I. FINAL REPORT

A. Project Identifier Information

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B. Table of Contents:

Progress

Delivery System Design:

Bassett Healthcare Network's journey toward oral health integration began in 2000 (**Attachment #1 SBH Dental Services Timeline**). From the onset, the focus was on increasing access while addressing oral health as it relates to students' health, school performance and overall wellness. The links between childhood dental disease and poor oral health are well-established, ranging from impaired speech and development due to early tooth loss, increased school absence and decreased school performance, to adverse impacts on general health outcomes in both children and later adult life. Oral health status for low income children is particularly disparate. Low-income children in Bassett's rural service region have these same types of unmet oral health care needs and the same consequential risks, but confront comparatively higher access barriers to meeting these needs. Families in rural areas served face additional barriers to regular and ongoing dental care, including significant travel time, distance and winter weather burdens. With the prevalence of poverty, low dental literacy, lack of providers (particularly those serving Medicaid or uninsured children) lack of dental insurance and lack of fluoridated water supplies. This program was designed to be prevention based and allow families the ability to connect to care.

We began in 2000 by screening the neediest children identified by one school nurse in one elementary building. Initial screening allowed us to connect students to dental care within the community and families to needed resources. In 2007 we replicated this model and increased the RDH/Oral health coordinator's time to identify children with high needs in three additional communities. With a grant from the NYS Health Department, preventative services with a focus on sealants were supplementing the work. Delivering preventative services with portable equipment in a school environment would allow Bassett to specifically speak to the Healthy People 2020 objective; placing dental sealants second and third grade children to protect healthy adult molars on 50% of this population.

Expansion to provide restorative services in the school based health setting seemed a natural progression for care delivery and optimal health outcomes for our students. The HRSA funded expansion project was comprised of four high-need rural school districts in which Bassett currently operates SBHC programs. While Laurens and Morris are very small, each serving less than 450 students, Sherburne-Earlville and Sidney districts are much larger serving 1500 and 1100 students respectively. All of these schools serve students grades Pre K-12.

Preparation for the restorative services integration was focused primarily on providing access to care for our patients by delivering quality dental care in the community's school-based health center. Expanding from preventative services to restorative care to students in a school setting required multiple steps. Establishing systems while modifying others were vital to creating a viable dental operation in an offsite setting. The first year was consumed with creating infrastructure to support restorative dental care within the Bassett system. Working with managers in Coding/Billing, Risk Management, Scheduling, Sterilization, Radiation Safety, Information Technology and Purchasing was an extensive process.

From an administrative perspective, securing a dentist was our top priority. The pool of candidates was limited due to our geographic location and the position was part time. Initially we were going to contract with an established local dentist, passionate about children's' dental health and solving the rural oral health crisis. The lengthy process of credentialing this doctor within the hospital requirements was completed. While the dentist was knowledgeable and willing, the initial few months of the contract proved he was not a good fit for the program. The contract was terminated. We utilized our resources at the New York State Dental Foundation, the New York State 5th District Dental Association, Columbia Dental School, and our local networking as we set out to find a dentist who would appreciate the goals of school-based health work. We explored all areas for recruitment including loan forgiveness and worked extensively with medical staff affairs. The recruitment process was both challenging and time consuming and set the project back at least a year.

As we regrouped, we knew of a young graduate student early in her journey to becoming a dentist. We had met this dental student at local oral health coalition meeting a few years earlier She was by then (2011) a dental resident, from the area and still had family nearby. Although a long shot, it was worth gauging her interest in returning home and taking on a community based approach to care. She agreed and we were off!

With a dentist in the wings, we continued with the development of operational systems and baseline evaluation measures. Memorandums of Understanding (service agreements) with each school site were enhanced to reflect the restorative services added to the preventative care currently being offered. Once this process was complete and approved by the New York State Department of Health, work began to establish systems and operations. Approval for proposed systems in a large organization requires several steps. Moving from formal written requests, through work plans with department managers in search for approval requires networking, organization, persistence and patience. The Dental Project Coordinator dedicated half of her time for two years establishing these systems within the organization. Working on multiple systems at once was critical to achieving progress in stages. Creating the consent, in concert with Risk Management, to provide restorative care to patients in a school setting, off site from the sponsoring hospital, it took an entire year to complete. Industry standard templates were modified to best fit the program needs. The editing and approval process was daunting with

large gaps of time passing while the Risk Management would review, approve, deny or modify each section. Final approval of the current consent used was a project success!
Scheduling ,coding and billing was less laborious, however this course took several drafts to achieve accurate ADA coding, fee, appointment types and time allotment for dental procedures. Having an existing dental practice within the organization was helpful as many of the project systems were created from the origination of this project.

After research, multiple meetings and thoughtful design, the sterilization of the dental instruments was to be completed at the hospital. Instruments are transported by courier to multiple sites from Sterile Processing in Cooperstown. This continues to be a challenge in successful timely delivery to accurate location and correct packaging. However, safety is guaranteed for proper sterilization and regulatory measures.

