Adolescent & Young Adult Behavioral Health Collaborative Innovation & Improvement Network (AYA-BH CoIIN)

Quality Improvement Learning Collaborative

Addressing Adolescent & Young Adult Depression in Primary Care

Cohort 2: October 2021-June 2022

Data Handbook

Adolescent & Young Adult Behavioral Health Collaborative Innovation & Improvement Network (AYA-BH CoIIN)

Addressing Adolescent & Young Adult Depression in Primary Care

Cohort One

Table of Contents

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) (under #U45MC27709, Adolescent and Young Adult Health Capacity Building Program). The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.

National Improvement Partnership Network

NIPN Contacts

Wendy Davis, MD
NIPN Associate Director & Primary Investigator
(802) 656 - 9107
wendy.davis@med.uvm.edu

Rachel Wallace-Brodeur MS, MEd
Project Director & Quality Improvement Coach
(802) 372-5686
rachel.wallace-brodeur@med.uvm.edu

Susan Richardson, PhD
Research Analyst

susan.richardson@med.uvm.edu

Introduction

Project Overview

The Adolescent and Young Adult Behavioral Health Collaborative Innovation and Improvement Network (AYA-BH CoIIN) is a collaboration between the National Improvement Partnership Network (NIPN) and the Association of Maternal and Child Health Programs (AMCHP) and is part of the Adolescent and Young Adult Health National Capacity Building Program. It is funded by the Maternal and Child Health Bureau. The goal of this cross-state initiative is to improve depression screening and follow-up care for adolescents and young adults (AYA). Depression is one of the most widely recognized AYA mental health disorders, with the USPSTF, the AAP (BF, 4th ed.) and the EPSDT Program recommending depression screening.

Practice-level change is crucial to increasing screening rates and providing follow-up care for AYA experiencing depression to promote optimal health and well-being. Therefore, NIPN is implementing a primary care-focused Quality Improvement (QI) intervention to strengthen office systems to implement screening at health supervision visits and support practices in developing procedures for follow-up care for depressed AYA. NIPN will support participants in the project with training in QI methodology and implementation of evidence-based strategies to increase depression screening rates and follow-up. Throughout the nine months of the project, practices will complete surveys about office systems and practice demographics, as well as submit baseline and monthly data on depression screening and follow-up care for AYA. The project timeline in Appendix I illustrates the distribution of different project elements. The NIPN QI team will provide resources and expertise through monthly Learning Collaborative webinars, monthly emails and practice reports, and ongoing support as needed.

Data Handbook

This data handbook has been created for practices to have one centralized resource of all the data components of this project. The handbook contains print versions of all the data collection tools, as well as instructions for their completion and patient sampling.

Data Roles

NIPN Data Contacts: The primary data contacts at NIPN are Rachel Wallace-Brodeur and Susan Richardson. Susan is the project's data manager. She is responsible for data analysis and the construction of the monthly practice reports. Rachel is the project Quality Improvement Coach. She is responsible for helping you to interpret your report and providing the coaching support in the monthly practice reports. Also assisting our team is Christina (Christy) Fay. Christy coordinates distribution of data tools and tracks their completion. All the data links and monthly feedback reports will come from her email.

Any questions about data can be directed to Christy or Susan. Questions specific to quality improvement support can be directed to Rachel.

Practice Data Liaison: Due to limitations in REDCap and to maintain data integrity, only one person per site may be designated to receive links for data submission. Each participating site will designate one person to serve as the practice's Data Liaison. This person will be the primary contact and liaison for all project data requests. The Data Liaison will be the only person at the practice who will receive data links for the project and will enter or facilitate entry of all practice data. Other team members will be made aware of data requests and deadlines through the project listserv.

The Data Liaison does not have to be the sole person to enter data into REDCap.

The Data Liaison will be responsible for ensuring that data is entered according to the Project Timeline (see Appendix I).

Project Measures

QI Project Aim

The overall aim of this QI project is to measurably increase the proportion of adolescents and young adults who are screened for depression at their annual well visit and who have documentation of a follow-up plan if the screen is positive.

Project Measures

There are 3 measures that will be used to track progress on depression screening and follow-up for AYA. The measures are a mix of process, outcome, and balancing measures. A more in-depth definition of each measure can be found in Appendix II.

1. *Screens for Depression (process measure)*

   Proportion of adolescents and young adults 12 through 25 years of age with a visit during the project period who are screened for depression using an age-appropriate validated screening tool.

2. *Documentation of a follow up plan (process measure)*

   Proportion of adolescents and young adults 12 through 25 years of age who screen positive for depression using an age appropriate valid tool and have a documented follow up plan for their depression.

3. *Impact on staff (balancing measure)*

Does the time and effort required to implement office systems interventions benefit staff in planning, scheduling, and conducting visits that include screening for depression using a validated tool?

