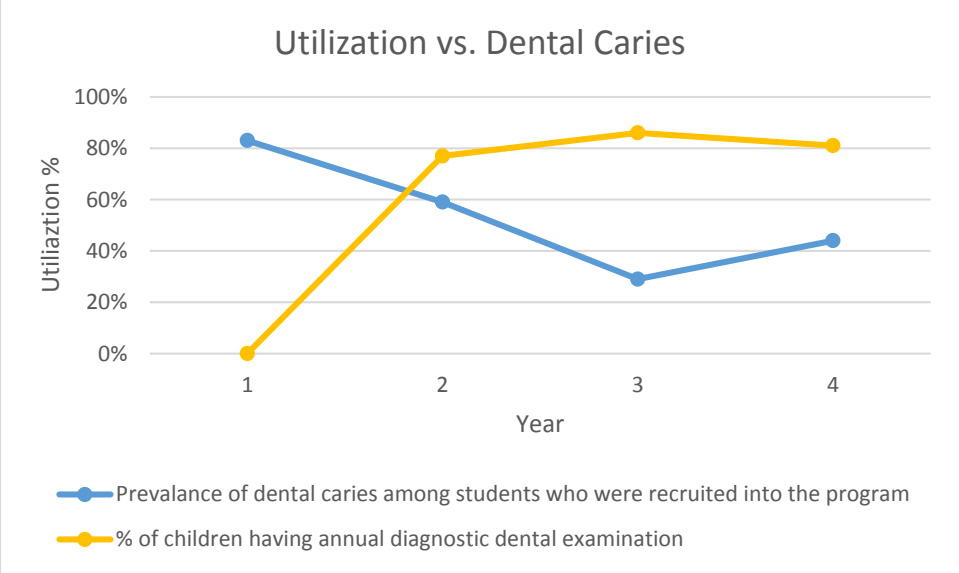
to process all claims. RCM is a division of SuccessEHS/MediaDent and has direct access to the system to bill out claims and reconcile accounts. Since the startup of the new permanent operatories. The billing coordinator actively works account receivables for insured and the uninsured.

Medicaid expansion has benefitted our patient population overall though not necessarily reflected in the individuals seeking oral health services at SHS. Volumes continue to climb and more individuals have access care at SHS because of the sliding fee scale. The SFS provides an affordable mechanism for individuals to receive care who would otherwise not be able to afford. The increased Medicaid volume for SHS overall is beneficial to the financial health of Sheridan Health Services. Outreach and enrollment specialists contributed to sustainability by increasing volume, enrolling patients in Medicaid and the HIE.

II. Evaluation

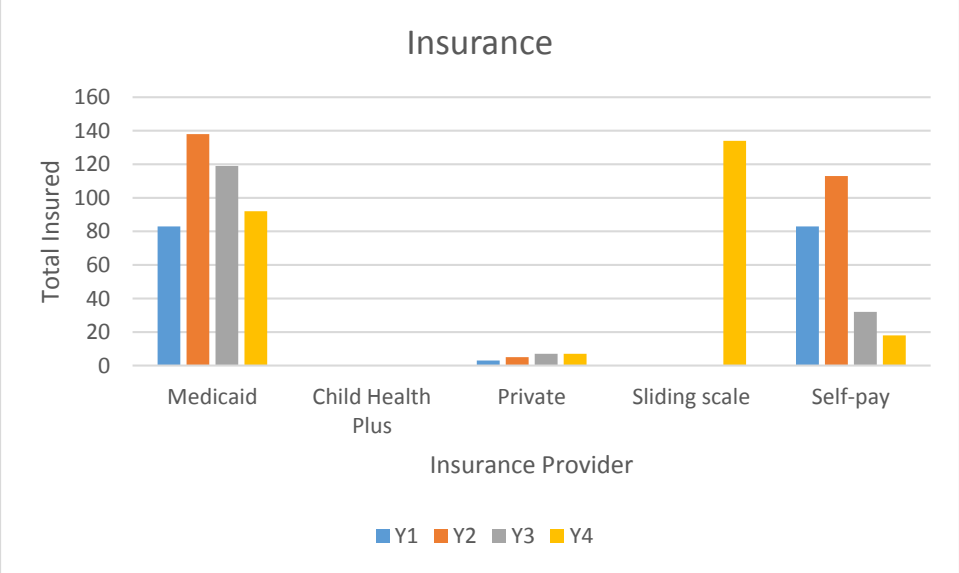
Access to comprehensive oral health care for children and families who receive care at Sheridan Health Services has increased incrementally. Sheridan Health Services has almost doubled in growth. We served approximately 1,861 unique patients in 2012 and 3,007 patients in 2015. Dental encounters increased from 323 in 2013 to 1,273 encounters in 2015. Overall growth has been slower than expected due to the implementation of a new electronic health record and ongoing extensive efforts for HIT optimization. Recruiting bilingual personnel was difficult. It took over 6 months for us to hire a dental assistant. Those challenges coupled with staffing turnover and clinic expansion has impeded the trajectory of growth. The Medicaid benefits counselors have increased the enrollment of eligible but not enrolled (EBNE) students into the Health Information Exchange (HIE). The team routinely attends 4-6 community events each quarter, processes 70-90 sliding fee scale applications, and assists with 20-40 Medicaid applications, resulting in almost 180 sliding fee scale beneficiaries and up to 120 potential new patients annually. Substantial growth is expected in 2016.