Radiation Safety, however, was a fairly straight forward directive. Two portable NO-MAD radiographic systems were purchased, state registered and ongoing training and safety monitoring is implemented to key staff.

Implementing an Electronic Dental Record (EDR) through the Information Technology Department required multifaceted components to successfully onboard. Due to the complexity of adding an EDR off site from the hospital at multiple locations in addition to coordinating this effort with school IT personnel, proved to be extremely challenging. The funding and installation of a dedicated server, the direct drops for connectivity and choosing the software system are all examples of IT tasks achieved in the development phase of the project. Currently, we are utilizing the Dentrix ®for dental charting and documentation. We look to expand to Dentrix Enterprise® and coordinate with two Bassett affiliated dental offices in the near future.

The purchasing department guided our work in the coordination of pricing with outside vendors as we identified equipment and supply needed to provide restorative care. Concurrently, the work began to create the position and draft the job description for a School- Based Health Dental Assistant within the organization. This is a unique position. In addition to actually assisting the dentist with clinical care, ordering supplies and carrying out practice guidelines for disinfection and sterilization, a considerable amount of time is spent on care coordination. This coordination included assisting parents with appointments, referrals, interpretation of treatment planning and consents. All are important and time consuming tasks.

New York State provides data by county, however, we were interested in tracking school specific measures from the onset of the program in Year 1 to the conclusion in Year 4. With the assistance of the Bassett Research Institute, a study was created to identify the level of current health, outstanding needs and barriers to care in a rural setting. Specifically for the project schools that speak to the goals and objectives set forth in this project. We evaluated 3rd and 8th graders for prevalence of caries, caries experience, sealant placement on 1st molars, care within the last twelve months and active dental insurance. (Please see results in the Evaluation section for details).

By Year 3, staffing was in place and the team was ready to begin providing care. As we approached the launch date goal of the first visit with Dr. Carpenter, we prepared patient centered practice guidelines centered on direct patient care and completed appropriate training. Examples of this work would include protocol for emergency care, informed consent, the preparation of dental instruments for courier transport and radiation safety training. Working within an impoverished community presents challenges with literacy and comprehension, communication and scheduling. Tools were designed to aid in the comprehension of treatment plans and consents to best serve our students and families. Examples of this work would include color coded treatment planning and initial boxes on consent forms to confirm understanding of each segment of the consent as it is verbally reviewed with the caregiver.

Providing care at the three sites was rolled out in stages. Restorative services began in 2013 at the Laurens School-Based Health center. Students in the Laurens district as well as from the neighboring community, Morris were offered services. While preventive dental services are available on-site at Morris, students must travel 10 miles to the Laurens SBHC for restorative care. Approximately 617 students are enrolled between the two sites. Students who are without a dentist and/or dental insurance are eligible for care and referrals are triaged through the RDH preventative site visits.

Beginning the work at a well established small site is a good best practice. This allowed the team to work through problems and make adjustments. By the fall of 2014, the SBH dentist and SBH dental assistant were ready to move the equipment to the much larger Sherburne- Earlville site and begin providing care. The dynamic was (is) continually a moving target. Not only is the composition of the community changing, the physical plant, school personnel and support staff were (are) different. Flexibility and willingness for personnel to adapt is key to success. Our ability to meet the needs of the communities we serve is outlined in the goals and objectives set forth for the project.

Presently the School-Based dental team provides preventative care including screenings, prophys, fluoride application, sealant placement, oral hygiene education and referral services. There restorative team provides comprehensive dental examinations, radiograph as appropriate, restorations, extractions, and root canal treatments. Patients in need of sedation of extensive work beyond the capacity of the school-based program are referred to outside specialist. The programs Nurse Care Coordinator is available to assist those families.

Interdisciplinary Care

In addition to on-boarding restorative services, care integration was a key component to the project goals. The focus was to identify students with active oral health needs and those at risk for oral health disparities by the medical providers. Although dental, mental and somatic health are components of school based health, all were practicing in separate silos.

A universal Risk Assessment Tool (RAT) was designed by a multidisciplinary team. The RAT is utilized by the medical providers during well child visits as well as in mass screening events.

While many RATs exist, this tool was simplified and customized to quickly assess oral and dietary habits as well as socioeconomic status. This tool is a catalyst for different types of referrals; care navigation, insurance enrollment and nutritionist intervention.

Adding a piece to the workflow has been a challenge for the team. There are varying degrees of use and success with the implementation of the tool. A profound achievement was the organizational embedding of the RAT into the Electronic Medical Record (EMR**)-**EPIC **(Attachment #2 Oral Health Risk Assessment Tool)**. The RAT tool is easily accessible in the well child visit screen. It calculates a risk score and based on score generates an action plan.

It was identified that the medical providers were still lacking the knowledge and confidence in their ability to assess their patients' oral health status. The SBH dentist linked the providers to an online training resource to enhance their understanding. This training was provided by ***Smiles for Life***. A product of Society of Teachers of Family Medicine, ***Smiles for Life*** is a national oral health curriculum. Providers can earn continuing education credits by completing the modules. The team increased their knowledge and gained confidence in their assessment skills. They can now identify students who are high risk at well child visits in addition to mass screening events using the RAT. Another tool created was "6 Ways to Identify Students at Risk at Your Site"

Additional outreach and education was achieved through sharing oral health messaging with colleagues at variety of venues. At all SBHC team meetings (entire team= 60 members), there is always an oral health component on the agenda which may includes project developments and clinical oral health information as it relates to care delivery by all disciplines.

