

# Texas Healthcare Transformation and Quality Improvement Program

## REGIONAL HEALTHCARE PARTNERSHIP (RHP)

### PLAN

**November 14, 2012**

### RHP#3 Oral Health Services for At-Risk Populations Project

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## Narrative for Category 1 Project Title Oral Health Services Expansion

**Project Option 1.8.9 - Expansion of school-based sealant and/or fluoride varnish programs that provide sealant placement and/or fluoride varnish applications to otherwise un-served school-aged children by enhancing dental workforce capacity through collaborations and partnerships with dental and dental hygiene schools, local health departments, federally qualified health centers, and/or local dental providers.**

**Unique Project ID:** 0937740-08.1.1

**Performing Provider:** City of Houston Department of Health and Human Services/ 0937740-08

### **Project Description:**

***The City of Houston Health and Human Services (HDHHS) proposes to expand diagnostic and preventive oral health services for perinatal and safety net eligible persons, expand Project Saving Smiles and link more patients to dental home.***

This project seeks to enhance dental health in underserved populations by: 1) expanding diagnostic, preventive, restorative, and surgical oral health services for safety net eligible persons, 2) expanding an evidence based dental sealant program for elementary school children, Project Saving Smiles and 3) initiating diagnostic, preventive, restorative, and surgical oral health services for eligible perinatal women through three months post-partum

### Safety Net Oral Health Services

Houston Department of Health and Human Services (HDHHS) currently provides comprehensive dental care for children ages six (6) months of age through 21 years of age. Title V funding is used to fund these services in addition to the general fund dollars that are allocated by the City of Houston. This project will expand existing services to provide access to safety net oral health services for additional children.

### Dental Sealants Program, Project Saving Smiles

Project Saving Smile, which was established more than 5 years ago by HDHHS, provides screening, oral health education, sealants, and fluoride varnish for at-risk 2nd graders. At-risk 2<sup>nd</sup> graders are identified through partnerships with individual schools, school principals and through Houston Independent School District (HISD), which is the third largest school district in the US. HISD has a very high percentage of minority populations and a large number of schools have a large proportion of low income students receiving free or reduced cost breakfast and lunch program. Currently, Project Saving Smile has a limited capacity, and only able to serve a few schools.

Second graders from at-risk, low income schools will be targeted for the expansion of Project Saving Smile. The project will link these 2nd graders to a dental home.

### Perinatal Oral Health

The project will also add oral health services for pregnant women to the mix of oral health services offered by HDHHS. By providing perinatal diagnostic, preventive, restorative, and surgical oral health services (during pregnancy and through the third month post-partum), the performing provider will improve the health and quality of life for at-risk Houston area mothers and their children.

By the end of the three months post-partum time the project would 1) link the perinatal patients to a dental home, 2) provide anticipatory guidance for perinatal women and their children, 3) promote and support breastfeeding practices with anticipatory guidance, e.g., wiping the baby's gums after breast or bottle feeding and 4) provide a coordinated effort between the prenatal and oral health provider to promote utilization of dental services during pregnancy.

Plaque causing oral diseases, dental caries, gingivitis, and periodontitis can be prevented with optimal oral hygiene. Good oral health during pregnancy and throughout life is imperative to promote health and quality of life for the mother. It also prevents vertical pathogenic bacteria transmission from mother to child, as well as horizontal pathogenic bacteria transmission among all. Yet, many prenatal patients do not receive oral health care services during pregnancy despite evidence that poor oral health can have adverse pregnancy outcomes. There are barriers to care for pregnant women stemming from the patient herself and from the health care system. Due to a lack of understanding about oral health services during pregnancy, oral health and prenatal providers limit their patients' oral health care during pregnancy. Research supports the benefits of providing dental care during pregnancy clearly outweigh any potential risks. Routine access to oral health services is imperative throughout life. With young children, there is an opportunity to begin prevention and for them to enjoy optimal oral health for life.

HDHHS will address and reduce the vertical transmission, mother to child movement, of pathogenic bacteria by treating common oral conditions found in pregnancy, e.g., gingivitis, dental caries, infections due to cariogenic bacteria. In so doing, HDHHS anticipates treating fewer cases of Early Childhood Caries (ECC) among the child patients it serves. The ECC is defined as tooth decay in children under six years of age. The timely provision of oral health services during pregnancy serves to address oral problems thus avoiding systemic infections and the risk of transmission of cavity causing bacteria from the mother to her children. While there is ongoing research, the evidence to date suggests that periodontal treatment during pregnancy does not affect the frequency of low birth weight babies or preterm births, and is safe for the fetus and the mother. The American College of Obstetricians and Gynecologists note: "Caries, poor dentition, and periodontal disease may be associated with an increased risk for preterm delivery. It is very important that pregnant women continue usual dental care in pregnancy. The dental care includes routine brushing and flossing, scheduled cleanings, and any medically needed dental work."