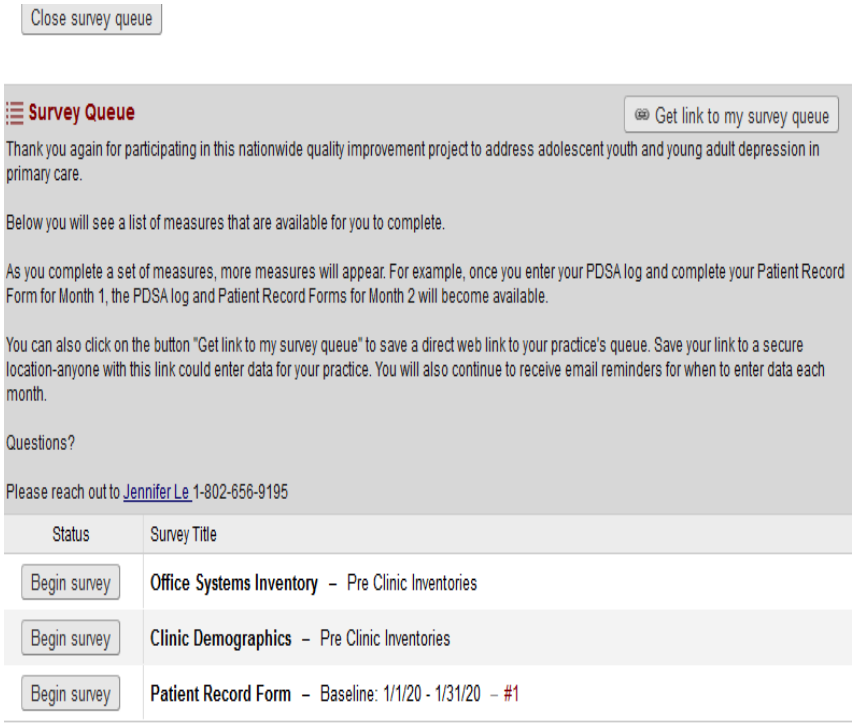
Data Collection System

REDCap

All project data and surveys are submitted electronically through REDCap, an online encrypted data collection system. The REDCap system for this project is housed at the Larner College of Medicine at the University of Vermont. Data is downloaded for analysis and reporting by NIPN staff, housed at the University of Vermont. **No protected health information (PHI) is submitted**. All practices are assigned a unique identifier, so that data can be properly attributed to and summarized for your practice site. This project has been determined to be "Not Research" the University of Vermont Institutional Review Board.

Accessing REDCap

Practices access REDCap through monthly hyperlinks sent via email from Christy Fay. Practices need to ensure their firewall allows emails with hyperlinks in the body of the email and that Christy's address is not blocked by their system. **Each hyperlink will provide access to a "Survey Queue".** In the Survey Queue, each practice will see a list of surveys and data entry forms that are available to be filled out and submitted.



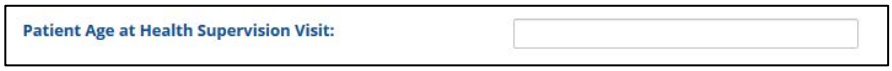
Each month, a reminder email will be sent out with a link to the Survey Queue with a reminder of the survey tools to be filled out that month.

Note: *While the REDCap email says the link "should not be forwarded to others", you may forward it to others within your practices. The link should not be sent outside of your practice. Anyone with this link will have the ability to enter data and see data that you have entered.*

Navigating within REDCap

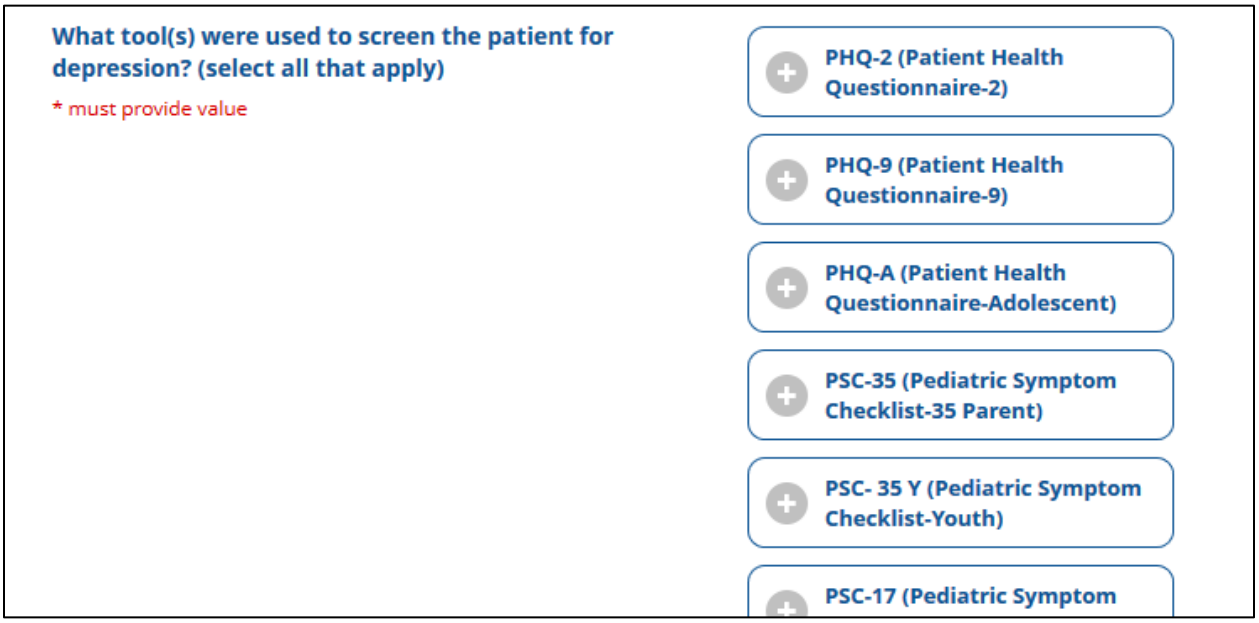
Each survey or data collection form contain the series of questions that you will answer. There are three main types of questions:

- Text boxes: Enter a typed response as required.



- Radio buttons: Select one option from a list of options.

- Check boxes: Select as many options as apply.



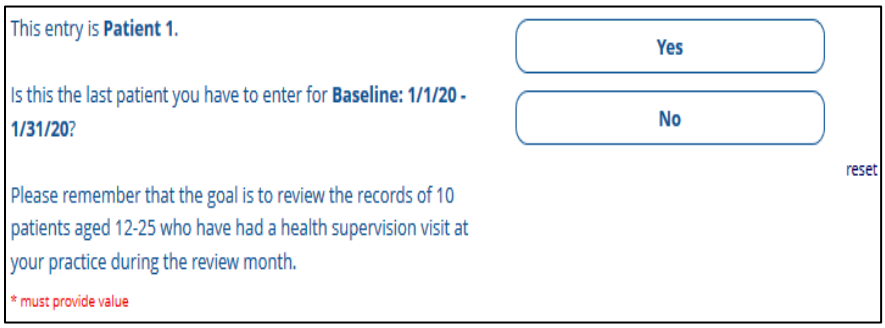
When applicable, the "Select One" or "Select Many" items have been designed to give ample choices to choose from. Often, there is also an "other" selection. If you select "other, a text box will appear for you to type in your response.

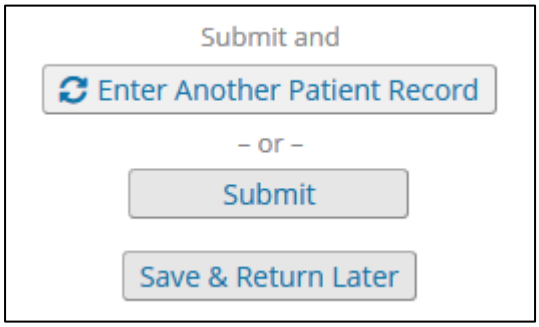
In each survey or data collection form, there are fields that must be entered, denoted with a red asterisk (*). You will not be able to submit your survey or data collection form if any of the fields marked as required are left blank or contain an invalid value. All required fields on a page must be completed before moving on. In multipage surveys, once you have moved to a new page you can navigate to previous pages to edit or change responses. Once you have completed the survey or data collection form, be sure to click "Submit" to ensure the data is saved and marked as complete by REDCap.

WARNING: If you have entered data or responses into REDCap, be sure to click either the "Save & Return Later" or "Submit" button before closing your browser so that your data is saved. Failure to do so will result in a loss of all the data entered.

The Patient Record Form has been designed as a repeatable form. For each patient, you will complete one form.

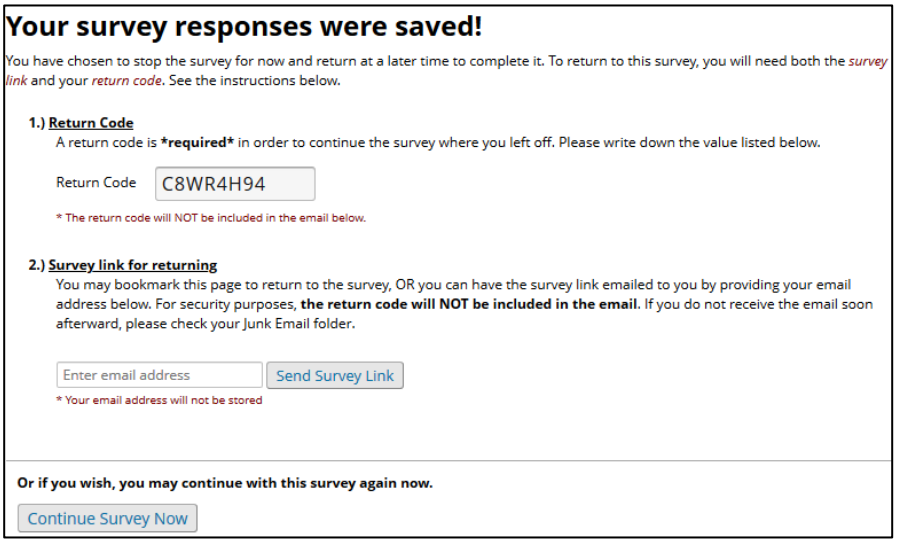
When you reach the end of the Patient Record Form, you will be asked if this is the last patient you have to enter. If it is your last patient, select "Yes," then click the "Submit" button. If you have another patient to enter, select "No," and click the "Enter Another Patient Record" button. If you have more records to enter, but you aren't ready to enter them yet, you can choose "Submit" as long as you have completed the current record, and use the Survey Queue to enter more patients at a later date.