The support staff is essential to the success of efficient and effective SBHC operations. Tools and workflows were designed to assist the office staff on how to best support the medical, dental and mental health providers and link the patients care. **(Attachment #3 Office Support Workflow)** A basic understanding of how oral health effects overall health was crucial to staff buy in and optimizing the patients' health outcomes.

In an effort to integrate our services, merging dental, medical and mental health paperwork was crucial to workflow, caregiver perception and eliminating silos**.** The re-enrollment paperwork merge was piloted in a project site (Laurens) in Year 3. Edits were made and all 4 project sites were included in Year 4.
Although initial SBH medical and dental enrollment paperwork (which includes more detailed medical history) is still in development, the plan is to eliminate separate re-enrollment paperwork and send to all SBH sites in January 2016 **(Attachment #4 SBH Re-enrollment Paperwork Merge).**

In Year 1, the SBH team identified students with dental needs and place them on a list for the RDH to address at next site visit. The site visit could be several weeks to months away. Currently, the team has the ability and knowledge to "own" that patients needs, triage and refer as needed. The task of referring patients seemed overwhelming to the medical team. A guide was created to simplify the process. When a patient presents with pain, with 5 or greater caries

or caries in a permanent the dental providers assist the team with the referral process. All other patients with less urgent needs have their parents contacted via backpack letter and/or phone call outlining patients' needs. Currently we have enhanced this process by adding personalized care navigation. Patients who have been identified as having 5+ caries and/ or caries in permanent tooth are contacted to develop a plan of action. Often, the nurse care coordinator is guiding the parents to facilitated insurance enrollers, assisting with coordinating appointments with the SBH dentist, non SBH dentists (for non project sites) and arranging transportation to specialists as needed.

A valuable lessons learned in Year 3 was including a consent to treat patients without parent/caregiver present for simple restorative procedures (**Attachment # 5 Consent to Treat Minors**). Parents are required to attend the initial comprehensive exam with the SBH dentist. At this visit, an extensive review of the treatment needed is reviewed and planned with the caregiver. Initially, parents were required to attend all restorative appointment for their children. Over time, this became a barrier to care and resulted in a high 'no show' rate. Parents would often miss appointments for their child creating inefficiencies for the clinic. Although some procedures such as extractions, a parent is still required to attend the visit, straight forward procedures, such as a one surface restoration, a parent is not required to be present.

The time, resources and attention to care integration that this project funding has allowed, has had a positive effect in health outcomes for our students. Although The SBHC is not always the right setting for every students care, we assist the family is finding what will best meets their needs.

Patient /Community Education

Patient and Community education is a pillar at Bassett. In collaboration with Corporate Communications an extensive community outreach plan was developed. Introductory mailings and posters were initially designed to promote the expanded services. Over the course of the project, several additional pieces were developed centered on healthy lifestyle habits and the "5-2-1-0 Lets Go" messaging (5 fruits/veggies, 2 hours or less screen-time, 1 hour of activity and 0 sugary drinks each day). Exam room posters were designed focusing on key age appropriate healthy behaviors beyond brushing and flossing. These posters target audience were the school-age child and the teenager. This approach was intended to empower the child to consider healthy snack choices and oral health habits. (**Attachment #6 SBH Exam Room Posters).**
With additional funding and support through the Dental Trade Alliance Foundation, we were able to expand this effort to include a pediatric poster and a brochure designed to introduce healthy habits and the benefits of fluoride to caregivers **(Attachment #7 SBH Pediatric Brochure).**

Oral Health events were held at each project school site to introduce the SBH dentist to the community and establish a rapport with the caregivers. Educational games, prizes and healthy snacks proved to be a successful way to deliver messaging and enroll students. Combining these events with school events, such as a concert or open house was a great way to interact with a larger crowd.

Promotion and Outreach was a strong focus for the project in Year 3. A professional agency was contracted to produce a series of educational videos. The five videos have a different target audiences; *SBH Dental Care, Why it Works, SBH Dental Care, Why it Matters, SBH Dental Care, How it Works, SBH Dental Tips* and an informal training video was created on the application of fluoride varnish for school age children. These videos and print media were all ways we communicated with lawmakers, school administrators, parents and youth. **(Attachment #8 SBH Video Links)**

Locally we take every opportunity to trends in oral health and our projects worh with public health agencies and fellow oral health providers. In June 2015 Bassett SBHC hosted the annual Bassett Dental Retreat, attended by approximately 50 dental staff and providers from the Bassett organization. Dr. Ronnie Myers, Associate Professor of Clinical Dental Medicine. Vice Dean for Administrative Affairs from Columbia University was the key note speaker. The SBH Dental Leadership team regularly meets with local, regional and state health and human services organizations and provider. In July 2015 we were invited to present a webinar via the National School Based Health Alliance entitled "Intersection of Primary Care and Public Health Through Oral Health Services for Students"**(Attachment #8 SBH Video Links).** A multidisciplinary panel discussed the elements of designing and sustaining a comprehensive school-based oral health program