### **Goals and Relationship to Regional Goals:**

The goal of this project is to partner with Dental providers, Dental Schools, School Districts, School principals and other stakeholders and provide services to underserved population who are at risk for poor oral health. The primary goal is to close gaps in access to dental care in certain sub-population groups. The target population addressed for this project will be perinatal women and elementary school children (aged 6-9 years). This is directly related to the regional goal of alleviating dental health disparities by provision of access to dental care. By enhancing access to Preventive Care in high risk populations, a long term investment in dental health ensues.

### **Project Goals:**

The overall goal of this program is to improve oral health in underserved or under-served populations, specifically perinatal women and children.

- Close gaps/disparities in access to dental care services

### **This project meets the following regional goals:**

- Increase access to primary and specialty care services, with a focus on underserved populations, to ensure patients receive the most appropriate care for their condition, regardless of where they live or their ability to pay.
- Transform health care delivery from a disease-focused model of episodic care to a patient-centered, coordinated delivery model that improves patient satisfaction and health outcomes, reduces unnecessary or duplicative services, and builds on the accomplishments of our existing health care system.

### **Challenges:**

Some of the challenges that the provider anticipates are 1) Developing an efficient and effective referral process: a) For Safety Net Dental Operations - For dental procedures beyond the HDHHS' scope of services, continue referring to Harris Health System for oral surgery, University of Texas School of Dentistry for Endodontics, Pediatric Dentistry, Orthodontics, and for Oral Surgery 2) Ensuring a dental home for all – disposition of patients after application of dental sealant: For patients with restorative or surgical dental needs and for those with just preventive needs, refer them to their dental home. If they do not have a dental home and do not have private dental insurance, refer them to HDHHS dental clinics to be their dental home. 3) Disposition of patient post-perinatal period – finding a dental home post-perinatal period (three months post-partum): a) If the patient is age-eligible for the HDHHS dental program, retain the patient within the program to complete her restorative and/or surgical care, as well as, to meet their preventive needs b) If the patient is not age-eligible, refer the patient to Harris Health System, Federally Qualified Health Center Dental Clinic, and/or University of Texas School of Dentistry to complete her restorative and/or surgical care, as well as, to meet their preventive

needs. Additionally, the challenges mentioned will be addressed by instituting an efficient follow-up process. This follow up procedures will be in place for 60-90 days after the patient completes the program.

### **5 Year Expected Outcome for Providers and Patients:**

The Houston Department of Health and Human Services (HDHHS) as the primary provider expects to see a reduction in early childhood caries in low-income zip codes that have been identified by the Houston Independent School District as those with greater than 70% of students on free/reduced lunch program. The provider also expects to see better dental health in perinatal women and the newborn children in the underserved areas of Houston. Due to the comprehensive nature of the program, dental health in underserved areas is likely to improve among high-risk populations.

### **Starting Point/Baseline:**

Currently, no comprehensive program exists that targets improvement in dental health of perinatal women, young infants, and young elementary school children in high risk populations living in underserved areas. Baseline will be established by the end of in DY 2 of the project for proportion of children with dental sealant and for proportion of children with dental caries.

### **Rationale:**

Oral disease is common in the underserved population. Oral disease can lead to poor nutrition; serious systemic illnesses and conditions such as poor birth outcomes, diabetes, and cardiovascular disease; and a diminished quality of life and life expectancy. Inadequate access to oral health services compounds other health issues. It can result in untreated dental disease that not only affects the mouth, but can also have physical, mental, economic, and social consequences. Fortunately, many of the adverse effects associated with poor oral health can be prevented with quality regular dental care, both at home and professionally. Increasing, expanding, and enhancing oral health services will improve health outcomes.

Children who have regular access to a dental provider are more likely to have received preventive dental services such as sealant placement. Children who have regular access to a dental provider are less likely to suffer from untreated dental caries. The Centers for Disease Control and Prevention rate the application of sealants within a school-based setting as one of two strongly recommended evidence-based dental public health prevention methods. There is clearly a return on investment associated with dental sealants when applied within a school sealant program: for every \$28 spent on placing one dental sealant and preventing decay, at least \$70 will be saved by not filling a one-surface cavity.

This program will reach the underserved target population in previously identified zip codes. This program has the potential to improve dental health among at risk population and help close dental health disparity gaps in our population. Cost incurred to the health care system from those that do not have a dental home, or those that do not have access or availability due to other barriers is significant. These are avoidable costs and this program will help offset a portion of this cost by providing care before there is a dental health emergency. The

prevention of early childhood caries (ECC) through the provision of oral health services and education for the mother serves to address the documented morbidity and mortality associated with ECC. Among US children, ECC is the most common chronic condition found in young children and yet it is the most prevalent untreated condition in children. Disproportionately affecting low income children, ECC results in infection, pain, and early tooth loss. The ECC is prevalent, costly, and preventable. There are prevention models in place that can affect these statistics while driving down unnecessary caries and costs.