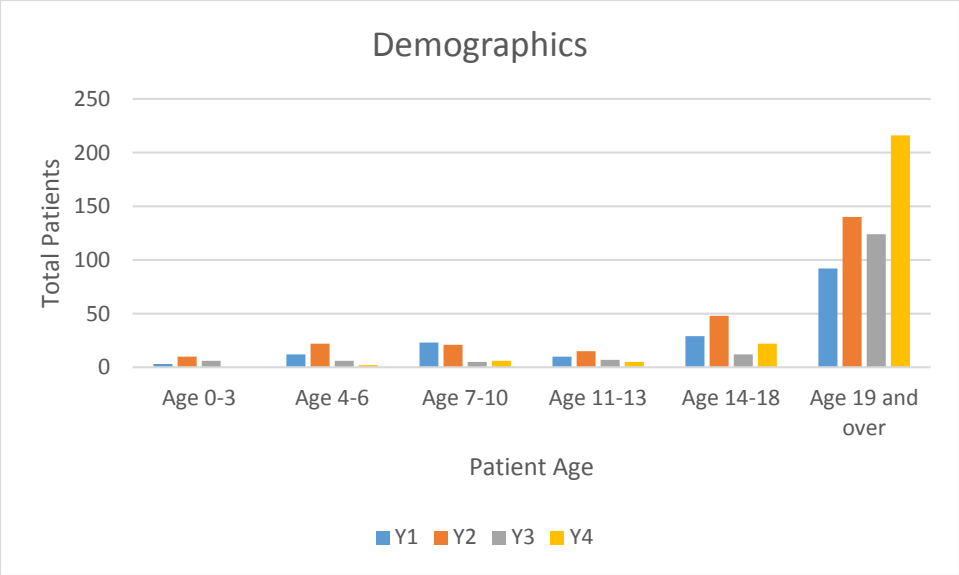
Based on outcome measures, the number of children who received preventive services increased and the number of carries decreased. We are hopeful these trends will continue into the future. Combined totals for all measurement years are reported below:



Demographics were collected on the patient populations who received dental care. Strategic efforts to increase children and youth are underway. The majority of patients are 18 years of age or older. There is more of a demand for adults who have no payor source.

Colorado is a state that has Medicaid expansion. Interestingly, the numbers of individuals who acccessed oral care with Medicaid decreased over the past 3 years, individuals with private insurance have increased and those who qualify for sliding fee scale increased significantly.