With an interest in understanding our impact on the community and to gauge meeting their needs, we regularly meet with the SBH Advisory Committees. Twice each school year, we include a dental component on the meeting agenda. We share our data, goals and objectives with this group and solicit their feedback and impressions on the program. In Years 1 and 3 we conducted pre and post survey respectively, to assess the oral health of third and eighth graders in the project schools. To increase participation in the study, we asked students to assist us in engaging participants. Students were recruited from the community advisory meetings. We solicited their ideas to motivate students to participate in the dental study. Student ambassadors were key in identifying what motivates students and disseminating the sign up information. A poster, teacher memo and parent questionnaire were created to engage the 8th graders, teachers and parents in this data collection effort **(Attachment #9 Study Promotional Documents).** For example, in Year 1 there was a lack of communication between teachers and the data collectors with regard to dates and times this activity would take place. In Year 4 teachers, a teacher memo was utilized and teachers were more engaged and supportive with the initiative. Data results are fully explained in the evaluation section of this report. In Year 4, we wanted to know what we need to do to improve the care we are providing and how to better meet the needs of the students we serve.. With the help of the advisory committee, a patient satisfaction survey (caregiver, patients<12 years of age, and patients <12 years of age) was designed.(**Attachment #10 Satisfaction Survey)).** This survey was given to patients and caregivers at the conclusion of their care and provides the team insight to their understanding of treatment, their comfort level during care and effectiveness of health education and messaging provided.

Continuous Quality Improvement (CQI)

Continuous quality improvement is hard wired into all Bassett School-Based Health operations and clinical performance, both in a formal and informal manner. The coordinator of the project is a standing member of the School-Based Health Quality Improvement Team. The team is responsible for gathering and reporting data to the organization's Performance Improvement committee along with addressing and identifying programmatic areas of concern.

The 2015 performance indicator chosen was "completion of restorative dental treatment plan within 6 months of initial treatment planning visit (does not include those patients referred out for treatment under sedation)" This data was collected quarterly and reported in an electronic format to the organization PI department who in turns reports the finding at the Board of Trustees Performance Improvement committee meetings. Performance improvement findings are presented at the biannual School-Based Health Community Advisory Committees.

The data indicated that 100% of pts who had a treatment planning visit completed treatment through the first three quarters in 2015, the 4th quarter data has not yet been reported. A different PI indicator will be selected in 2016, as it was noted there is no need for improvement with this measure. The other 2015 dental indicator selected was "Patients 12 years of age or older who are receiving Preventative Dental Services will have documentation of Tobacco Assessment in their dental records", this proved to be a bit more challenging. Through the 3rd quarter only 74% of patients had this assessment documented. Due to performance less than the anticipated threshold, guidance was sent to all RDHs and process reviewed at a team meeting. Fourth quarter data is not yet available, improvement is anticipated however this indicator will we repeated in 2016 to insure best practice is fully integrated into the RDH's workflow.

The School-Based Dental program at Bassett receives a New York State Department of Health grant to provide preventative services. A requirement of the grant is a quarterly report on all school-based dental activities. Once the data is collected it is sent to the team for review and comment prior to submission. If there are any outstanding variances, an informal huddle is held to discuss the data and develop a correction action plan. This report includes both productivity and financial performance. Each June, the SBHC dental team meets for an in-depth analysis of all dental productivity.

Additional CQI measures include chart review and peer review. Each quarter a supervising dentist reviews five charts at random to ensure the RDH provides a thorough review of systems, appropriate care and accurate documentation. Each year, the RDHs partner with one another to provide peer review. Observation of procedures, patient interaction and infection control measures are evaluated and reviewed. Peer review has proven to be a valuable tool as the hygienists have found discrepancies in care delivery that are later discussed. Best practice guidelines are then formulated.

Much of this project and other related projects focused on the integration of oral health into the other components of school-based health. Representatives from all discipline were engaged in that work. The work was measured and finding reported back to the workgroup and the SBHC

team at large. An example is the application of fluoride varnish in the primary care setting. We have tracked that data for a number of years now and provide each SBHC with a graphic depiction of their progress. Those sites exhibiting no improvement have been asked to do a PDSA on their plans. We have found the use of PSDA's is a bit intimidating to some members on the team, in spite of multiple trainings and tutorials; therefore we have tried to make them less formal and refrain from using the letters "PDSA"☺

Sustainability

Achieving sustainability was paramount to this project from the beginning and is fundamental to the overall School-Based Health program. The intention from the beginning was to prove this model is sustainable and to spread the learning throughout the SBHC operation.

