

IHS Division of Oral Health



Dental Depression Screening Demonstration Project

Final Report

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Conceptual Design, Project Duration, Purpose

In December 2009 the U.S. Preventive Services Task Force (USPSTF) released recommendations on screening adults for depression in primary care settings, with a “B” recommendation (moderate certainty that the net benefit is moderate to substantial) for screenings when staff-assisted depression care supports are in place, and a “C” recommendation (selective offering) when such there are no care supports on site or in place.

<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-adults-screening>.

Subsequently, on January 28, 2016, a project was developed to help promote depression screenings in IHS, Tribal, and IHS-funded urban dental programs. On August 19, 2016, the Division of Oral Health reached out to the IHS Division of Behavioral Health to collaborate on the project. With support from them and the Improving Patient Care Initiative team at IHS Headquarters, the project began on October 1, 2016 and ended on March 31, 2017, a six-month duration. The purpose of the project was to identify best practices related to using the Patient Health Questionnaire (PHQ) – 2 Depression Screening Tool in a dental setting (Attachment 1).

Participating Sites

On September 9, 2016, a solicitation e-mail was sent to IHS Area Dental Officers to identify sites within their Areas which might want to participate in the demonstration project. These sites, all of which were invited to participate, were:

Clinic Name	IHS/Tribal	Location	IHS Area
Bad River	Tribal	Ashland, Wisconsin	Bemidji
Consolidated Tribal Health Project	Tribal	Calpella, California	California
Crow Service Unit	IHS	Crow Agency, Montana	Billings
Crownpoint Service Unit	IHS	Crownpoint, New Mexico	Navajo
Fort Belknap	IHS	Ft. Belknap, Montana	Billings
Keams Canyon Service Unit	IHS	Polacca, Arizona	Phoenix
Ketchikan Indian Corporation	Tribal	Ketchikan, Alaska	Alaska
Rosebud Service Unit	IHS	Rosebud, South Dakota	Great Plains
St. Regis Mohawk Clinic	Tribal	Akwesasne, New York	Nashville
Taos-Picuris Service Unit	IHS	Taos, New Mexico	Albuquerque
Western Oregon Service Unit	IHS	Salem, Oregon (Chemawa)	Portland
Wewoka	IHS	Wewoka, Oklahoma	Oklahoma City
White Earth Health Center	IHS	White Earth, Minnesota	Bemidji

Due to significant staff changes, including the loss of the dental chief, Crownpoint Service Unit dropped out of the demonstration project after one month.

Structure/Format

The demonstration project kicked off with a webinar entitled “Depression Screening in Dentistry,” presented by Dr. Gabriel Longhi from the Albuquerque Area Indian Health Service. This presentation, which laid the foundation for why depression screenings are important, was well attended, with 76 different telephone participants, 94 participants who registered in the IHS Continuing Dental Education (CDE) course, and 89 participants who received CDE course credit. Since many dental staff, especially dental assistants, do not seek CDE credits through webinars, we estimate that the total attendance of this webinar was approximately 150 dental staff from I/T/U programs. The recording can be accessed at <https://ihs.adobeconnect.com/p2nrm8uxgea/>.

Four webinars were planned and executed for the 13 (later 12) I/T/U pilot project sites. These included webinars on November 30, 2016; January 25, 2017; February 22, 2017; and March 22, 2017. CDE credits were offered to participants of each of these webinars, with a total of 47.5 participant CDE hours awarded as a result. With each of the webinars, participants were asked to report on their progress in implementing the PHQ-2 depression screenings in their programs using IPC-recommendation tools to document successes, failures, and lessons learned (the Plan-Do-Study-Act form).

Recordings can be accessed on Adobe Connect as follows:

- November 30, 2016 – <https://ihs.adobeconnect.com/p1l4otyitob/>;
- January 25, 2017 – <https://ihs.adobeconnect.com/p28ixkwq098/>;
- February 22, 2017 – <https://ihs.adobeconnect.com/p3pp3234681/>; and
- March 22, 2017 – <https://ihs.adobeconnect.com/p79b169dbvx>.

Baseline Data

At the onset of the project, each site was asked to complete a baseline survey. Of the 13 initial programs, two reported that they currently used the PHQ-2 to conduct depression screenings, two reported that they used some other type of depression screening tool, two reported that they had tried but had given up doing depression screenings, and seven programs reported that they had never conducted depression screenings in their dental clinics. Regarding potential referrals for positive screenings, eight programs that they had an existing referral program in place for any behavioral health issues to a behavioral health provider, while three programs stated that they referred patients with behavioral health issues to a primary care provider (physician) rather than to a behavioral health provider.

The baseline survey also looked at the number of patients served or referred by the pilot project sites. Excluding Crownpoint, which later dropped out of the project, the 12 project sites served a total of 28,271 dental patients out of a user population of 71,427, with 16,224 of those patients 12 years of age or older (the recommended age for screenings). For Fiscal Year 2016, the pilot project sites reported a total of 1,064 depression screenings in dental and 46 total referrals.

Results

On the last webinar, eight of the 12 programs reported out to the group.