Additionally, dental sealants are cost effective thin coatings applied to the chewing surface of the molar/back teeth to prevent cavities. The painless application of sealants fill-in the deep pits and grooves where food and plaque (bacteria) accumulate. Some 90% of dental caries occur on the occlusal surface of the molars, the targeted surface for sealants. The Centers for Disease Control and Prevention rate the application of sealants within a school-based setting as one of two strongly recommended evidence-based dental public health prevention methods. There is clearly a return on investment associated with dental sealants when applied within a school sealant program: for every \$28 spent on placing one dental sealant and preventing decay, at least \$70 will be saved by not filling a one-surface cavity.

**Project Components:**

**This project has no required core components. Major features of the project include:**

- a) Increase services to young elementary school children in partnership with the school district and the individual schools, by providing a sealant placement program off-site.
- b) Partnership with University of Texas Dental School, local dental providers to provide enhanced services to target population.
- c) Connect all patients to dental home.
- d) Implement provision of services to perinatal women through a combination of education, diagnostic, preventive and surgical services to perinatal women through three months post-partum.

**Unique community need identification numbers that project addresses:**

- CN.4 Inadequate access to dental care
- CN.15 Insufficient access to services for pregnant women, particularly low income women
- CN.22 Insufficient access to services that are specifically designed to address racial, ethnic and cultural health care disparities

**How the project represents a new initiative or significantly enhances an existing delivery system reform initiative:**

Currently there are no programs that provide comprehensive population based dental health care to underserved perinatal women. This program will provide dental care to perinatal women, young children and school age children in underserved communities, since there is a lack of access and utilization of care in the

targeted communities. This programs aims to close gaps/disparities in access to dental care services and enhance the quality of dental care as well as build capacity in the region by training providers. The project will also expand service capacity in safety net oral health services for children provided at HDHHS dental clinics and expand service capacity in the Project Saving Smiles, dental sealant program.

**Related Category 3 Outcome Measures:**

OD-7 Oral Health

IT-7.1 Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth (Healthy People 2020; CMS Oral Health Initiative goal

IT-7.2 Cavities: Percentage of children with untreated dental caries (Healthy People 2020)

**Reasons /rationale for selecting the outcome measures:**

The primary outcome measures chosen for this project are:**increase in sealant application and reduction in dental caries** in elementary school children aged 6-9 years. Elementary school children of this age are a particularly vulnerable because they lose their “baby” teeth and new teeth emerge. In order to ensure the best possible prognosis for the future optimal dental health, both outcomes will be tracked and evaluated. Perinatal women seen in this program will be tracked in terms of an **output measure** to show an increase in number of women served and offered diagnosis, treatment and preventive care. Improved dental health during the perinatal and postnatal period has positive implications for the dental health of both the mother and the child.

**Relationship to other Projects:**

**Relationship to Other Performing Providers’ Projects and Plan for Learning Collaborative:**

Project results and lessons learned will be disseminated to other members in the regional learning collaborative to share lessons learned and discuss quality improvement strategies. We plan to participate in a region-wide learning collaborative(s) as offered by the Anchor entity for Region 3, Harris Health System. Our participation in this collaborative with other Performing Providers within the region that have similar projects will facilitate sharing of challenges and testing of new ideas and solutions to promote continuous improvement in our Region’s healthcare system.

**Project Valuation:**

HDHHS utilized two categories to calculate value for each DSRIP project. The first category is Prioritization and the second is Public Health Impact (see attachment for HDHHS Valuation Tool). HDHHS scored the project on a scale of 1 (poor) to 9 (exceptional) for each of the six factors that comprise the Prioritization category. The Prioritization category includes the following factors: 1) Transformational Impact, 2) Population Served / Project Size, 3) Alignment with Community Needs, 4)Cost Avoidance, 5) Partnership Collaboration, and 6)Sustainability.

Each factor was then given a weighted score based on the score rated and a pre-determined percentage weight. The six weighted scores were added to get a composite score for the Prioritization category.

Public Health includes activities which seek to achieve the highest level of health for the greatest number of people. Public Health also focuses on preventing problems from happening or re-occurring through programs and activities that promote and protect the health of the entire community. As a public health department, HDHHS added an additional valuation category of Public Health Impact that looked at projects through a public health lens. The Public Health Impact category includes the following factors: 1) Alleviate Health Disparity, 2) Control Communicable and Chronic Disease , 3) Prevention Orientation, 4) Population Health Focus, 5) Access and Connection to Health Services and 6) Evidence Based Health Program. HDHHS scored the project on a scale of 1 (poor) to 9 (exceptional) for each of the six factors that comprise the Public Health Impact category. Each factor was then given a weighted score based on the score rated and a pre-determined percentage weight. The six weighted scores were added to get a composite score for the Public Health Impact category.

HDHHS gave the Prioritization score a weight of 25% and the Public Health Impact score a weight of 75% to determine the overall project value for the plan. Oral Health Service Expansion received a composite Prioritization score of 7.65 and a Public Health Impact score of 7.

