

I. PROJECT SUMMARY

Provide a brief description (1 to 2 pages) of the proposed project summarizing needs, expected accomplishments and target quality improvement(s). Include descriptions of resources, both available and needed, for the project.

Alivio Medical Center (AMC) is requesting \$20,000 in funding for new dental software and hardware to be purchased and installed in order to expand its dental practice to a new suite within its Berwyn, IL site. With funding, Alivio will begin dental operations at its Berwyn site with the necessary equipment, software, and hardware to be able to increase access to dental care and provide high quality, safe, and culturally and linguistically appropriate dental services to the underserved communities of Berwyn, Cicero, and neighboring areas.

AMC received federal funding from HRSA to partially support the salaries of a dentist and a dental assistant for the Berwyn site. In addition, AMC received a \$10,000 grant from Delta Dental of Illinois, for the supplies needed for the opening of the Berwyn dental clinic. AMC is submitting this request to the Illinois Community Health Foundation for equipment, software and hardware costs to enable the full expansion of AMC's dental services to the Berwyn site.

This specific request includes the purchase of a Dexis Platinum Sensor System, required site license, and a Dexis Bridge Interface. These items make up the last component (Digital X-Ray) of the Electronic Dental Record. Without this component, AMC's dental clinic would still operate partially on paper charting diagnostic purposes.

AMC's expansion of Dental services to its Berwyn clinic will improve the clinical quality in the following three areas: **Access to Dental Care; Coordinated Dental Care; and Culturally Competent Dental Care.**

II. PROJECT NARRATIVE

This section of the application should describe thoroughly the project for which you are requesting funding.

Alivio Medical Center (AMC) is requesting funding for new dental software and hardware to be purchased and installed in order to expand its dental practice to a new suite within its Berwyn, IL site. With funding, Alivio will begin dental operations at its Berwyn site with the necessary equipment, software, and hardware to be able to increase access to dental care and provide high quality, safe, and culturally and linguistically appropriate dental services to the underserved communities of Berwyn, Cicero, and neighboring areas.

The dental suite is located on the second floor of AMC's 13,000 sq ft. clinic. The dental suite was built out to the specifications of AMC's clinical and dental team, is completely new, and has four (4) operatories. The medical section at the Berwyn site is fully operational. However, there are existing staffing, equipment and IT needs that have delayed the opening of the dental practice at Berwyn, Fortunately, AMC received federal funding from HRSA to partially support the salaries of a dentist and a dental assistant. In addition, AMC received a \$10,000 grant from Delta Dental of Illinois, for the supplies needed for the opening of the Berwyn dental clinic. AMC is submitting this request to the Illinois Community Health Foundation for equipment, software and hardware costs to enable the full expansion of AMC's dental services to the Berwyn site.

This specific request includes the purchase of a Dexis Platinum Sensor System, required site license, and a Dexis Bridge Interface. These items make up the last component (Digital X-Ray) of the Electronic Dental Record. Without this component, AMC's dental clinic would still operate partially on paper charting for radiology purposes.

A. STATEMENT OF NEED (20 Points)

1) Describe the specific clinical quality challenges of the underserved residents to be improved by the project and the degree to which those needs are being met by the existing health care quality system.

AMC's expansion of Dental services to its Berwyn clinic will improve the clinical quality in the following three areas: **Access to Dental Care; Coordinated Dental Care; and Culturally Competent Dental Care.**

Residents of AMC's service area lack sufficient access to dental care. For over 15 years, the State of Illinois has cut funding for oral health care. In Cook County, this has meant that affordable oral health clinics have shut down, demand for affordable oral health care has increased and the financial support for oral care has drastically decreased. According to the Chicago Dental Society's Broken Smiles report, in 2011, 1.5 million residents in Cook County were registered for Medicaid, this is half of the overall Medicaid population in the state of Illinois, and there is just one dental clinic in Cook County for every 15,700 uninsured children. (The Chicago Dental Society. "Broken Smiles: Restoring Oral Health Care in Chicago and Cook County." 2013, pp. 7.)