Clinic Name	# of Sites	%
<i>What type of PHQ-2 is being used now by your program?</i>		
• Scored (0-3)	8	100
• Unscored	0	0
<i>What method of screening are you currently using?</i>		
• 42-1 (IHS Dental Patient Medical History Form)	5	62.5
• Separate form	3	37.5
<i>Who is doing dental depression screening in your clinic?</i>		
• Dentist only	2	25.0
• Dental hygienist only	0	0.0
• Dental assistant only	1	12.5
• Dental receptionist only	1	12.5
• All dental staff	4	50.0
<i>Who is being screened?</i>		
• Adults only	1	12.5
• Adolescents only	0	0.0
• Adults & adolescents	7	87.5
<i>What % is screened? Average of responding programs</i>		
• Previous six months (1/2 of annual results)	-	6.6%
• 6 months of the project	-	89.6%
<i>Who are you referring to?</i>		
• Behavioral Health	6	75.0
• Primary Care	1	12.5
• Both	1	12.5
<i>How many referrals for depression have you made?</i>		
• Previous year (1/2 of annual results)	23	-
• 6 months of the project	111	-
<i>After completing this project, do you see value in continuing depression screenings?</i>		
• Yes	8	100.0
• No	0	0.0

For the demonstration project, a scored and unscored version of the PHQ-2 was developed for adults and adolescents, both as a stand-alone form and as part of the IHS Form 42-1, Page 2, IHS Dental Patient Medical History Form. Versions of these documents can be found in Attachments 2-4 at the end of this report. The majority of participating programs utilized the modified 42-1 form since this form is used at least annually to update patients' medical histories. However, two programs used a form developed by their Area to record all GPRA-related screenings (Attachment

5), and one program utilized a peel-off label that could be affixed to the patient’s progress note or referral notice.

Depression screenings were conducted by all dental staff, with two programs noting that only the dentist performed the screenings while four programs said that all staff had performed the screenings. All but one program screened both adolescents (12 and older) and adults, with a substantial improvement in “institutionalizing” screenings into the dental program, going from 6.6% of patients screened for depression to a cumulative average of almost 90% in the span of six months. Referrals also increased significantly as a result, from 46 referrals in the previous year to 111 referrals in the six months of the project, a 382% increase (Figures 1 & 2). All of the participating sites stated that they saw value in the depression screenings conducted in the dental program.

Figure 1. Results of 6-month IHS Dental Depression Screening Demonstration Project: Number of Patients Screened

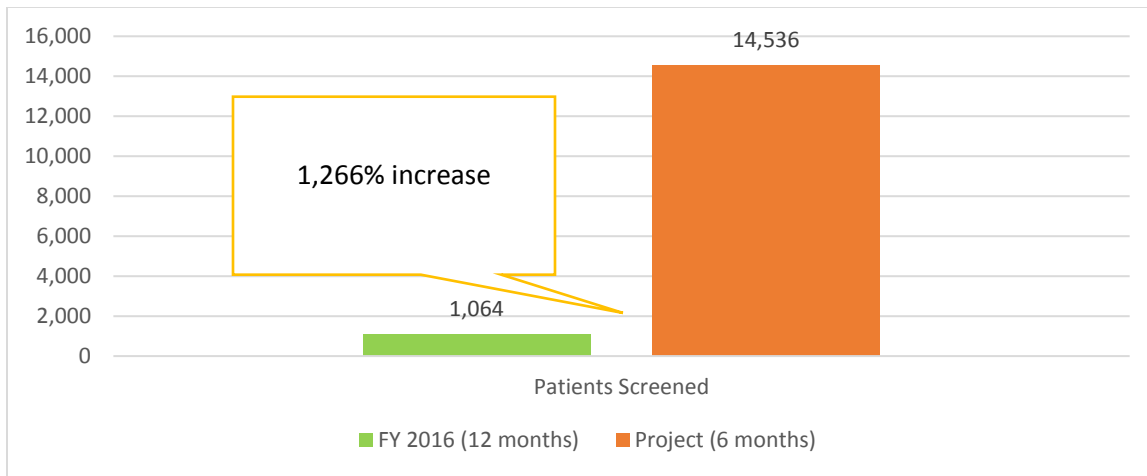
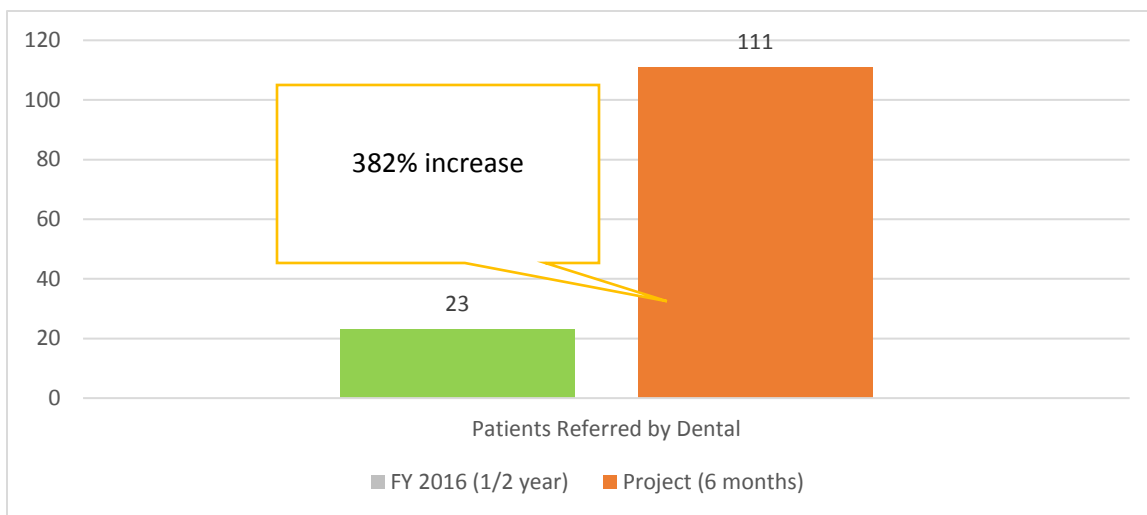