How to re-access REDCap

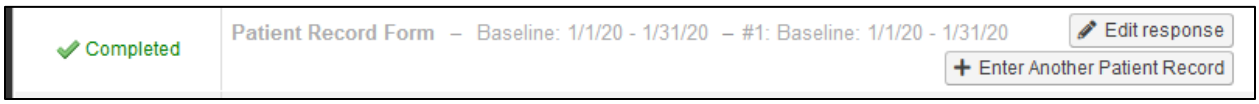
If you cannot complete a survey or enter all patient data in a Patient Record Form, it is possible to save and return later to finish. If you select "Save & Return Later", you will receive a Return Code.



The Return Code is a unique identifier that allows you to return to the data tool to complete or modify responses. If you try to re-access a data tool in REDCap **without** a Return Code, all previously entered responses **will be deleted** requiring all data to be reentered. Use the ***REDCap Return Code Tracking Log*** to save the Return Code in one location (Appendix III). If you misplace your Return Code, email Christy and she will be able to retrieve your code.

To return survey or form using a Return Code, reselect the uncompleted survey and then enter your Return Code.

For the Patient Record Form, you may complete some of the patient records, but not all ten. In this case, select "Submit", and from the Survey Queue at a later time, you may enter another patient record. In the example below, the Patient Record Form for Baseline: 10/1/21-10/31/21 is marked "Completed", but only one Patient Record Form was entered and submitted. To enter another, click the "Enter Another Patient Record" button.



Data Collection Tools

Data Tool Overview

There are two types of data for this project: clinical patient data and practice surveys. All data are completed for the site as a whole, i.e. individuals within a site do not submit their own data rather the site submits data that counts towards all individuals who are participating in the project at that site.

The seven data tools listed below are used to collect all the patient and survey data associated with the project.

1. Office Systems Inventory *(survey)*
2. Clinic Demographics (*survey)*
3. PDSA Log *(survey)*
4. Patient Record Form *(patient data)*
5. Staff Impact Survey *(survey)*

Completion of all these data elements is required for individuals seeking project credit for professional certification. The project timeline (Appendix I) illustrates the distribution of these tools within the project.

Practice Surveys

Sites enrolled in this project will complete four surveys: the Office Systems Inventory, the Staff Impact Survey, and the monthly PDSA Log. These surveys are meant to capture the opinions and experiences of the site, not an individual participant. Thus we ask that all project participants at a site work together to complete all project surveys.

> ***Tip:*** *Surveys are intended to capture the opinions of all the practice team members. We recommend printing a paper version of the surveys (see appendices), completing them as a group, and then transferring the team's responses into REDCap.*

Office Systems Inventory and Clinic Demographics

The purpose of the Office Systems Inventory (Appendix IV) is to capture practices' current systems screening AYA for depression and their current follow-up and referral systems. This survey will be completed twice, once at the beginning of the project and once again at the end of the project. This survey should be completed by the whole practice team so it best reflects the experiences of the team rather than a single individual. In addition to serving as an inventory of the practice's current systems, it can also serve as a resource of strategies that the practice may choose to implement to optimize AYA depression screening and follow-up and referral systems.

The Clinic Demographics survey (Appendix IV) is completed once at the beginning of the project. This survey describes the patient panel of your practice and staffing at your practice.

Staff Impact Survey

The staff impact survey is a short, six-question survey that evaluates whether the time and effort required to implement the office systems interventions benefit staff in planning, scheduling, and conducting screening of AYA at health supervision visits (Appendix V). This survey will be distributed at the end of the project.

Monthly PDSA Log

At the heart of the Model for Improvement is the Plan-Do-Study-Act (PDSA) cycle, which allows for rapid, effective testing of change: planning the change, trying it, observing the results, and acting on what is learned. Through the PDSA Log (Appendix VI), practices will document the strategies they are testing and lessons learned from those tests. The PDSA Log is meant to facilitate discussion and guide practice teams in their quality improvement work. Please note that the PDSA Log also includes two additional questions. One question is about the population that your practice is targeting for change that month (i.e., patients at well visits, patients at other visits, or patients at any visit). The other questions assesses the impact of the ongoing COVID-9 pandemic on your practice.

Patient Data

Sites will submit patient data monthly in order to determine AYA depression screening rates and follow-up plans of care for AYA who screen positive for depression.