Currently the dental safety net does not have near the capacity needed to serve all who need dental care in the State of Illinois. For example, in 2000, the Cook County Department of Public Health served close to 12,000 patients, while in 2009 they served fewer than 5,000. Worse yet, the dental safety net continues to endure budget cuts, and most clinics that provide dental services have waiting lists that are months long. For individuals without dental insurance, many cannot afford basic care and end up "falling through the cracks." Only a limited number of dental clinics serve community members with Medicaid insurance due to low reimbursement rates. In

fact, aside from Alivio's proposed new site in Berwyn, Lawndale Christian Health Center is the only Federally Qualified Health Center that offers oral care in the West District of Suburban Cook County. Alivio will be the only site that will offer dental services by 100% bilingual and/or bilingual bicultural staff.

Simultaneously, while Illinois' dental safety net and Medicaid program experienced severe budget cuts, private dental insurance coverage declined from 2000 to 2012 and more adults and children moved coverage to Medicaid or CHIP. Aside from private insurance coverage, there is the working poor immigrant population that does not access healthcare due to language and cultural barriers, intimidation of traditional healthcare institutions, lack of awareness of available resources, and/or fear of immigration status. Forty percent of Alivio's patients are Latino, predominantly Mexican, immigrant, uninsured and most likely undocumented; ninety-nine percent of Alivio's current dental patients are currently on Medicaid. Alivio foresees similar dental patient demographics at its new proposed site.

Despite funding limitations, Alivio Medical Center has offered dental care to patients since February 2007. Unlike other federally qualified health centers in Cook County who contract with a third party dental provider, Alivio's very own bilingual and/or bilingual bicultural providers deliver quality, culturally sensitive dental care to its patients. This is important because it means more coordination of care and culturally competent dental care for AMC's patients. A contracted dental provider will likely use their own electronic dental record that will be separate and apart from the FQHC's own electronic health record system. In the case of AMC, its dental providers have shared access to GE Centricity – AMC's electronic health record, can communicate with the patient's primary care provider and create and receive referrals of patients. This leads to fully integrated care for the patient.

AMC plans to expand oral health services to its clinic in Berwyn, IL. The clinic mainly serves Cicero and Berwyn Illinois, west of downtown Chicago, in Suburban Cook County, West District. Cicero and Berwyn are predominately Hispanic (59%) and have a large population of foreign-born residents (37%) and residents living below 200% of the federal poverty level (42.2%). Health center penetration of low-income is 47%, but penetration of uninsured is only 25%. Of the estimated 183,000 undocumented immigrants living in Chicago, at least 73,000 live in AMC's target communities. AMC's service area now includes nine Chicago communities: Lower West Side (Pilsen); South Lawndale (Little Village); Armour Square; Brighton Park; McKinley Park; Bridgeport; New City; Gage Park; Archer Heights; plus the Chicago suburbs of Cicero and Berwyn, IL.

“Nationwide, less than 2 percent of dentists work full-time in traditional safety net settings, according to the ADA. In Illinois and Cook County — where there are approximately 7,310 and 3,512 clinically practicing dentists — that amounts to less than 146 and 70 dentists, respectively. With more than 1.5 million Cook County residents registered for government health care, it's obvious to see: If there are only 70 dentists working full-time in the safety net in Cook County, each seeing approximately 1,500 patients per year, only 105,000 of 1.5 million patients will be seen.” (The Chicago Dental Society. “Broken Smiles: Restoring Oral Health Care in Chicago and Cook County.” 2013, pp. 9.)

In calendar year 2015, AMC served 1,788 dental patients through 3,286 visits at its Morgan site. 99% of its current dental patients are on Medicaid. If Illinois Community Health Foundation extended its support to AMC's Dental Clinic at Berwyn, it would enable AMC to purchase software for the digital x-ray and sensor and increase access to dental care for 700 annual dental patients with 1,300 annual dental visits at the Berwyn Dental Clinic.

2) Describe the level of current quality measures and need for focus in the proposed service area including the number of current users and encounters annually impacted by the project. Explain why the additional technological or other resources are needed.

Access: Currently, AMC operates a dental clinic at its Morgan street site in Pilsen/Lower West Side in Chicago. In 2015 – the last year for which data is available – AMC’s dental clinic served 1,788 patients and rendered 3,286 dental visits. Alivio Medical Center is currently providing preventive dental services at its Morgan Street site with four operatories. Dental services include: Dental exams, diagnostic radiographs, prophylaxis, fluoride application, space maintainers, resin restorations, stainless steel crowns, pulpotomies, pulpectomies, pulp capping, gross debridements, scaling and root planning, dental extractions, use of nitrous oxide analgesia.