<b>UNIQUE IDENTIFIER</b> 0937740-08.1.1	<b>RHP PP REFERENCE NUMBER:</b> 1.8.9	<b>PROJECT COMPONENTS:</b> 1.8.9	<b>PROJECT TITLE: Oral Health Services for At-Risk Populations</b>	
Performing Provider Name: City of Houston Health and Human Services			TPI - 0937740-08	
<b>Related Category 3 Outcome Measures:</b>	0937740-08.3.1	IT – 7.1	Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth	
	0937740-08.3.2	IT – 7.2	Percentage of children with untreated dental caries	
<b>Year 2</b> <b>(10/1/2012 – 9/30/2013)</b>	<b>Year 3</b> <b>(10/1/2013 – 9/30/2014)</b>	<b>Year 4</b> <b>(10/1/2014 – 9/30/2015)</b>	<b>Year 5</b> <b>(10/1/2015 – 9/30/2016)</b>	
<b>Process Milestones and Metrics</b>				
<b>Milestone 1 [P-X1]</b> Project Planning  Metric: Engage stakeholders, identify resources and potential partnerships, develop relationships, develop implementation plan  Goal: Produce a comprehensive report documenting all points above  Data Source: Program Documentation  Milestone 1 Estimated Incentive Payment: \$ 940,526.33	<b>Milestone 4 [P-6.1]:</b> Implement/expand alternative dental care delivery systems to underserved populations  Metric: Implement/expand a mobile dental clinic program with an affiliated fixed-site dental clinic location Documentation of expansion. Documentation includes descriptions of all services provided as well as program management activities.  Goal: Document expansion of services to underserved target population.  Data Source: Dental records documenting exams, treatment, consultations, and referrals	<b>Milestone 8 [I-14]:</b> Increase number of special population members that access dental services  Metric: Increasing the number of children and pregnant women, accessing dental services  Number of children, and pregnant women that have seen by a dental provider within the past 12months.  Goal: Increase by 5% over baseline the number of special population members that access services in past 12 months. (Baseline established in DY 3)  Data Source: consent forms, other documentation of	<b>Milestone 9 [I-14]:</b> Increase number of special population members that access dental services  Metric: Increasing the number of children and pregnant women, accessing dental services  Number of children, and pregnant women that have seen by a dental provider within the past 12months.  Goal: Increase by 10% over baseline the number of special population members that access services in past 12 months.  Data Source: consent forms, other documentation of dental <b>services</b>	

<b>UNIQUE IDENTIFIER</b> 0937740-08.1.1	<b>RHP PP REFERENCE</b> NUMBER:1.8.9	<b>PROJECT COMPONENTS:</b> 1.8.9	<b>PROJECT TITLE: Oral Health Services for</b> <b>At-Risk Populations</b>	
<i>Performing Provider Name: City of Houston Health and Human Services</i>			<i>TPI - 0937740-08</i>	
<b>Related Category 3</b> <b>Outcome Measures:</b>	0937740-08.3.1	IT – 7.1	<i>Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth</i>	
	0937740-08.3.2	IT – 7.2	<i>Percentage of children with untreated dental caries</i>	
<b>Year 2</b> <b>(10/1/2012 – 9/30/2013)</b>	<b>Year 3</b> <b>(10/1/2013 – 9/30/2014)</b>	<b>Year 4</b> <b>(10/1/2014 – 9/30/2015)</b>	<b>Year 5</b> <b>(10/1/2015 – 9/30/2016)</b>	
<b>Milestone 2 [P-4.1]:</b> Establish additional/expand existing dental care clinics or space  Metric: Number of additional clinics, expanded space and existing available space. Provide documentation of expansion or efficient use of space.  Goal :Increase services to underserved target population  Data Source: New dental care schedule or other project documentation regarding expansion  Milestone 2 Estimated Incentive Payment: \$ 940,526.33	Milestone 4 Estimated Incentive Payment: \$ 669,943.50  <b>Milestone 5: [P-6.3].</b> Implement/expand alternative dental care delivery systems to underserved populations  Metric: Implement school-based sealant program  a. Number of schools participating in receiving sealants for 12 month period  Goal: Increase access through partnerships with dental providers for target population  Data Source: MOUs, contracts with sealant partners (UT Dental School) Milestone 5 Estimated	dental services Milestone 8 Estimated Incentive Payment: \$ 2,666,374	Milestone 9 Estimated Incentive Payment: \$ 2,374,874	