Patient Record Form

The purpose of the monthly patient chart review (Appendix VII) is to assess the practice's progress on increasing depression screening rates for AYA and increasing the proportion of patients who have a follow-up plan of care following a positive depression screen. All practices will use their EMR or paper charts to obtain this data as visit-level information is required. Monthly chart audits will be conducted for nine months: three months of baseline (September - November 2021) and for six months during the intervention phase (December 2021-May 2022). The inclusion and exclusion criteria for the monthly chart review are described below.

Inclusion criteria for the monthly chart audit

- 12-25 years old (up to the 26th birthday)
- Seen for a visit in the measurement period.

Depending on which visits your practice plans to target to improve screening rates, a visit may be a health supervision visit, or may be another visit type where AYA receive care.

Health supervision visits include: Annual well check, Sports physical, New patient visit, and Travel visit.

We do not recommend the inclusion of immunization only visits.

Exceptions

You may choose to not to review patients that meet the following exception criteria

- Patients who refuse to participate.
- A patient who is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status.
- Situations where the patient's functional capacity or motivation to improve may impact the accuracy of results of standardized depression assessment tools. For example: certain court appointed cases or cases of delirium

In the monthly chart review data tool, we have one item to ascertain if the patient has a previous diagnosis of depression or bipolar disorder. You will not exclude the patient from the chart review, but NIPN may exclude this patient from planned analyses. If a patient meets any of the exception criteria, please note the criteria in the comment box at the end of the form.

Sampling Strategy

For each measurement period, practices will review a maximum of 10 patient charts, sampled from the visit type targeted by their practice. Practices may decide to focus exclusively throughout the project on health supervision visits, or exclusively on other visits types, or may change from one to the other based on their improvement efforts as the project progresses.

We are asking that **all practices select 5 patients with health supervision visits and 5 patients with other visit types for each of the three Baseline months**. After that, practices will indicate on their PSDA cycle which visit type they are targeting and on the Patient Record Form the visit type of the patient reviewed.

Chart Visit Type Selection for Baseline and Intervention Periods

Baseline	Intervention
September, October, November — 5 health supervision charts & 5 other visit charts	December, January, February, March, April, March, May — 10 Charts, visit type targeted by practice

Each month, practices will have access to the Patient Record Form in their REDCap Survey Queue for the current (and previous) months. Each month, a link to the Survey Queue will also be sent to the practice Data Liaison as a reminder to enter these data.

Practices will use a systematic sampling process to identify patients to review for each measurement period.

To select charts for review, generate a patient list of all eligible adolescents and young adults by listing patients who received the targeted visit type. If you are unable to generate a list of at least 10 patients, generate a second list containing adolescent and young adult patients who had other visits with your practice and also did not have a visit of the targeted type identified by your practice. In other words, patients appearing in the targeted visit list should not appear in the list of patients with other visit types. The instructions below describe how to sample patients using a random sequence generator under different conditions.

When creating your list(s)

1. Order the patients by visit date, starting with the first visit in the measurement period.
2. Number the patients sequentially beginning with "1".
3. Count the total number of patients in your generated list(s).

Note: *The process below describes selecting 10 patients from a targeted visit type for an Intervention month.*

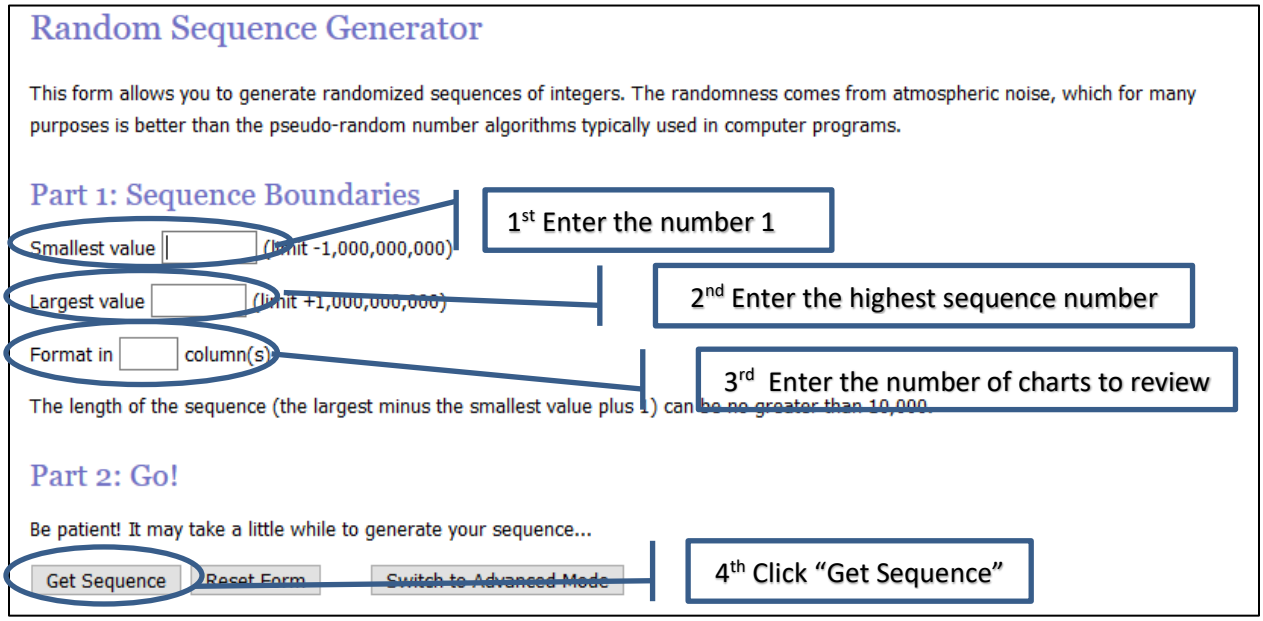
For Baseline, you will generate two lists: one for health supervision visits, and one for other visit types. Each list will be numbered sequentially, separately. You will choose 5 patients from each list.