Figure 2. Results of 6-month IHS Dental Depression Screening Demonstration Project: Number of Patients Referred for Follow-Up Care



Barriers/Problems Encountered

Since this demonstration project was meant to lead to promoting depression screening in dental programs as a best practice, we asked the participating programs to identify barriers and problems throughout the six-month project. Three issues seemed to be mentioned throughout the project: (1) buy-in from dental staff and dental patients; (2) communication between the dental program and behavioral health program; and (3) documentation and coding of depression screenings conducted in dental in order to track progress.

For some programs that may have not conducted other “non-dental” screenings in the past (alcohol/substance abuse, domestic/intimate partner violence, etc.), they had to first educate patients as to why the dental program was conducting depression screenings in the first place. Ft. Belknap, for example, provided one-on-one education to patients while conducting the screening. Several programs, including St. Regis Mohawk, Ft. Belknap, Hopi, and Ketchikan, also spent time educating dental staff about why the depression screenings were needed so that they would get staff buy-in. A few programs also had high staff turnover which also affected staff buy-in. Crownpoint, which lost their dental chief a month into the project, dropped out even after the chief executive officer/clinical director was invited to each of the webinars. Bad River hired a new dental director in the middle of the project.

In hindsight, one of the faults of this project was that there was no effort at the national level to inform behavioral health providers at the demonstration sites about the project. Consequently, some of the dental programs had some communication barriers that had to be identified and improved. Consolidated Tribal Health, for example, reported that behavioral health questioned why the screenings were being performed by dental staff and what impact such screenings would have on their workload. Other communication issues also existed. Ft. Belknap was unable to make direct referrals to behavioral health and had to work through the nursing program. Taos-Picuris was unable to make “warm hand-offs” to the behavioral health department at their request. Ketchikan, while currently having no issues with communicating with behavioral health, worried that a future move of behavioral health out of the ambulatory facility would affect future referrals from the dental program.

Documentation and coding issues permeated each of the webinars, and each of the participating demonstration sites chose unique ways to address tracking and documentation. The Crow Service Unit, for example, utilized an Electronic Health Record (EHR) questionnaire that was already embedded in a screening template in their EHR (Attachment 6). Chemawa utilized the PDSA document (Attachment 7) to document improvement in tracking screenings. Taos-Picuris utilized the previously mentioned GPRA Screening Tool (Attachment 5) to record the screenings into the EHR. White Earth, as well as others, utilized a “user-defined” code (identified locally as IH33 through IH49) to mark depression screenings so that they could be tracked. Overall, there was not a single coding/documentation problem, nor was there a single coding/documentation solution.

Lessons Learned, Moving Forward

The major lesson learned by demonstration sites was that each site was unique in how they implemented depression screenings in the dental program, from their existing communications and referral processes to staff buy-in to documentation and coding. Several of the programs embraced the direction given by the IPC team, and attached to this report include an example of an Ami Charter from Chemawa (Attachment 8) as well as an example of a PDSA from White Earth and (Attachment 9).

What is next for depression screenings in I/T/U dental programs? Because this demonstration project showed that with no financial incentive whatsoever (the IHS did not provide any funding to participating sites), dental programs not only embraced depression screenings but did so with remarkable results – a 1200% increase in patients screened and a 400% increase in referrals, all in less than six months, replication of this project should be possible. Like other IHS Division of Oral Health initiatives, we plan to utilize the demonstration sites to serve as subject matter experts to describe to programs how they implemented depression screenings in their dental programs.

Below is a description of how depression screenings will be promoted through I/T/U programs in FY 2017 and FY 2018:

- July 2017, with the roll-out of GPRA Year 2018: E-mail on IHS Dental Listserv, and promotional flyer on the IHS Dental Portal, to promote depression screenings in dental programs;
- November 2017: Continuing Dental Education recorded webinar promoted to IHS, Tribal, and Urban dental staff; and
- Other promotions throughout the year through the IHS Oral Health Promotion/Disease Prevention Program.

Attachments

- Attachment 1 – Depression Pilot Project Flyer
- Attachment 2 – PHQ-2, Scored Version, incorporated into the IHS Form 42-1
- Attachment 3 – PHQ-2, Scored Version, Adult
- Attachment 4 – PHQ-2, Scored Version, Adolescent
- Attachment 5 – Dental GPRA Screening Form
- Attachment 6 – EHR Questionnaire, Crow
- Attachment 7 – PDSA Example, Chemawa
- Attachment 8 – Ami Charter, Chemawa
- Attachment 9 – PDSA Example, White Earth



IHS Division of Behavioral Health-Oral Health Depression Screening Pilot Project

The **IHS Division of Oral Health**, in partnership with the **IHS Division of Behavioral Health**, is seeking IHS, Tribal, or Urban dental programs who would like to participate in a Depression Screening Pilot Project. The purpose of the project will be to identify best practices related to using the PHQ-2 Depression Screening Tool in a dental setting.