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Performing Provider Name: City of Houston Health and Human Services			TPI - 0937740-08	
<b>Related Category 3 Outcome Measures:</b>	0937740-08.3.1	IT – 7.1	Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth	
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<b>Year 2</b> <b>(10/1/2012 – 9/30/2013)</b>	<b>Year 3</b> <b>(10/1/2013 – 9/30/2014)</b>	<b>Year 4</b> <b>(10/1/2014 – 9/30/2015)</b>	<b>Year 5</b> <b>(10/1/2015 – 9/30/2016)</b>	
<b>Milestone 3 [P-4.2]:</b> Expand and establish additional clinics or space  Metric: Number of additional school-linked health centers/spaces with dental services (dental screenings and off-site mobile sealant and hygiene program for 2 <sup>nd</sup> graders):  A) Documentation of establishment of additional school-linked health center/space with description of dental services provided.  B) Program Management process documentation on parent education and empowerment of families and follow-up of findings from screenings	Incentive Payment: \$ 669,943.50  <b>Milestone 6 [P-6.4]:</b> Implement/expand alternative dental care delivery systems to underservedpopulations.  Metric: Implement program to increase dental services to improve maternal and early childhood oral health  Documentation of implementation (descriptions of all services provided as well as program management activities)  Goal: Increase access to dental services for target population  Data Source: Program documentation and referrals Milestone 6 Estimated			

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Performing Provider Name: City of Houston Health and Human Services			TPI - 0937740-08	
<b>Related Category 3 Outcome Measures:</b>	0937740-08.3.1	IT – 7.1	Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth	
	0937740-08.3.2	IT – 7.2	Percentage of children with untreated dental caries	
<b>Year 2</b> <b>(10/1/2012 – 9/30/2013)</b>	<b>Year 3</b> <b>(10/1/2013 – 9/30/2014)</b>	<b>Year 4</b> <b>(10/1/2014 – 9/30/2015)</b>	<b>Year 5</b> <b>(10/1/2015 – 9/30/2016)</b>	
<p>Goal: Increase access to dental care for elementary school children</p> <p>Data Source: Program Documentation of the above.</p> <p>Milestone 3 Estimated Incentive Payment: \$ 940,526.34</p>	<p>Incentive Payment: \$ 669,943.50</p> <p><b>Milestone 7 [P-X]:</b> Increase number of special population members that access dental services</p> <p>Establish baseline for measuring number of children and pregnant women, accessing dental services who have seen a dental provider within the past 12months.</p> <p>Metric 1 [P-X.1] Collect data to determine the number of children and pregnant women, accessing dental services that have seen by a dental provider within the past 12months.</p> <p>Baseline Goal: Establish baseline number of special population members that</p>			

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<b>Year 2</b> <b>(10/1/2012 – 9/30/2013)</b>	<b>Year 3</b> <b>(10/1/2013 – 9/30/2014)</b>	<b>Year 4</b> <b>(10/1/2014 – 9/30/2015)</b>	<b>Year 5</b> <b>(10/1/2015 – 9/30/2016)</b>	
	access services in past 12 months.  Data Source: consent forms, other documentation of dental services  Milestone 7 Estimated Incentive Payment: \$ 669,943.50			
<b>Year 2 Estimated Milestone Bundle Amount:</b> \$ 2,821,579	<b>Year 3 Estimated Milestone Bundle Amount:</b> \$ 2,679,774	<b>Year 4 Estimated Milestone Bundle Amount:</b> \$ 2,666,374	<b>Year 5 Estimated Milestone Bundle Amount: \$</b> <b>2,374,874</b>	
<b>TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD (add outcome amounts over DYs 2-5):\$ 10,542,601</b>				

**Narrative for Category 3 Outcome Measure 1 Associated with Category 1 Project Title Oral Health Services Expansion**

**Title of Outcome Measure (Improvement Target):** IT 7.1- Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth (Healthy People 2020; CMS Oral Health Initiative goal)

**Unique RHP Outcome identification number(s):** 0937740-08.3.1

**Outcome Measure Description:**

IT-7.1 Dental Sealant:

- Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth (Healthy People 2020; CMS Oral Health Initiative goal)

**Process Milestones:**

- **DY 2**
  - Establish Baseline Rates
- **DY3:**
  - P-4: Milestone: Conduct Plan Do Study Act cycle to continually improve program
  - P-5: Milestone: Disseminate lessons learned and best practices

**Outcome improvement targets for each year:**

- **DY 4:**
  - IT-7.1 Dental Sealant: Increase by 5% over baseline, Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth (Healthy People 2020; CMS Oral Health Initiative goal)
- **DY 5**
  - IT-7.1 Dental Sealant: Increase by 10% over baseline, Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth (Healthy People 2020; CMS Oral Health Initiative goal (Non-standalone measure))

**Rationale:**

The Outcome Improvement target for this project was chosen because application of dental sealants in underserved elementary school children promotes dental health in the future. By increasing the percentage of children who receive dental sealants, this program will promote and enhance dental health in underserved children and help close disparities in dental health. The process milestones P4 and P5 were chosen for this project based on the need for documentation of baseline and continuous quality improvements in program for sealant application and dental care. The PDSA cycle will inform systematic data driven program improvements. Inadequate access to dental services compounds other health issues. It can result in untreated dental disease that not only affects the mouth, but can also have physical, mental, economic and social consequences. Fortunately, many of the adverse effects associated with poor oral health can be prevented with quality regular dental care, both at home and professionally. Increasing, expanding, and enhancing dental services will improve

overall health outcomes. The improvement targets are based on the two single most important indicators for childhood dental health. Children who have regular access to a dental provider are more likely to have received dental services that can prevent or treat early dental disease. Additionally, unserved or underserved perinatal women are a specially vulnerable group not only for their own dental health but also for the dental health of their children. Education on the importance of dental health can help promote better dental health in young children.