The program undergoes a monthly financial review by SBHC leadership and organizational management. Careful examination of both revenues and expenses with monthly variance reporting is completed and submitted to organizational leadership. It became clear early on in the project that reimbursement were much lower than anticipated. Increase in revenues plus outside support would be needed support the program operation in the future. In an effort to better understand the financial health of the program, monthly meetings are schedule with SBHC leadership and personnel from Finance. A thorough analysis is ongoing, beginning with the scheduling and registration process, coding, billing and payer contract reviews. When deficiencies are identified in any area corrective action is taken with a comprehensive communication plan. The AOA Guide **(Attachment # 3 Office Support Workflow)** is an example of this work. The complexities of revenue capture in a hospital organization with an employed provider model are notable, and therefore require attention to detail only known by finance experts. One success has been that Bassett has successfully negotiated contracts with the two Medicaid dental carve out payers in the area. This will result in increased revenue for the program. Program leadership will encourage the Bassett organization to explore negotiations with private dental insurance plans enabling the SBCOHS program to bill them for services rendered. The compelling data collected on claims submitted and reimbursements received will be shared during these meetings. In addition to revenue cycle analysis we continue to work with the dental team on performance measures, production goals and cost saving measures as we look toward self sustainability Due to some changes and extended absences by key staff this has also been a challenge. Every effort has been made to be fully engaged in value base purchasing. The dental assistant, RDH and coordinator have developed strong working relationships with purchasing department at Bassett and dental suppliers resulting in reduced costs for some needed equipment and supplies.

In an effort to obtain needed funding, to fully complete the needed work in this project, SBHC leadership reached out to the Friends of Bassett (FOB), philanthropic arm of the Bassett organization, for assistance. As a result, the program was invited to make a presentation at the "President Forum Breakfast" an event held 3 times of year for hospital major donors. As a result of the presentation several sizable gifts were given to the SBHC program. Additionally the FOB made arrangements for program leadership to meet with the executive director of a major private foundation. A proposal was submitted to the foundation to fund the restorative portion of the

program for an additional two year and expand the schools served. In mid December 2015 the program was informed that the Clark Foundation awarded the Bassett School-Based Health program a two year grant, $200,000 per year. This award allows the program an additional two years of balance funding, truly an unexpected gift. Due to factors beyond the program control during the first two year of the HRSA grant funding we were not able to secure the services of a dentist--critical to the proposed program. The success of the original project proposal was dependent on the provision of restorative care in the first year. Unfortunately the dentist, Dr Carpenter, began in the beginning of project year three. This additional funding will enable us to regain the two years lost in the early days of the program.

Along with the Clark award the FOB have assisted the SBH program in applying for smaller awards. We successfully applied and received an award from the Dental Trade Alliance Foundation which supported and enhanced the work of oral health integration.

In addition to all the activities describe above, program leadership is actively involved in local, state and national advocacy. The program directors and manager have an annual breakfast meeting with our state senator. The purpose of the meeting is to keep him informed of the state of SBHC at Bassett and to ask his opinion and assistance as needed. He serves as the Chairman of the NYS Senate Insurance Committee!

F. Evaluation

The Bassett Research Institute provided assistance with the evaluation process described below. Separate dental surveys of 3rd and 8th grade students were conducted in 2013 and 2015 to assess whether the introduction of comprehensive oral health services was associated with changes in oral health and utilization of oral health services. Data on oral health are summarized in Tables 1-3 and are based on examinations of 202 3rd graders (100 in 2013, 102 in 2015) and 95 8th graders (55 in 2013, 40 in 2015). The prevalence of active caries (Table 1) declined in both grades (24% relative reduction in 3rd grade, 50% relative reduction in 8th grade), bringing the prevalence of active caries in 2015 below the HP2020 goal.

Goal 1: Improve the Oral Health of Children and Adolescents Served By the Project.

Objective 1.1 (See HP 2020 Objective OH-1): Reduce the proportion of SBHC enrolled children and adolescents who have dental caries experience in their primary or permanent teeth to achieve HP 2020 target rates by age group (49% for children aged 6 to 9 and 48.3% for youth aged 13 to 15) or a 10% improvement over the relevant baseline for Bassett SBHC enrollees, whichever is higher.

Caries experience is based on filled and extracted teeth, and prevalence for this measure (Table 1) increased in 2015 compared to 2013, though levels were still at or below the HP2020 goals. The increased caries experience in part reflects the shift from untreated to treated dental decay.

Table 1: Prevalence of Caries Experience by Grade and Year

	HP2020 Goal	***2013***	***2015***	***Relative Change in Prevalence***
3rd Grade	49.0%	31%	44%	42% increase
8th Grade	48.3%	38%	48%	26% increase
Overall		34%	45%	32% increase

Objective 1.2 (See HP 2020 Objective OH-2): Reduce the proportion of SBHC enrolled children and adolescents with untreated dental decay to achieve HP 2020 target rates by age group. (25.9% for children aged 6 to 9 and 15.3% for youth aged 13 to 15) or a 10% improvement over the relevant baseline for Bassett SBHC enrollees, whichever is higher.