Using the Random Sequence Generator

If your practice had 10 or more patients of the targeted visit type

Visit the website https://www.random.org/sequences/ . This website will generate a randomized sequence of numbers between your first patient and your last patient, and indicate which patients should be reviewed this month and entered into the REDCap data collection tool.

On the website, enter "1" as the "Smallest Value" and the total number of patients in your health supervision visit patient list as the "Largest Value." Then, in the "Format in __columns" box, you will enter the number of patients you want to review.



For example, consider a practice that extracts the patient MRN and visit date for all patients age 12-25 patients with targeted visit types between December 1, 2021 and December 31, 2021 (Intervention Month 1).

The MRN are then sorted by visit date and time, and then assigned each a sequential number starting at "1". If visit time is unavailable, sort patients by MRN within date.

Before Sort

MRN	Health Supervision Visit Date
1111111	1/2/2020
2222222	1/5/2020
3333333	1/5/2020
4444444	1/12/2020
5555555	1/30/2020
6666666	1/14/2020
7777777	1/12/2020
8888888	1/22/2020
9999999	1/16/2020
…	…
10101010	1/30/2020

All eligible patients

After Sort

MRN	Health Supervision Visit Date
1111111	1/2/2020
2222222	1/5/2020
3333333	1/5/2020
4444444	1/12/2020
7777777	1/12/2020
6666666	1/14/2020
9999999	1/16/2020
8888888	1/22/2020
5555555	1/30/2020
…	…
10101010	1/30/2020

All eligible patients, sorted

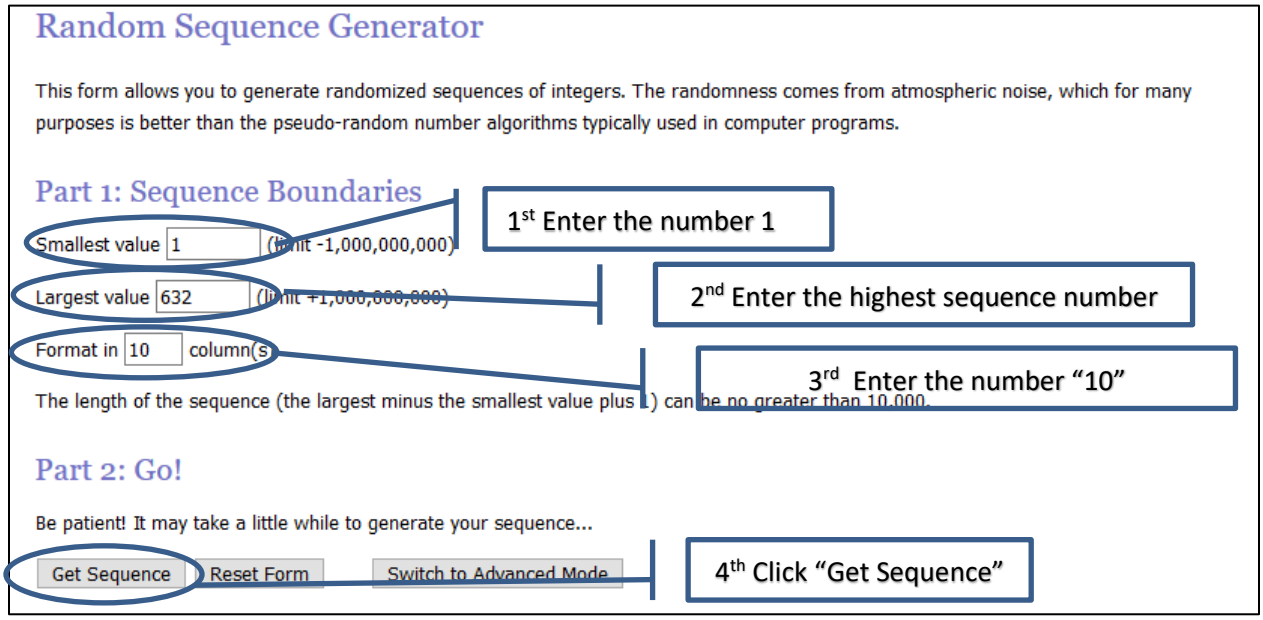
Add a Sequence Number

MRN	Health Supervision Visit Date	Sequence
1111111	1/2/2020	1
2222222	1/5/2020	2
3333333	1/5/2020	3
4444444	1/12/2020	4
7777777	1/12/2020	5
6666666	1/14/2020	6
9999999	1/16/2020	7
8888888	1/22/2020	8
5555555	1/30/2020	9
…	…	
10101010	1/30/2020	632