**Outcome Measure Valuation:**

The Outcome measure was valued at 12.29 % of the overall assigned project value for the associated Category 2 project in year 3, 12.29 % in Year 4 and 12.29 % in Year 5. HDHHS utilized the following method to determine the Category 2 project value.

HDHHS utilized two categories to calculate value for each DSRIP project. The first category is Prioritization and the second is Public Health Impact (see attachment for HDHHS Valuation Tool). HDHHS scored the project on a scale of 1 (poor) to 9 (exceptional) for each of the six factors that comprise the Prioritization category. The Prioritization category includes the following factors: 1) Transformational Impact, 2) Population Served / Project Size, 3) Alignment with Community Needs 4) Cost Avoidance 5) Partnership Collaboration and 6) Sustainability. Each factor was then given a weighted score based on the score rated and a pre-determined percentage weight. The six weighted scores were added to get a composite score for the Prioritization category.

Public Health includes activities which seek to achieve the highest level of health for the greatest number of people. Public Health also focuses on preventing problems from happening or re-occurring through programs and activities that promote and protect the health of the entire community. As a public health department, HDHHS added an additional valuation category of Public Health Impact that looked at projects through a public health lens. The Public Health Impact category includes the following factors: 1) Alleviate Health Disparity, 2) Control Communicable and Chronic Disease, 3) Prevention Orientation, 4) Population Health Focus, 5) Access and Connection to Health Services and 6) Evidence Based Health Program. HDHHS scored the project on a scale of 1 (poor) to 9 (exceptional) for each of the six factors that comprise the Public Health Impact category. Each factor was then given a weighted score based on the score rated and a pre-determined percentage weight. The six weighted scores were added to get a composite score for the Public Health Impact category.

HDHHS gave the Prioritization score a weight of 25% and the Public Health Impact score a weight of 75% to determine the overall project value for the plan. Oral Health Service Expansion received a composite Prioritization score of 7.65 and a Public Health Impact score of 7.

<i>Unique Category 3 ID: 0937740-08.3.1</i>	Ref Number from RHP PP: IT-7.1	<i>IT-7.1 Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth</i>	
<i>[RHP Performing Provider involved with this project - Name] City of Houston Health and Human Services</i>			<i>TPI - 0937740-08</i>
Related Category 1 or 2 Projects:	Unique Cat 1 ID: 0937740-08.3.1		
Starting Point/Baseline:	<i>Project Baseline will be established in DY 2</i>		
<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>(10/1/2012 – 9/30/2013)</b>	<b>(10/1/2013 – 9/30/2014)</b>	<b>(10/1/2014 – 9/30/2015)</b>	<b>(10/1/2015 – 9/30/2016)</b>
<p><b>Process Milestone 1 [P- 2]</b></p> <p>Metric: Calculate baseline rate of dental sealants in children age 6-9 in Oral Health Program in DY2 months 6-12</p> <p>Numerator: # of children age 6-9 years with dental sealant enrolled in Oral Health Program</p> <p>Denominator: Total # of children of same age enrolled in the program</p> <p>Goals: Establish baseline against which improvements can be measured</p> <p>Data Sources: Program documentation from month 6-12 inDY2</p> <p>Milestone 1 Estimated Incentive Payment: \$74,252</p>	<p><b>Process Milestone2 [P-4]:</b> Conduct Plan Do Study Act cycle to continually improve</p> <p>Metric: Document use of PDSA in planning process</p> <p>Goal: Goal: Ensure highest quality on program process and improvement.</p> <p>Data Source: Step-wise documentation of PDSA in program documentation</p> <p>Process Milestone 1 Estimated Incentive Payment: \$148,876</p> <p>Milestone 2 Estimated Incentive Payment: \$73,938</p> <p><b>Process Milestone 3 [P-5]:</b></p> <p>Disseminate lessons learned and best practices</p> <p>Metric 1: Documentation of best</p>	<p><b>Outcome Improvement Target 1 [IT-7.1] Dental Sealant:</b> Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth (Healthy People 2020; CMS Oral Health Initiative goal (Non-standalone measure)</p> <p>Numerator: Number of children age 6-9 with a dental sealant on at least one permanent first molar within the measurement period (past 12 months) enrolled in Program</p> <p>Denominator: Total number of children age 6-9 that have seen a dental provider within the measurement period (past 12 months) enrolled in Program</p> <p>Goal: Increase rate of dental sealant in children by 5% over baseline (Baseline will be determined in DY2)</p>	<p><b>Outcome Improvement Target 2 [IT-7.1] Dental Sealant:</b> Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth (Healthy People 2020; CMS Oral Health Initiative goal (Non-standalone measure)</p> <p>Numerator: Number of children age 6-9 with a dental sealant on at least one permanent first molar within the measurement period (past 12 months) enrolled in Program</p> <p>Denominator: Total number of children age 6-9 that have seen a dental provider within the measurement period (past 12 months) enrolled in Program</p> <p>Goal: Increase rate of dental sealant in children by 10% over Baseline</p> <p>Data Source: Program Electronic</p>