- ◆ Pilot Project Period: October 1, 2016—March 31, 2017
- ◆ Training on depression screening & follow-up will be provided to pilot project sites
- ◆ Approximately \$5,000 (pending funding availability) will be made available for selected pilot sites
- ◆ Pilot project sites must participate in monthly conference calls to share progress

If your program is interested in being part of this project, please contact your Area Dental Officer by September 15, 2016.



The Patient Health Questionnaire-2 (PHQ-2)

Over the past 2 weeks, how often have you been bothered by any of the following problems?	Not At All	Several Days	More Than Half the Days	Nearly Every Day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3



DENTAL PATIENT MEDICAL HISTORY

Patient Name: _____ DOB: _____ Chart #: _____

Reason for Dental Visit? _____ When was you last dental visit? _____

Do You Have a Toothache Now? (Please Circle) Yes No If Yes, on a scale of 1-10, with 10 being the most painful, what is your pain level? _____

If you are unsure of how to answer any of the questions below, please ask dental staff for help! Do you have or have you had any of the following? (Please check)

	Yes	No		Yes	No
*Organ Transplant -- Date:			Epilepsy, Seizures, or Nervous System Disease		
*Joint Replacement (hip, knee, ankle, shoulder) -- Date:			Stroke		
*Artificial Heart Valve -- Date:			Allergy to latex, iodine, or red dye (circle all that apply)		
*Congenital Heart Disease, Defect, or Heart Murmur:			Allergy to: metal or local anesthetics (circle)		
*Bacterial Endocarditis (SBE)			Cancer/tumors -- Dates: _____ Type: _____		
*Kidney Problems or Dialysis (circle)			Chemotherapy or Radiation -- Dates: _____		
*Spleen removed			Tuberculosis -- currently or in past (circle)		
Steroid Use (e.g. prednisone) -- Dates:			Asthma, or other Lung Disease		
HIV or AIDS or do you believe you have been exposed?			Ulcers		
Lupus (SLE)			Arthritis		
Rheumatoid Arthritis			Osteoporosis		
Diabetes: Type I Type II (circle)			Thyroid Problems --- High or Low (circle)		
Other Immunosuppressive Condition:			Mental Health Condition:		
Hepatitis -- treated in past or currently active Type:			Physical or Mental Disability that requires special consideration:		
Other Liver Disease			Chemical Dependency (alcohol /other drugs)		
Pacemaker / Defibrillator or other Artificial Device / Implant -- Date:			Do you smoke or chew tobacco?		
Congestive Heart Failure			If yes, are you interested in quitting?		
Heart Disease or Heart Attack -- Dates:			Any other disease or condition?		
Chest Pain / Angina			WOMEN ONLY:		
High Blood Pressure			Are you pregnant?		
Have you or are you taking blood-thinners?			Are you nursing?		
Anemia or Abnormal Bleeding or Bruising			Are you taking birth control?		

Depression Screening Questions:

Over the past 2 weeks have you been bothered by:

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3

List any medications that you are allergic to and what type of reaction: _____

List medications you currently take (including over-the-counter drugs): _____

Date of last medical appointment _____ Primary Care Provider Name _____

Have you ever been hospitalized? _____ When and What for? _____

Do you have any disease, condition, or problem not listed? No Yes (If yes, specify) _____

IMPORTANT! The answers I have given above are true to the best of my knowledge. I am indicating my consent for routine diagnostic tests and procedures such as x-rays, cleaning, fillings, local anesthesia, blood pressure, and glucose by signing below on behalf of myself or the below named minor in my guardianship.

Signature (Patient or guardian if patient is a minor)

Date

Signature (Dentist/Hygienist)

Date

Patient Health Questionnaire-2 (PHQ-2) – Adult Scored

NAME: _____ DATE: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use "X" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3

Patient Health Questionnaire-2 (PHQ-2) – Adolescent (12-17) Scored

NAME: _____ DATE: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use "X" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, irritable, or hopeless	0	1	2	3

Taos Picuris Service Unit
REQUIRED SCREENING TOOL FOR EVERY PATIENT

Ages 12 years and Over
– Please Complete the Following – Thank You

NAME – DOB or CHART# _____ **Date of Visit** _____

DEPRESSION

In the last TWO weeks, how often have you:

Felt down, depressed or hopeless? (Please check one)

____ Not at all (0) ____ Several days (1) ____ More than a week (2) ____ Nearly every day (3)

Not enjoyed or lost interest in doing things that you usually do?

____ Not at all (0) ____ Several days (1) ____ More than a week (2) ____ Nearly every day (3)

If you are feeling depressed or have a history of depression are you?