All eligible patients, sorted and sequenced

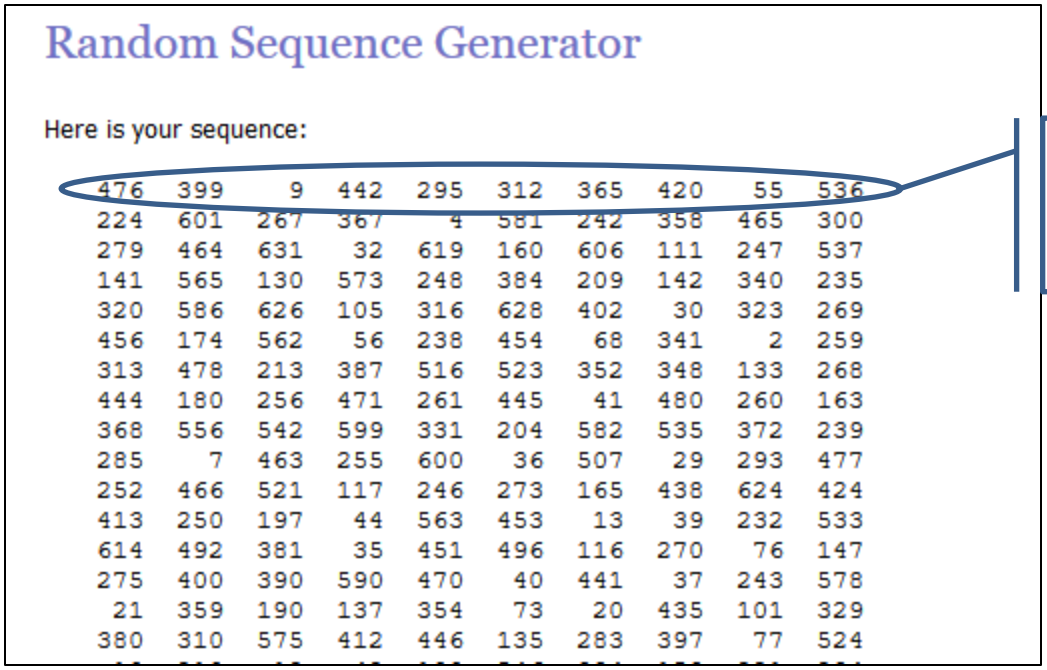
In this example, we there are 632 eligible patient records. Once they are sorted, each patient is assigned a number 1 through 632.

Using https://www.random.org/sequences/, enter "1" as the "Smallest Value" and "632" as the "Largest Value." Then, enter the value of 10 (or 5, if you are selecting charts for a baseline assessment) into the "Format in ___ column(s)" box



Click on the "Get Sequence Button", and wait for the screen to refresh.

The result is a randomized sequence of all whole numbers between (and including) 1 to 632. You will use the TOP LINE to find the numbers of ten patient charts to review. Use these numbers to match to the number sequence you applied to your patient list. In this example, the practice would review charts 476, 399, 9, 442, 295, 312, 365, 420, 55, and 536. These numbers refer to the assigned sequence number in the list, not to any patient identifier.



If your practice had exactly 10 patients of the targeted visit type

Review all 10 patient charts for the measurement period. You do not need to use the Random Sequence Generator.

If your practice had between 1 and 9 patients of the targeted visit type

Review all of the patient charts with the targeted visit type. If your practice had adolescent and young adult of other visit types, use that list of patients with other visits types with the Random Sequence Generator with the steps described above under "If your practice had 10 or more patients of the targeted visit type" with the following exception: instead of entering the value of 10 (as we want to select 10 charts) into the "Format in ___ column(s)" box, enter 10 minus the number patients with the targeted visit type.

For example, consider a practice that is targeting screening at health supervision visits. The practice has 6 patients with health supervision visits and 59 patients with other visit types. The practice will review all 6 patients with health supervision visits. Using their list of 59 patients for other visits, ordered by date, they would visit https://www.random.org/sequences/, enter "1" as the "Smallest Value" and "59" as the "Largest Value." Then, enter the value of 4 (10-6 patients with health supervision visits) into the "Format in ___ column(s)" box. The result will be four columns, and the first row of data will be used to identify the sequence number of the records to be reviewed from the list of patients with other visit types.

If the list of adolescents with other visits is the less than or equal to 10-# of patients with health supervision visits, then review all patients with other visit. For example, if a practice has 6 patients with health supervision visits and 3 patients with other visits, review all 9 patients (10-6=4, and the number of patients with other visits is <=4). You will not need to use the Random Sequence Generator.