The prevalence of active caries (Table 2) declined in both grades (24% relative reduction in 3rd grade, 50% relative reduction in 8th grade), bringing the prevalence of active caries in 2015 below the HP2020 goal

Table 2: Prevalence of Active Caries by Grade and Year

	HP2020 Goal	***2013***	***2015***	***Relative Change in Prevalence***
3rd Grade	25.9%	25%	19%	24% reduction
8th Grade	15.3%	20%	10%	50% reduction
Overall		23%	16%	30% reduction

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Objective 1.3 (See HP 2020 OH-12): Increase the proportion of children and adolescent who have received dental sealants on their molar teeth to achieve HP 2020 target rates by age group (28.1% for children aged 6 to 9 and 22.9% for youth aged 13 to 15) or a 10% improvement over the relevant baseline for Bassett SBHC enrollees, whichever is higher.

Table 3 shows the proportions of students who have received dental sealants on their molar teeth. Sealant use in 2013 already exceeded the HP2020 goals, and a 10% relative improvement was observed for 3rd grade students. The status of first and second molars was assessed separately in 8th graders. Sealant levels remained high for first molars and showed a 26% relative increase for second molars in the comparison of 2015 data with 2013 survey findings.

Table 3: Prevalence of Sealants on Molar Teeth by Grade and Year

	HP2020 Goal	***2013***	***2015***	***Relative Change in Prevalence***
3rd Grade	28.1%			
1st molars		67%	74%	10% improvement
8th Grade	22.9%			
1st molars		78%	79%	1% improvement
2nd molars		53%	67%	26% improvement

Goal 2: Improve Access to Comprehensive Oral Health Services Including Preventive Services and Oral Health Education

Objective 2.1 (See HP 2020 Objective OH-7): Increase the proportion of SBHC enrolled children and adolescents who used the oral health care system in the past year to achieve the HP 2020 target of 49% or a 10% improvement over the relevant baseline for Bassett SBHC enrollees, whichever is higher.

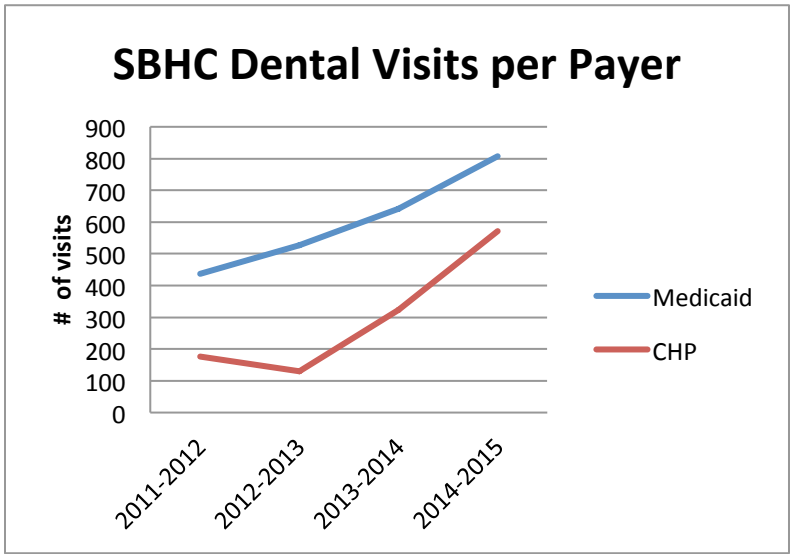
The dental survey included questions on whether the child received dental care during the previous 12 months and whether care was provided by a dentist in the community, by the School Based Health Center or from both sources of care. The results for these questions are summarized in Table 4. Use of care in the past year was reported for 80% or more students in these two grades in 2013 and levels of utilization were essentially identical for 3rd graders and somewhat higher for 8th graders in 2015. The percentage distribution for source of care is also shown in Table 4, and for both grades there is a shift away from utilization of multiple sites and an increase in the School Based Health Center as the source of dental care

Table 4: Percent of Students Using Dental Care in Past 12 Months by Grade, Year and Source of Care

	HP2020 Goal	***2013***	***2015***	***Relative Change in Percentage***
3rd Grade	49.0%	86%	87%	1% improvement
DDS		*51%*	*51%*	*no change*
SBHC		*27%*	*36%*	*33% increase*
Both		*8%*	*0%*	*100% decrease*
8th Grade	49.0%	80%	87%	9% improvement
DDS		*60%*	*62%*	*3% increase*
SBHC		*18%*	*25%*	*39% incease*
Both		*2%*	*0%*	*100% decrease*

Objective 2.2 (See HP 2020 Objective OH-8): Increase the proportion of SBHC enrolled low-income children and adolescents who received any preventive dental service during the past year to achieve the HP 2020 target of 29.4% or a 10% improvement over the relevant baseline for Bassett SBHC enrollees, whichever is higher.

We were not able to collect regarding the proportion of SBHC enrolled low-income children and adolescents who received preventative dental services, however we did collect the number of visits per payer. There was a 54% increase in Medicaid visit and a 31% increase in CHP visits.



Efforts to increase the proportion of SBHC students enrolled has been successful. An increase in those seeking dental care at the SBHC was noted.