The proposed dental clinic is located in a highly underserved area which has been designated a Dental Health Professional Shortage Area (HPSA ID: 617999170G). The expansion of AMC’s dental practice to the Berwyn, Cicero and neighboring communities will result in an increase of access to oral health care to approximately 700 underserved, low-income and disadvantaged individuals and will render approximately 1,300 additional dental visits during the first year of operations.

Coordination of Care: AMC’s Berwyn dental clinic will be fully integrated within the medical clinic. It is co-located, there is shared access to the patients’ health records, and there is a mechanism in place for internal referrals. The AMC Berwyn site currently offers primary health care including: OB/GYN and Midwifery Services, pediatrics and family medicine. There is a pharmacy on-site as well as diagnostic lab, and enabling services such as case management and behavior health services. The addition of dental services will transform the Berwyn site to fully comprehensive community health center.

AMC implemented an Electronic Dental Record in November 2015 but has not implemented an electronic/digital diagnostic x-ray tool to date. AMC's dental providers currently use traditionally developed radiographs- a piece of film and chemical developer and fixer. These radiographs are filed in AMC's dental department.

Cultural Competence: AMC is the only FQHC in the proposed area which is staffed with 100% bilingual and/or bilingual bicultural, Spanish-speaking healthcare providers. AMC is well known in its community as an advocate for healthcare for all and as a safety-net for the immigrant, Latino- specifically Mexican, population.

In order to fully expand its dental practice to the Berwyn clinic and increase access to dental care to the Latino, immigrant, Spanish –speaking community; AMC is in need of software, hardware, and equipment to operate completely paperless. Operating entirely on an electronic dental system is important for several reasons, including efficiency, quality and safety, accurate data collection and reporting. Currently, AMC's dental providers keep actual, physical x-ray film and manually enter readings on the electronic dental records. The proposed digital x-ray system will reduce the patients' exposure to radiation by up to 75%, compared to the current system. Digital images can be corrected/enhanced, often resulting in a higher quality image. Digital images can be electronically sent to specialists/other providers and images cannot be lost or misfiled. Digital radiology reduces overhead costs (no more chemical or special disposal of chemicals and film lead) and it reduces chair time. Finally, this will be the last piece to having a complete electronic dental record.

B. PROJECT OBJECTIVES (15 Points)

Present a minimum of two measurable objectives in which the project proposes to achieve improvement in the quality challenges identified above.

1. Measurable objective – Increased Access

AMC will increase access to dental care to the underserved communities by opening a second dental clinic at its Berwyn site. During the first year of operations of AMC's Berwyn Dental Clinic, AMC will serve 700 additional dental patients and deliver 1,300 dental visits.

2. Measurable objectives –Quality of Care

20 % of AMC's Dental patients aged 6 through 9 years, at moderate to high risk of caries will receive a sealant on a first permanent molar during the first year of Dental Operations at the AMC Berwyn site. (Set based on baseline data for African-American Children at 18.4% and White/Not Hispanic Children at 25%)

C. PLAN OF OPERATION (25 Points)

1) Describe how the funds will be used:

a) Purchase equipment. – Digital X-Ray System and Bridge for the Berwyn Dental Clinic. (As this is a matching grant, AMC intends to purchase the identical system for its Morgan Site Dental Clinic). The costs for each are included in the attached budget and are based on quote received from Henry Schein Dental and Visualutions.

2) Describe the implementation plan to achieve the project objectives.

AMC will first develop a plan to install all of the software, hardware and dental equipment to the Berwyn dental clinic. The purchase of these items will take place immediately after notification of the Illinois Community Health Foundation grant award – approximately March 15, 2017.

AMC expects the purchase and delivery of items to happen within a month. Implementation, training, and equipment testing, therefore will begin mid-April 2017 and completed by the end of April 2017.

3) Describe how the proposed project will be integrated into your center's existing operations and any modifications needed to accommodate the quality initiatives.