____ Currently taking medication
____ Receiving regular therapy
____ Want to request help

TOBACCO

A.) Tobacco (Smokeless – Chewing/Dip)

1. ____ Cessation – Smokeless
2. ____ Current Smokeless
3. ____ Never Used Smokeless Tobacco
4. ____ Previous (Former) Smokeless
5. ____ Smokeless Tobacco, Status Unknown

B.) Tobacco Exposure

1. ____ Exposure to Environmental Tobacco Smoke
2. ____ Smoke Free Home
3. ____ Smoker in Home

C.) Tobacco (Smoking)

- | | |
|------------------------------------|---|
| 1. ____ Ceremonial Use Only | 2. ____ Current Smoker (Every Day) |
| 3. ____ Current Smoker (Some Days) | 4. ____ Current Smoker (Status Unknown) |
| 5. ____ Heavy Tobacco Smoker | 6. ____ Light Tobacco Smoker |
| 7. ____ Never Smoked | 8. ____ Previous Smoker |
| 9. ____ Smoking Status Unknown | |

ALCOHOL/DRUGS

____ **I do not use Alcohol or Drugs (If your answer is NO, go to the next Topic)**

- | | | |
|--|----------|---------|
| 1. Have you ever felt you should CUT down on your alcohol or drugs use? | ____ Yes | ____ No |
| 2. Have people ANNOYED you by criticizing your drinking or drug use? | ____ Yes | ____ No |
| 3. Have you ever felt BAD or GUILTY about your drinking or drug use? | ____ Yes | ____ No |
| 4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or get rid of a hangover or get the day started? | ____ Yes | ____ No |

DOMESTIC VIOLENCE/INTIMATE PARTNER RELATION

- | | | | |
|---|----------|---------|----------------|
| 1. Do you feel SAFE with the people you live with or spend time with? | ____ Yes | ____ No | ____ Want Help |
| 2. Are you afraid to go home? | ____ Yes | ____ No | ____ Want Help |
| 3. Has anyone forced you to have sexual activities recently? | ____ Yes | ____ No | ____ Want Help |

REQUIRED SCREENING TOOL FOR EVERY PATIENT

Ages 1 Day to 11 years old

- Please Complete the Following – Thank you

NAME–DOB–or CHART # _____ DATE of VISIT _____

1. Is your child exposed to ANY type of Tobacco Smoke?

_____ Yes

Please circle one:

a. Ceremonial

b. Smoker in Home

_____ No

a. Smoke Free Home

EHR Questionnaire

1. Over the Past two weeks, how often have you been bothered by any of the following problems? (Check one answer in each section)

- a. Little interest or pleasure in doing things
 - i. ____ 0 = Not at all
 - ii. ____ 1 = Several days
 - iii. ____ 2 = More than half the days
 - iv. ____ 3 = Nearly every day

- b. Feeling down, depressed, or hopeless
 - i. ____ 0 = Not at all
 - ii. ____ 1 = Several days
 - iii. ____ 2 = More than half the days
 - iv. ____ 3 = Nearly every day

2. Do you use alcohol? YES / NO

If YES, how many drinks do you have on average per week? (Check one)

- a. ____ 7 or less
- b. ____ 8 - 14
- c. ____ More than 14

3. Do you use tobacco? YES / NO

Check all that apply:

____ Never used	____ Quit over 6 months ago
____ Quit within 6 months	____ Exposed to second hand smoke
____ Use cigarettes/cigars	____ Use E cigarettes
____ Use smokeless tobacco	____ Use for ceremonial purposes

4. Do you feel safe in your home? YES / NO

If NO, why not? _____

5. Physical Activity Level (Check one):

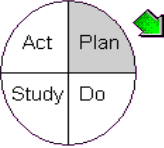
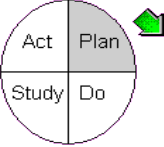
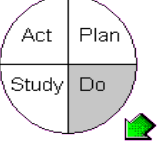
- a. ____ Inactive
- b. ____ Some Activity
- c. ____ Active
- d. ____ Very Active

FOR OFFICE USE ONLY:

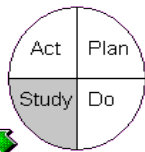
Chart Number: _____ Height: _____ Weight: _____

B/P: ____/____ P: _____ Pain (1-10): _____

PDSA Cycle Form for Data Collection & Testing (Please Use Implementation PDSA for Implementation)