Outreach activities were extensive throughout the process of adding restorative services at all sites. Events were coordinated with popular school events such as morning program and open house. Activities included educational games and prizes geared toward increasing caregiver knowledge about oral health and the SBH services offered. Quarterly newsletters feature an oral health section written by dental providers. Subjects range from healthy snacking to emergency care for "knocked out tooth". In an effort to keep up with social media trends, each week a dental health message is posted by a dental provider. Promotion of access to preventative services and the benefits of sealants are ongoing. There has been an increase of referrals from medical provider and primary care application of fluoride varnish.

Goal 3: Develop SBHC Systemic Capacity and Infrastructure to Achieve Best Practice Rural Model for Delivering Sustainable Cost-effective, Performance-Based, Integrated and Comprehensive Somatic, Dental and Mental Healthcare

Objective 3.1: Manage Project activities to complete 100% of key milestones in accordance with the Project Timeline and SBHC Site Work Plans.

Although the timeline goal was unmet primarily due to the delay in the recruitment of a dentist, 100% of Operational systems and key milestones were achieved as described

Objective 3.2: Develop a comprehensive oral health component at the three Project SBHCs and integrate SBCOHS/Project services into the SBHC clinical and administrative program to provide comprehensive dental, somatic and mental health care. (See HP 2020 Objective OH- 09)

The newly created restorative dental services, along with the existing preventive dental services were successfully integrated into the SBH service model. All three disciplines are familiar with each other's work and routinely collaboration on shared patients. All are house in the same School-Based Health Center suite, facilitating consultation and team huddles. Plans to expand this work to additional sites has begun.

Objective 3.3: Develop and implement accountability mechanisms and performance-improvement practices, including the Evaluation Plan and Continuous Quality Improvement (CQI) Plan and related data collection, analysis and reporting methodologies.

Performance improvement including Evaluation Planning and Continuous Quality Improvement was ongoing from the onset. All areas are required elements of operation by the Bassett Organization. As described in the CQI section measures are reported to the organizations PI committee and ultimately the Board of Trustees. Data collection, and analysis of clinical measures occurs on a quarterly basis and is reported to the NYSDOH and program leadership and operation measures are reported on a monthly basis using the organizations tools..

Objective 3.4: Achieve sustainability of services through such activities as optimizing opportunities for billing services and reimbursement, developing and maintaining community and stakeholder support, expanding local dentists' participation in the Project, and evaluating cost-effectiveness of intervention strategies such as digital, dental radiography equipment.

This objective has been partially met. We have not yet been able to achieve full sustainability however continue to work with the Department of Finance to optimize all aspects of the revenue cycle. The program has received ongoing funding from a private foundation for an additional two years. The intent of this grant is to allow the program to complete work needed to be reasonably sustainable.

Goal 4: Provide Effective Leadership and Collaboration Child Health Issues at the Community, State and National Levels

Objective 4.1: Provide oral health education for students, parents, school administrations, and other stakeholders to improve understanding of key concepts, including the link between oral health, physical health and school performance, and the importance of preventive services.

Oral Health promotion and education materials were developed for a variety of audiences, they included:

- A series of videos created targeting education administrators, legislators and caregivers respectively **(Attachment 8- links)**
- A brochure was designed targeting the caregiver with a young child- "5 Things You May Not Know About Teeth"**.**
- A poster series was also designed to motivate students directly; "Tips for Teens and Healthy Snacking **(Attachment 6).**

Community advisory committee feedback on this work was instrumental in the final versions.

- Weekly oral health Facebook postings
- School-Based Health has been one of the leaders working on an organizational multi-county National Children's' Dental Health Month campaign with the Otsego County Oral Health Coalition.

Objective 4.2: Support elementary school participation in the NYS Department of Health School Fluoride Rinse Program for communities without fluoridated water supplies.

Although Bassett supports the initiative, NYS School Swish Program has been inconsistent with providing school districts regular fluoride. Alternatively, the SBHC is able to provide fluoride varnish applications to students identified at risk for dental disparities. In concert with funding from the Dental Trade Alliance, Bassett SBH was able to expand this work to pediatric care. Young children are now assessed for dental risk at the 9, 18 and 30 month well child visits. Those children at risk are offered fluoride varnish in site. Providers have increased their knowledge and nursing teams are trained. Plans to expand this work to Prime Care within the Bassett Network are underway.

Objective 4.3: Actively disseminate Project results through print and live media and provide peer-to–peer assistance and expertise to others interested in replicating the Bassett model or aspects thereof.

Over the course of the project period, several presentations centered on the project work were given:

- National School Based Alliance Health Webinar **(Attachment #8 SBHC Video Links)**,
- NYS Oral Health Coalition Meeting "Milestones Across Mountains" (Bray)
- Bassett President's Forum "Oral Health: The Teeth in School-Based Health" (Kjolhede, Hamilton)
- Dr. Carpenter, SBH dentist, is scheduled to deliver Pediatric Grand Rounds to the Bassett medical staff in February 2016.

- An article on oral health is included in every issue of the SBHC newsletter which is mailed to nearly 7000 households in a four county region.
- Additionally a few Bassett publications have also highlighted the work of the project.