With the timeline described above, AMC should have the adequate staff and equipment to begin operations late/end of April 2017 or beginning of May 2017.

AMC will house the new Berwyn dental suite within the 13,000 sq. ft. facility at the Berwyn site. Having the dental clinic in the same location as primary care is ideal for care coordination, improved patient outcomes and increased efficiency.

D. PROJECT EVALUATION (15 Points)

1) Identify who will be responsible for the project and describe the process to be used to analyze the data and document the project's progress in meeting the objectives.

Desiree Loreno, DDS has served as Alivio Medical Center's dental director since 2009. She received her DDS from University of Illinois at Chicago College of Dentistry in 2003, and has been practicing general dentistry for over thirteen years. As Alivio's dental director, Dr. Loreno oversees the daily operations of the dental department, is a member of several clinical committees and also serves as a bilingual clinical provider.

Dr. Loreno will be primarily responsible for the entirety of the Berwyn expansion project. Dr. Loreno will oversee the implementation of all software, will coordinate training, and will meet with AMC's Quality Improvement Coordinator so as to meet the goals outlined in this application.

Vickie Rivkin, Alivio Medical Center's Quality Improvement Coordinator will also monitor the data and report to the Quality Committee of AMC's Board of Directors. Ms. Rivkin along with Dr. Lorenzo, will set baseline data, set goals, record and capture data, establish workflows so as to develop a consistent method for all dental providers to capture data, analyze the data, document progress, and report to the Quality Committee of the Board.

2) Describe the process to be used to determine the efficiency of operations and effectiveness of the project in meeting improvement goals.

AMC intends to utilize historical data from its Morgan dental clinic for comparison. It is expected that the dental clinic at Berwyn will run more efficiently (will see more patients, will have more accurate data collection) than the Morgan site where it once ran with paper charts and which has been on a difficult transition to EDR.

E. SUSTAINABILITY (10 Points)

Describe how initial quality improvement achieved through new technology/ operational resources will be sustained upon completion of the grant period.

First and foremost, the new software (Digital X-Ray; Sensor) will ensure the best quality, most efficient, and comprehensive dental care to AMC's patients. AMC expects high scores on patient satisfaction surveys and this will lead to increased demand for services. The sustainability of the Dental clinic at Berwyn will be based on the enhanced reimbursement rate for an FQHC, currently at approximately \$97 per dental visit which is an estimated \$126,100 (1300 visits as goal set above). An increase in productivity due to the improved efficiency of operating on an electronic dental record will be beneficial for sustainability as will be the quality improvement scores tracked and submitted to various quality assurance/improvement monitoring agencies such as HRSA, NCQA, and Joint Commission.

BUDGET PROPOSAL

PROJECT EXPENDITURES				
Expenditure Category	Description	Total Amount Required	Amount Provided by Applicant/Others	Amount Requested From Grant
Equipment	Dexis Platinum Sensor System & Site License	\$ 34,600.00	\$ 17,300.00	\$ 17,300.00
New Software	Dexis Bridge Interface & Configuration & Installation & Maintenance	\$ 4,400.00	\$ 2,200.00	\$ 2,200.00
Personnel				
Consultants				
Training				
Other	Freight	\$ 1,000.00	\$ 500.00	\$ 500.00
TOTAL		\$ 40,000.00	\$ 20,000.00	\$ 20,000.00
<p>Narrative: Describe costs and budgeting assumptions. AMC based the budget on quotes received from Henry Schein Dental and Visualusions. The total cost of the Digital X-ray and sensor system for 2 sites is \$34,600.00. The total cost of the Dexis Bridge (to connect the EDR to the Digital X-Ray) is \$4,400. AMC intends to match this grant award and purchase the identical products for its Morgan Dental Clinic site. A total of \$1000 was allocated for shipping costs - also based on previously received quotes.</p>				
<p>Brief Description of Equipment: Dexis Platinum Sensor. The Dexis Platinum Sensor will give AMC the ability to see subtleties using digital radiography for diagnosis. Through a combination of advanced hardware and software technologies, the DEXIS Platinum sensor is able to deliver clinically meaningful images that are extremely clear and highly detailed. AMC anticipates that the sensor will reduce the number of exposure-related dental X-ray retakes, and patients will benefit from the reduction in radiation.</p>				