Cycle # P#W#	Start Date:	End Date:
CYCLE OBJECTIVE:	___ Collect Data to Develop a Change OR <u>X</u> Test a Change* Description of Change to be Tested: Develop a process for entering screening data into EHR.	
<p>PLAN</p> 	<p>What do we want to learn from the Cycle? Learning Questions:</p> <ol style="list-style-type: none"> How will this change increase percentage of patients screened for depression yearly? <ol style="list-style-type: none"> Prediction: Increased number of patients screened for depression yearly How will this change increase the number of patients screened yearly for depression in the dental clinic? <ol style="list-style-type: none"> Prediction: Patients will be screened yearly for depression in the dental clinic How will this change increase number of referrals made versus number of positive responses? <ol style="list-style-type: none"> Prediction: Patients with positive responses will get a referral to the appropriate provider How will this change increase GPRA measurement for depression screening for all ages for FY 2017? <ol style="list-style-type: none"> Prediction: Increased number of patient screened for depression How will this change maintain or increase stakeholder satisfaction? <ol style="list-style-type: none"> Prediction: Patients satisfaction will increase with the additional service Prediction: Provider satisfaction will increase 	
<p>Part 2 of Plan</p> <p>*For Test reference p. 171 of Improvement Guide for Testing Checklist **For Implementation Cycle reference p. 185 for Implementation Checklist ***Planning Form for Data Collection, Improvement Handbook, p. 12-11</p> <p>PLAN</p> 	<p>Test Plan: (if Collect Data Cycle Only ---- Skip this Section)</p> <p>What specific change(s) will be tested? Develop a process for entering screening data into EHR.</p> <p>What issues need to be addressed in the design? (list questions about things which are important to consider as you design the test) How/who will record screenings in the EHR? Can the screening be recorded in Dentrix? How will the change be designed and pretested? Who will be involved? Can data be entered in EHR while patient is in the chair? Do all assistants and providers have access to EHR and the knowledge of how to enter data? How will the change be tested once there is a final design? (complete questions below)</p> <ul style="list-style-type: none"> What will be the wide range of conditions? <ul style="list-style-type: none"> Adult patients Adolescent patients Where will the test be conducted? <ul style="list-style-type: none"> WOSU When will the test be conducted? <ul style="list-style-type: none"> March 2017 How long will the test last? (5 minutes, an hour, a day, etc.) <ul style="list-style-type: none"> One week Who will instruct the participants how to run the test? <ul style="list-style-type: none"> Dr McLaughlin Who will monitor the test? <ul style="list-style-type: none"> Dr McLaughlin <p>Collect Data Plan (Required for all PDSA cycles): Using the learning questions, what information and measures are important to collect? Any additions? What Measures/ How will the information be collected? (insert surveys & data collection forms)</p> <p>Who will collect the data? Dr McLaughlin and Connie Rutledge</p> <p>Who will graph the data prior to Study? Connie Rutledge</p> <p>When will the collection of data take place? January 2017</p>	
<p>DO</p> 	<p>Observations: Surprises not part of the plan:</p> <p>Did you need to modify the original Plan? If so, why?</p> <p>Note: Document modifications in the Plan portion (use different color to note changes ex: "extend test")</p>	

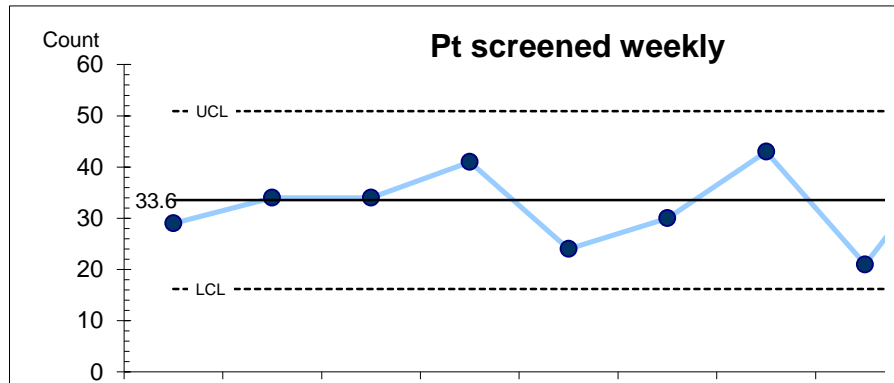
PDSA Cycle Form for Data Collection & Testing (Please Use Implementation PDSA for Implementation)



STUDY

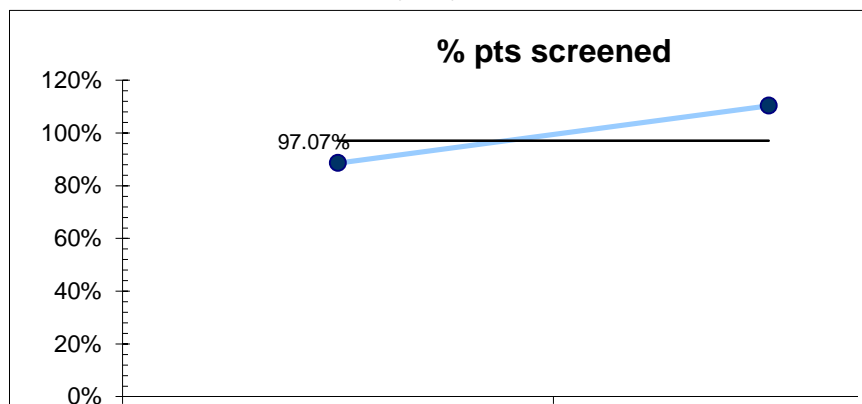
Questions: *(Copy & paste all Learning Questions and Predictions from Plan above and Insert Graphs.)*

1. How will this change increase percentage of patients screened for depression yearly?
 - a. Prediction: Increased number of patients screened for depression yearly



- b.
- c. What did we learn? We have screened an average of 33.6 patients per week in the dental clinic.

2. How will this change increase the number of patients screened yearly for depression in the dental clinic?
 - a. Prediction: Patients will be screened yearly for depression in the dental clinic



- b.
- c. What did we learn? *By incorporating the depression screening into the annual health history form we have been able to screen 97.07% of first patients seen for their first visit this fiscal year. We have gone from not screening patients for depression to screening 97.07% of patients in the first two months of the project.*

3. How will this change increase number of referrals made versus number of positive responses?
 - a. Prediction: Patients with positive responses will get a referral to the appropriate provider

- b. **Insert graph**
- c. What did we learn? *Chemawa students are able to be referred to our behavioral health department but the resources for our community members are very limited. We do have a list of outside resources available for our community member patients.*

4. How will this change increase GPRA measurement for depression screening for all ages for FY 2017?
 - a. Prediction: Increased number of patient screened for depression

- b. **Insert graph**
- c. What did we learn? *At this time the information on our impact on the GPRA scores is unknown. We have learned patients with a diagnosis of depression require biannual screening to meet GPRA requirements.*

5. How will this change maintain or increase stakeholder satisfaction?
 - a. Prediction: Patients satisfaction will increase with the additional service
 - b. Prediction: Provider satisfaction will increase

- c. **Insert graph**
- d. What did we learn?