Indicators are detailed by year in Appendix A and the combined totals for the project period are provided in the spreadsheet below:

Process, Outcome, and Impact Indicators	**Combined Totals**
Informed Consent:	**Project Period**
Number of forms distributed	836
% forms returned	100%
Enrollment:	
Number of children enrolled in the program by age/ins	836
Age 0-3	19
Age 4-6	42
Age 7-10	55
Age 11-13	37
Age 14-18	111
Age 19 and over	572
Payment Types:	
Medicaid	432
Child Health Plus	0
Private	22
Sliding scale	134
Self-pay	246
Uninsured	0

Healthy Families	0
Wait time for 1st appointment from time of enrollment	3 weeks
Reimbursements:	
Number of claims eligible for Medicaid and CHIP	1002
Number of claims eligible for other 3rd party reimbursement	24
For each type of preventive serivce, the distribution of children by age, grade level, and insurance coverage (Medicaid, CHIP, and 3rd party insurance)	
Comprehensive oral exam	774
X-rays	663
Oral prophylaxis	61
Fluoride	220
Sealant	36
Education	836
For each type of treatment service, the distribution of children by age, grade level, and insurance coverage (Medicaid, CHIP, and 3rd party insurance)	
Restorations	368
Extractions	162
Other (specify)	46
Other (specify)	15
Other (specify)	25
Prevalence of dental caries among students who were recruited into the program	54%
Utilization of dental services (for students enrolled in the program):	
% of children having annual diagnostic dental examination	81%
% of children having teeth cleaned in past year	76%
% of all children having completion of treatment plan in one year	55%

Patient satisfaction snapshot

Patient Satisfaction Aug. 1, 2012- May 31, 2013

Questions	GREAT=5	GOOD=4	OKAY=3	FAIR=2	POOR=1	No Respons	Denominator
ACCESS*							
Ability to get in and be seen	78%	15%	0	4%	0	1	27
Hours center is open	59%	15%	15%	0	0	3	27
Convenience of center's location	74%	19%	0	0	0	2	27
Prompt retun on calls	63%	22%	4%	0	0	3	27
WAITING							
Time in waiting room	37%	41%	11%	7%	0	1	27
Time in exam room	37%	41%	7%	11%	0	1	27
Waiting for tests to be performed	41%	33%	11%	4%	0	3	27
Waiting for test results	48%	33%	7%	4%	0	1	27
STAFF/PROVIDER*							
Listens to you	89%	7%	0	0	0	1	27
Takes enough time with you	89%	4%	0	0	0	1	27
Explains what you want to know	89%	7%	0	0	0	1	27
Gives you good advice and treatment	81%	15%	0	0	0	1	27
Staff/NURSES/MA*							
Friendly and helpful to you	89%	7%	0	0	0	1	27
Answers your questions	89%	7%	0	0	0	1	27
Staff/All Others:							
Friendly and helpful to you	78%	4%	0	0	0	5	27
Answers your questions	78%	0	0	0	0	6	27
PAYMENT:							
What you pay	56%	11%	4%	0	0	8	27
Explanation of charges	56%	15%	4%	0	0	7	27
Collection of payment/money	59%	11%	4%	0	0	7	27
FACILITY:							
Neat and clean building	67%	19%	0	0	0	4	27
Ease of finding where to go	74%	11%	0	0	0	4	27
Comfort and safety while waiting	78%	7%	0	0	0	4	27
Privacy	78%	7%	0	0	0	4	27
CONFIDENTIALITY:							
Keeping my personal information private	78%	7%	0	0	0	4	27
Likelihood of referring friends/relative to us	78%	7%	0	0	0	4	27

Ongoing activities are being conducted to identify reasons for dissatisfaction and decrease barriers to care. Appointment scheduling and patient reminder systems are being revamped from feedback received to date.

III. **Resources and Capabilities**

A. Work Experience

Leadership roles included a dental director and executive director. The matrix was sufficient for the initial launch. There has been staffing turnover with 3 dentists and 1 hygienist. The dental director works clinically 1 day per week. Limited time was spent on administration, which was conducted by the operations manager in conjunction with the finance manager and operations manager. Leadership changes that occurred with the discontinuance of the mobile unit included loss of Rob Berg, the dental director at the SODM, the finance manager, and the operations manager.

Support staff for the dental department are required to be bilingual due to our patient population. Not only is language a major issue, it is imperative that the dental teams have experience with development ages. In our observation, general dentists who treat individuals of all ages, to include youth tend to practice differently than pediatric dentists that have extensive experience with pediatric populations. This was a lesson learned. In planning for a third operatory, we are hiring a pediatric dentist and dental assistants with pediatric experience who also can communicate with patients who speak Spanish. Moreover, the design of the operatory will be designed accordingly, with these components in mind.