Unique Category 3 ID: 0937740-08.3.1	Ref Number from RHP PP: IT-7.1	IT-7.1 Dental Sealant: Percentage of children age 6-9 with a dental sealant on a permanent first molar tooth	
[RHP Performing Provider involved with this project - Name] City of Houston Health and Human Services			TPI - 0937740-08
Related Category 1 or 2 Projects:	Unique Cat 1 ID: 0937740-08.3.1		
Starting Point/Baseline:	Project Baseline will be established in DY 2		
Year 2 (10/1/2012 – 9/30/2013)	Year 3 (10/1/2013 – 9/30/2014)	Year 4 (10/1/2014 – 9/30/2015)	Year 5 (10/1/2015 – 9/30/2016)
	practices  Metric 2: Documentation of lessons learned  Goal: Provide report documenting identification of best practices and lessons learned  Data Source: Documentation of report  Milestone 3 Estimated Incentive Payment: \$73,938	Data Source: Program Electronic Records  Outcome Improvement Target 1 Estimated Incentive Payment: \$148,132	Records  Outcome Improvement Target 2 Estimated Incentive Payment: \$296,859
Year 2 Estimated Outcome Amount:: \$74,252	Year 3 Estimated Outcome Amount: \$147,876	Year 4 Estimated Outcome Amount: \$148,132	Year 5 Estimated Outcome Amount: \$296,859
TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD (add outcome amounts over DYs 2-5):\$667,119			

## **Narrative for Category 3 Outcome Measure 2 Associated with Category 1 Project Title Oral Health Services Expansion**

**Title of Outcome Measure (Improvement Target):** IT-7.2 Cavities: Percentage of children with untreated dental caries (Healthy People 2020)

**Unique RHP Outcome identification number(s):** 0937740-08.3.2

### **Outcome Measure Description:**

IT-7.2 Cavities: Percentage of children with untreated dental caries (Healthy People 2020)

(Standalone measure)

### **Process Milestones :**

- DY 2
  - Develop and test data systems
- DY3:
  - P-4: Milestone: Conduct Plan Do Study Act cycle to continually improve program
  - P-5: Milestone: Disseminate lessons learned and best practices

Outcome improvement targets for each year:

- DY 4:
  - IT-7.2 Cavities: Reduce by 2% over baseline Percentage of children with untreated dental caries (Healthy People 2020) (Standalone measure)
- DY 5
  - IT-7.2 Cavities: Reduce by 5% over baseline Percentage of children with untreated dental caries (Healthy People 2020) (Standalone measure)

### **Rationale:**

The process milestones P4 and P5 were chosen for this project based on the need for documentation of baseline and continuous quality improvements in program for reduction of dental caries. The PDSA cycle will inform systematic data driven program improvements. Inadequate access to dental services compounds other health issues. It can result in untreated dental disease that not only affects the mouth, but can also have physical, mental, economic and social consequences. Fortunately, many of the adverse effects associated with poor oral health can be prevented with quality regular dental care, both at home and professionally. Increasing, expanding, and enhancing dental services will improve overall health outcomes. The improvement targets are based on the two single most important indicators for childhood dental health. Children who have regular access

to a dental provider are more likely to have received dental services that can prevent or treat early dental disease. Additionally, unserved or underserved perinatal women are a specially vulnerable group not only for their own dental health but also for the dental health of their children. Education on the importance of dental health can help promote better dental health in young children.

**Outcome Measure Valuation:**

The Outcome measure was valued at 12.29 % of the overall assigned project value for the associated Category 2 project in year 3, 12.29 % in Year 4 and 12.29 % in Year 5. HHDHS utilized the following method to determine the Category 2 project value.

HDHHS utilized two categories to calculate value for each DSRIP project. The first category is Prioritization and the second is Public Health Impact (see attachment for HDHHS Valuation Tool). HDHHS scored the project on a scale of 1 (poor) to 9 (exceptional) for each of the six factors that comprise the Prioritization category. The Prioritization category includes the following factors: 1) Transformational Impact, 2) Population Served / Project Size, 3) Alignment with Community Needs 4) Cost Avoidance 5) Partnership Collaboration and 6) Sustainability. Each factor was then given a weighted score based on the score rated and a pre-determined percentage weight. The six weighted scores were added to get a composite score for the Prioritization category.