New Issues: (include surprises or other things which were uncovered during the test/data collection)

Summarize What We learned from the test: (Write a short explanation of what was learned in total.)

Describe next PDSA Cycle; New Questions to Answer/Decisions made/Action to be taken
What action(s) will be taken concerning any New Issues?

What action(s) will be taken based on the results of the test? (Expand it?/Abandon/Revise/Test something new)

ACT



PDSA Cycle Form for Data Collection & Testing (Please Use Implementation PDSA for Implementation)

Ad Hoc Contributors	Recognize subject matter experts, people who conducted the tests, and others who have contributed to the learning:
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Depression Screening: Dental

<p>Describe Project:</p> <p>Redesign existing ___ Product, process or service X Design new product, process or service ___ Improve system as a whole (Drivers, mainstay, support) ___ Use an existing working ___ Improvement (best practice)</p> <p>Brief Description: Screen all dental patients for depression.</p> <p>Current Situation: Patients are not screened for depression during dental visits.</p> <p>Boundaries: Team has latitude. Initially works independently but will routinely collaborate and ultimately create standardized screening protocol.</p> <p>Sponsor: Tim Ricks, DMD</p> <p>Leader: Michael McLaughlin, DDS</p> <p>Core Team Members: Eddie Thompson, DMD, Sarah Hiller, RDH, Connie Rutledge, RDH, Laura Williams, Leh Landeros, San Key, Kim Lewis, Kristi Esquivel</p>
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<p>Outcome Goal: All dental patients will be screened yearly for depression</p> <p>Measure: Percentage of dental patients screened for depression yearly</p> <p>Process Goal: Incorporate yearly depression screening into health history</p> <p>Measure: Number of patients screened yearly for depression in the dental clinic</p> <p>Process Goal: Patients with a positive depression screen are referred to behavioral health or primary care</p> <p>Measure: Number of referral made versus number of positive responses</p> <p>Process Goal: Help increase GPRA measurement for depression screening for all ages for FY 2017</p> <p>Measure: Percentage of patients screened for depression in the dental clinic</p> <p>Balancing Goal: Maintain or increase stakeholder satisfaction</p> <p>Measure: Patient satisfaction rating Provider satisfaction rating</p>
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Ways to...

- Focus on the outcome to the customer
- Consider people in the same system
- Use automation
- Use reminders
- Minimize handoffs
- Use reminders
- Standardization/create a formal process

PDSA Objective: Choose which PHQ-2 is to be incorporated into dental health history.

Learning Questions:

1. How will this change increase percentage of patients screened for depression yearly?
2. How will this change increase the number of patients screened yearly for depression in the dental clinic?
3. How will this change increase number of referrals made versus number of positive responses?
4. How will this change increase GPRA measurement for depression screening for all ages for FY 2017?
5. How will this change increase stakeholder satisfaction?

PDSA Objective: Incorporate yearly depression screening into health history

Learning Questions:

1. How will this change increase percentage of patients screened for depression yearly?
2. How will this change increase the number of patients screened yearly for depression in the dental clinic?
3. How will this change increase number of referrals made versus number of positive responses?
4. How will this change increase GPRA measurement for depression screening for all ages for FY 2017?
5. How will this change increase stakeholder satisfaction?

PDSA Objective: Patients with a positive depression screen are referred to behavioral health or primary care

Learning Questions:

1. How will this change increase percentage of patients screened for depression yearly?
2. How will this change increase the number of patients screened yearly for depression in the dental clinic?
3. How will this change increase number of referrals made versus number of positive responses?
4. How will this change increase GPRA measurement for depression screening for all ages for FY 2017?
5. How will this change increase stakeholder satisfaction?