Evaluation Team

The evaluation team consisted of the operations manager, who instrumental in reporting clinical data throughout the project period. She compiled data for the reports and authored the progress reports prior to her departure in August 2015. The finance manager has a statistics background and provided financial data over the term of the project period. The CEO has a doctorate of nursing practice and a strong background in quality improvement. The CEO prepared the final report.

Board of Directors

The bylaws indicate that the Board elects its own members and that the Board must hold monthly meetings to assure adequate oversight. The Board is comprised of patient users, community members, health care experts, and Ex-Officio members of the University of Colorado Denver staff. It is vested with full authority and responsibility for the operations of the SHS health centers. The BOD selects clinical services, established hours of operation, and participates in strategic planning and quality improvement, and evaluates health center progress.

The BOD additionally approves the budget and adopts UC Denver general policies appropriate to the health center.

Board composition changed during the project period. There are currently 6 original members:

Board Member	Board Role	Expertise	SHS Patient?	Live/Work in Service Area	Yrs Served
Angie Romani	President	Non-profit boards	No	Yes	6.0
Elizabeth Holmes	Director	Community Advocate	Yes	Yes	2.5
Michael Cavanaugh	Director	Lawyer	Yes	Yes	3.5
Cindy Tanner	Director	Community Leader	No	Yes	3.0
Shari Fessler	Director	RN, Consultant to Sheridan School	No	Yes	6.0
Sally Daigle (Treasurer)	Director	Community Leader Clinic User	Yes	Yes	0.5
Kathie Jahnke	Director	Clinic User	Yes	Yes	2.0
Allan Jahnke (Vice Chair)	Director	Clinic User	Yes	Yes	2.0
Trudy Linenburger	Director	Clinic User	Yes	Yes	0.8
Shawn Moore	Director	Homeless Coordinator for Sheridan Schools	Yes	Yes	6.0

Joel Poppleton (Secretary)	Director	Sheridan Community Library Director	Yes	Yes	6.0
Erwin Arrellano	Director	Pastor	Yes	Yes	0.8
Gloria Arellano	Director	Community Leadership	Yes	Yes	0.8
Ex-Officio Members					
Amy Barton	Ex-Officio	Assoc Dean Clinical & Comm Affairs CU CON	No	No	8.0
Terry Dargevics	Ex-Officio	Finance Manager, SHS	No	No	2.0
Erica Sherer (Schwartz)	Ex-Officio	Executive Director, SHS	No	Yes	6.0
John Moore	Ex-Officio	Associate Dean of Finance, CU CON	No	No	1.0

B. Policies & Procedures

The CU College of Nursing provides administrative oversight for credentialing and privileging. SHS maintains policies for risk management, patient grievances, incident reporting, occurrence reviews, and the appropriate maintenance of medical records. Environmental Safety from CU conducted a recent audit to ensure proper waste disposal.

C. Readiness

Launching the programs was relatively simple. We were fortunate to have experienced personnel through the SODM. SHS was poised to initiate services. The work plan and timeline was realistic. Further, the organization was prepared for the on-site move. Significant delays that impacted volume had to do with the length of time for renovations to occur, difficulty recruiting staff, and staff turnover. We had projected one dental assistant per dentist due to the quantity of students. For purposes of maximizing productivity, that ratio is insufficient. A 2:1 dental assistant to dentist is necessary. In retrospect, there are 2 other changes I would have made with staffing, more administrative time for the dental director, more funds for marketing, and greater time allocation for the hygienist to purposely engage students, families, and faculty on oral health prevention initiatives.

Sheridan Health Services has applied for further grant support to expand oral health services, specifically geared to youth and health promotion initiatives. I am deeply grateful for the support received from HRSA. The impact to the community cannot be understated. The funding has enabled us to establish an infrastructure that will be self-sustaining.

2011-2012: Original Van

2015-2016 Dental Team

Dr Kessler, Dr. Gitlin, Norma Castro (DA), Gretel Skelton (Hygienist), Litzze Garcia (DA), & Dr. Gold