Public Health includes activities which seek to achieve the highest level of health for the greatest number of people. Public Health also focuses on preventing problems from happening or re-occurring through programs and activities that promote and protect the health of the entire community. As a public health department, HDHHS added an additional valuation category of Public Health Impact that looked at projects through a public health lens. The Public Health Impact category includes the following factors: 1) Alleviate Health Disparity, 2) Control Communicable and Chronic Disease, 3) Prevention Orientation, 4) Population Health Focus, 5) Access and Connection to Health Services and 6) Evidence Based Health Program. HDHHS scored the project on a scale of 1 (poor) to 9 (exceptional) for each of the six factors that comprise the Public Health Impact category. Each factor was then given a weighted score based on the score rated and a pre-determined percentage weight. The six weighted scores were added to get a composite score for the Public Health Impact category.

HDHHS gave the Prioritization score a weight of 25% and the Public Health Impact score a weight of 75% to determine the overall project value for the plan. Oral Health Service Expansion received a composite Prioritization score of 7.65 and a Public Health Impact score of 7.

Unique Category 3 ID: 0937740-08.3.2	Ref Number from RHP PP: IT-7.2	IT-7.2 Cavities: Percentage of children with untreated dental caries (Healthy People 2020)	
[RHP Performing Provider involved with this project - Name] City of Houston Health and Human Services			TPI - 0937740-08
<b>Related Category 1 or 2 Projects::</b>	Unique Cat 1 ID: 0937740-08.1.1		
<b>Starting Point/Baseline:</b>	TBD in DY2-3		
<b>Year 2</b> (10/1/2012 – 9/30/2013)	<b>Year 3</b> (10/1/2013 – 9/30/2014)	<b>Year 4</b> (10/1/2014 – 9/30/2015)	<b>Year 5</b> (10/1/2015 – 9/30/2016)
<b>Process Milestone 1 [P- 3] Develop and test data systems</b>  Metric: Select, install and test data system  Goal: Install efficient and effective data system to capture program data  Data Source: Documentation of selection, testing and implementation of data system  Milestone 1 Estimated Incentive Payment: \$74,252	<b>Process Milestone 2 [P-4]:</b> Conduct Plan Do Study Act cycle to continually improve  Metric: Document use of PDSA in planning process  Goal:Goal: Utilize a systematic cyclical process for quality improvement  Data Source: Program documentation  Process Milestone 2 Estimated Incentive Payment: \$148,876  Milestone 2 Estimated Incentive Payment: \$73,938  <b>Process Milestone 3 [P-5]:</b> Disseminate lessons learned and best practices  Metric 1: Documentation of best practices and lessons learned  Goal: Share lessons learned to add to knowledge base and inform others	<b>Outcome Improvement Target 1 [IT-7.2]:</b> Cavities: Percentage of children with untreated dental caries (Healthy People 2020)  a Numerator: Number of children with untreated dental caries(past 12 months) enrolled in Program  b Denominator: Total number of children that have seen a dental provider within the measurement period(past 12 months) enrolled in Program  Goal: Reduce by 2% over baseline the percentage of children with dental caries in the Oral Health program. (Baseline TBD in DY 2-3)  c Data Source: Program Electronic Records  <b>Outcome Improvement Target 1</b> Estimated Incentive Payment:	<b>Outcome Improvement Target 2 [IT-7.2]:</b> Cavities: Percentage of children with untreated dental caries (Healthy People 2020)  a Numerator: Number of children with untreated dental caries(past 12 months) enrolled in Program  b Denominator: Total number of children that have seen a dental provider within the measurement period(past 12 months) enrolled in Program  Goal: Reduce by 5% over baseline the percentage of children with dental caries in the Oral Health program  c Data Source: Program Electronic Records  <b>Outcome Improvement Target 2</b> Estimated Incentive Payment:

Unique Category 3 ID: 0937740-08.3.2	Ref Number from RHP PP: IT-7.2	IT-7.2 Cavities: Percentage of children with untreated dental caries (Healthy People 2020)	
[RHP Performing Provider involved with this project - Name] City of Houston Health and Human Services			TPI - 0937740-08
Related Category 1 or 2 Projects::	Unique Cat 1 ID: 0937740-08.1.1		
Starting Point/Baseline:	TBD in DY2-3		
Year 2 (10/1/2012 – 9/30/2013)	Year 3 (10/1/2013 – 9/30/2014)	Year 4 (10/1/2014 – 9/30/2015)	Year 5 (10/1/2015 – 9/30/2016)
	implementing similar projects  Data Source: Program Documentation  Milestone 3 Estimated Incentive Payment: \$73,938	\$148,132	\$296,859
Year 2 Estimated Outcome Amount: \$ 74,252	Year 3 Estimated Outcome Amount: \$ 147,876	Year 4 Estimated Outcome Amount: \$148,132	Year 5 Estimated Outcome Amount: \$296,859
TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD (add outcome amounts over DYs 2-5):\$667,119			