Charter Approval Form

Project Name: **Depression Screening: Dental**

Wave Number: 1

Project Number: 1

WHAT ARE WE TRYING TO ACCOMPLISH?	DESCRIPTION OF PROCESS, PRODUCT OR SERVICE TO BE IMPROVED AND DESIRED OUTCOME: <i>Use the Ami™ Charter Description:</i> Screen all dental patients for depression.	
	ORGANIZATION IMPACT: Increase number of patients screened for depression. WILL THIS IMPACT THE CUSTOMER? Yes	ESTIMATED TIME SAVINGS Intangible
HOW WILL WE KNOW A CHANGE IS AN IMPROVEMENT?	GOALS: 1. All dental patients will be screened yearly for depression 2. Incorporate yearly depression screening into health history 3. Patients with a positive depression screen are referred to behavioral health or primary care 4. Help increase GPRA measurement for depression screening for all ages for FY 2017 5. Maintain or increase stakeholder satisfaction	MEASURES: (define) 1. Percentage of dental patients screened for depression yearly 2. Number of patients screened yearly for depression in the dental clinic 3. Number of referrals made versus number of positive responses 4. Percentage of patients screened for depression in the dental clinic 5. Patient satisfaction rating Provider satisfaction rating
	CURRENT PERFORMANCE: Currently dental patients are not screened for depression	
<i>NOTE: Measures should be directly related to project description and objectives and include Outcome, Process and Balancing Measures</i>		
TEAM RECOMMENDATIONS	TEAM LEADER: Michael McLaughlin, DDS TEAM COACH: Tim Ricks CORE TEAM MEMBERS: Eddie Thompson, DMD, Sarah Hiller, RDH, Connie Rutledge, RDH, Laura Williams, Leh Landeros, San Key, Kim Lewis, Kristi Esquivel POTENTIAL AD HOC TEAM MEMBERS: Medical team staff and behavioral health team staff	
	MEETING DURATION/FREQUENCY: Weekly/60 minutes SPONSOR REVIEW SCHEDULE: Monthly	ESTIMATED COMPLETION: 100 days or less

APPROVALS

TEAM LEADER:

DATE:

TEAM COACH: (Can be Faculty)

DATE:

SPONSOR:

DATE:

Tips for completing a PDSA cycle using the Model for Improvement

The Model for Improvement, and the PDSA cycle that is part of it, is a framework for applying the five fundamental principles of improvement:

1. Knowing what you need to improve.
2. Having a feedback mechanism to tell you if improvement is happening.
3. Developing a change that will result in improvement.
4. Testing a change before implementing it.
5. Know when and how to make a change permanent. ¹

Step 1: Decide what you want to test

A PDSA cycle begins with deciding what you are trying to accomplish (your aim). Aims should be small and feasible. Rather than aiming to “reach GPRA targets for depression screening by January 1,” an appropriate aim for a PDSA cycle might be, “We want to learn if the hygienist can screen for depression without increasing cycle time.” Keep your larger goals in mind but always be thinking of ways to break down a challenge into smaller pieces.

Step 2: Plan your test

Decide the what, where, when, why and who of your test. Test on a small sample of patients, or appointment slots or days. For example, have your hygienist screen two patients next Tuesday and then report back to the team about his experience. You will have the opportunity to expand the test in future PDSA cycles.

Step 3: Do the test and then study the results of the test

One of the most common mistakes made in using the Model for Improvement is to forget to pause after each test and, based on the result of the test, decide what the next steps should be. This step is the robust feedback mechanism discussed in principle 2 above.

Step 4: Run additional tests until you are ready to implement a change

The PDSA cycle is not designed to be run once and then completed. Instead, it is a framework for repeatedly testing a change, learning from each test, adjusting subsequent tests based on your growing experience, and repeating until a change works well enough that the whole team is confident the change will be beneficial.

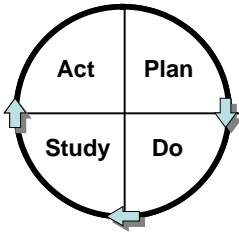
Use the form provided on page 2 of this document to plan your PDSA cycles.

Resources: excellent free videos explaining the use of PDSA cycles are available at the Institute for Healthcare Improvement’s web site. Registration is required but is free.

- <http://www.ihl.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Whiteboard5.aspx> (short “whiteboard” presentations).
- <https://www.youtube.com/watch?v=uSncRvw-lss> (56 minutes).

You may also contact the IPC Improvement Advisors to receive coaching in using the Model for Improvement.

¹ Adapted from: Langley, GL, et al, *The Improvement Guide, 2nd Edition*, Jossey Bass, 2009, pg. 25.



MODEL FOR IMPROVEMENT

DATE 12/7/16

What Do We Want to Change/Improve? **(What are we trying to Accomplish?)**

Improve care for the entire patient by adding depression screenings and setting up systems for appropriate referral.

Plan: (What change can we make that will result in improvement?)

Planned Change, answer questions/collect data: Who, What, When, Where

Using new health history form for patients that need to fill out new health histories at Pine Point. Dr. Imler will be administering the screening. This will be run for 2 weeks to see how many are filled out.

Predictions (for tested change based on plan):

There will be approximately 3-4 screenings administered per week and referrals will be completed as needed based on positive findings. The new forms will take adjusting for patients as well as staff, additional time will be needed to fill forms out.

Do:

Carry out the change or test; Collect data and begin analysis.

From 12/7/16 to 2/15/17 there were 21 screenings completed. There were 3 referrals completed in that timeframe.

Study: (How will we know that a change is an improvement?)

Complete analysis of data;

Some of the barriers to implementation were developing a process for referring pt's to mental health, determining method for tracking referrals in EDR, and developing tracking method for EHR so that results would be tracked with GPRA. All were overcome but the process is somewhat complicated and could be difficult to implement with multiple providers. As the baseline was zero referrals, there was a significant and meaningful

increase in referrals to mental health. Because it was from the field clinic, the number of pt's actually following up with care is probably low.

Compare the data to your predictions and summarize the learning

Act:

Are we ready to make a change/repeat test/try something new? Plan for the next cycle

The plan moving forward this will continue at the Pine Point Clinic and it will be tested with Dr. Imler's patients at White Earth for 2 weeks to determine feasibility with larger number of staff and in different setting. After that it will be evaluated for roll out with additional providers.