Objective 4.4: Actively outreach to and collaborate with parents, schools, communities, new or existing health and human service coalitions, and providers to support the oral health needs of children and especially for comprehensive health and wellness for children and youth in rural communities.

The Bassett School-Based Health Center system has a robust Community Advisory Committee (CAC) model. The CACs meet at least twice a year at all school sites, CAC membership consist of parents, school staff, community members, representatives of area health and human service organizations, and students. A formal presentation is developed and delivered, attendance and minutes maintained for each meeting. Oral health is always included on the agenda. Members of the SBHC team also participate in each School's Wellness Committees also.

Objective 4.5: Establish on-going and effective working relationships with the relevant federal and state agencies, including the National School-Based Oral Health Services Resource Center and the New York State Department of Health, Medicaid program, and NYS Oral Health Technical Assistance Center. Educating stakeholders and caregivers about oral health was a pivotal success in this project work.

The Program Coordinator serves on the New York State Oral Health Coalition and both the Program Dentist and Coordinator serve on the Otsego County Oral Health Coalition. The Program Director services on an oral health advisory group for Schuyler Center for Analysis and Advocacy and regularly participates in legislative advocacy activities

E. Resources and Capabilities

The Bassett Healthcare Network School-Based Health program was a mature program entering into this project with a twenty year history of operating school-based health centers. The Bassett Healthcare Network organization is comprised of six hospitals, 25 health centers including 3 dental practices and 20 school-based health centers. The operational expectations of the SBHC are very similar to that of all other health centers in the organization. The Bassett School-Based Health system is the largest rural program in New York State and depending on how the definition is crafted, the largest rural SBH program in the nation. The program has been the recipient of many national awards including the American Association of Nursing Credentialing Center Magnet Award, and the National Rural Health Association Outstanding Rural Program award. Most recently, the Bassett Healthcare Network School Based Health Oral Health Program was awarded the prestigious Healthcare Association of New York State's 2015 Community Health Improvement Award (**Attachment #11 HANYS Award, Press Release).**

The twenty plus years of working with families in rural upstate New York prepared the program for the work of this project. We were very familiar with the barriers families face each day when attempting to obtain care for their children; lack of insurance, lack of dentist who accept patients without insurance or with Medicaid or Child Health Plus, lack of transportation, and low health literacy. The project director and coordinator collectively had nearly thirty year of experience working with this population and are well versed on the barriers and had the energy and determination to do whatever needed to be done to help overcome them. The coordinator became very well versed in the area regulatory requirements, equipment and supply needs, and overall needs of a portable dental program.

Community Advisory Committees (CAC) were in place long before the project began. CAC have been historically valued advisors to the program. We did successfully added active students to the groups which proved to be a bit challenging due to their unpredictable schedules. The students were particularly useful when appealing to students to participate in the evaluation survey. The student advisors guided the staff on how to best promote the study and increase student involvement in the process.

The program evaluation was led by Dr. David Strogatz the Director of Central of Rural Community Health at the Bassett Research Institute. He was instrumental in the design of the survey tool, the implementation and analysis. Approximately 0.1FTE of Dr. Strogatz time was spent on this project. He was assisted by the program coordinator and program assistant who both needed to complete IRB training on an annual basis. The Bassett Research Institute's IRB reviewed and approved the evaluation design.

Limited work was needed in the area of policies in procedures. The organization has a robust policy and procedure dictionary. In the event a policy or guideline was needed the project team would create the needed document and obtain departmental approval, this occurred mainly with clinical standards of care. All other policies pertaining to credentialing and privileges, risk

management, patient grievance procedures, incident management and patient record confidentiality all existed in the organization and are reviewed and updated on an regular basis as needed.

The primary barrier to operational readiness faced by this project was the inability to recruit a dentist. Initially when entering the project we had anticipated contracting with a local private dentist to provide clinical supervision and services. It became apparent early on in the project that plan was not feasible and our relationship with that dentist was terminated. We then began to work with Medical Staff Affairs, the recruiting department at Bassett. We were well aware of the shortage of dentist in rural upstate New York however did not anticipate it would take nearly two years to secure a dentist. We had a few meeting with the Columbia University Dental School to no avail. It should be stated that we were very fortunate to successfully recruit Dr. Carpenter, program dentist out of her residency. She grew up in the Cooperstown area and her family continues to live there.

Initially the dental assistant who was hired was well intentioned, however did not have the skill set needed to be successful. After her resignation we were able to recruit an exceptional dental assistant into the program, an Army Veteran with extensive dental experience. Along with providing clinical support she is able to provide operational support and assistance to the program coordinator and director. Aside from the delay in recruiting the dentist all other aspects of the program developed as planned with few barriers.

All three school districts were very welcoming and did whatever was need to promotion and support the addition of new services. We had feared that radiation safety might be of concerns to schools. We were very transparent about the process involved in taking digital radiographs and the precautions taken to insure safety. No concerns to date have surfaced.

II. Appendix A-Supporting Documents--See Attachment

III. Appendix B-Process, Outcome and impact Indicators--See Attachment