If your practice had no patients with the targeted visit type but had 10 or more patients with other visits

Use the list of patients with other visit types and the Random Sequence Generator with the steps described above under "If your practice had 10 or more patients of the targeted visit type" to review 10 patient charts. Be sure to note on your PDSA form that though you targeted your efforts toward one visit type, you did not collect data on that visit type. As usual, indicate on the Patient Record Form the visit type you reviewed.

If your practice had no patients with the targeted visit type but had 10 or fewer patients with other visits

Review all of the patient charts with other visit types. You do not need to use the Random Sequence Generator. Be sure to note on your PDSA form that though you targeted your efforts toward one visit type, you did not collect data on that visit type. As usual, indicate on the Patient Record Form the visit type you reviewed.

If your practice had no patient visits

Contact Rachel for additional guidance.

If you have difficulty with the Sampling Strategy (generating patient lists, sequencing, etc.) and are in need of further assistance, please contact Susan for additional assistance.

Chart Review Question Definitions

The full data collection tool for the monthly chart review can be found in Appendix VII. Most of the questions are self-explanatory. Guidance on how to answer a few of the question is below to help support data consistency between sites.

> Health Supervision Visits
> This project focuses on depression screening in the context of the health supervision visit. Eligible health supervision visits may include annual well visits, sports physicals, new patient visits, and/or travel visits.
>
> If you have a question about whether a particular visit is eligible, please email Rachel.

Sex vs. Gender

Research has documented differences in depression screening and prevalence between women and men. For this reason, we are collecting data on patient sex. By sex, we are referring to patient's biological sex at birth.

- Please report the patient's biological sex assigned at birth.
- A response of "Undetermined" may be used if the patient is currently undergoing transition.
- A response of "Unknown" should be used if information on sex at birth is not in the patient record. This item is required.

We have also included an item on gender identity. Gender refers to the patient's concept of themselves, or their gender identity. A patient's gender identity may or may not match their biological sex assigned at birth.

- If data on patient gender identity is present in the chart, please select "Yes" if the patient's gender identity matches the sex they were assigned at birth" or "No" if it does not. If data is not available, leave the item unanswered. This item is optional.

Depression Screening vs. Assessment

The purpose of this QI project is to increase the rate of depression screening using a validated tool. Depression screening is identified as using a tool with specific items/questions that the patient or parent may answer that has been show to reliably identify people who are depressed and may be in need of additional care. Tools undergo rigorous testing to ensure that the items have validity, that they can be used by the target population to assess their mood, and that they can be used in a clinical setting. Some practices may ask patients to complete a tool before arriving at the visit, or in the waiting room, or while rooming in. If the screening tool is administered for the purpose of review at the health supervision visit, consider it completed at that visit.

Depression may be assessed more informally during a visit through perceptions of the clinician or practitioner, through volunteered responses of the patient, or in other ways. These assessments do not count as Depression Screening and you should not select "Yes" for screened with a validated tool.

- If a patient is screened using a validated tool, you will enter "Yes" for screened using a validated tool.

- For screens completed outside of the visit time (e.g., at home before arrival, in the waiting room) for the purpose of review at the visit, you will enter "Yes" for "Was the patient screened for depression using a validated tool at this visit?"

Depression Tools

There are a variety of depression screening tools that have been validated and can be used in a clinical setting.

If a patient has been screened using a validated tool, you will see a list of possible tools that may have been completed for the visit. For some tools there is more than one version of the tool (most often, a long form and a short form). While our list is long, it may not include the tool you are using. If it does not, select "Other" and provide the name of the tool you are using.

- Select the name of the screening tool that was used at the visit. If you do not know the name of the tool, consult with your QI team and/or contact Susan or Rachel for additional guidance.
- If you use a tool not listed, please verify that the tool is a screening tool for depression (for example, the GAD is a screening tool for general anxiety disorder, not depression). If the tool is a validated depression screening tool, please select "Other" and report the name of the depression screening tool you used. If you have a question if the tool you use is a validated depressions screening tool or not, contact Susan or Rachel for additional guidance.

Result of the Depression Screen

Different screening tools have different ways of reporting "positive" depression results. Some use word like "moderate" or "severe", which others have scores like 15/18. Consult with your QI team to determine how, in your practice, you can identify a "positive" result.

Assessment for Suicide Risk

This item will appear for every patient that is part of the chart review. Assessment for suicide risk may take many forms. Responses to this item consider both informal

assessments and screening tools. Suicide risk assessment may be part of the depression screening tool used at your practice (consult your QI team if this is the case).

- Enter "Yes" if the patient is informally assessed for suicide risk or if the patient is screened using any tool that includes an item or items to assess suicide risk or assesses only suicide risk.
- If the depression screening tool you are using includes an item or items to assess suicide risk, enter "Yes".

Depression Care Plan (Follow-Up Care Plan)

For patients who have screened positive for depression or who have a current diagnosis of depression or bipolar disorder, you will select all of the follow-up care plans that may apply.

- If the plan of care includes referral, in-office counseling and/or in-office follow-up appointments, additional items will appear to collect more details on the referral/appointments.

Recommendations to Improve Mood

This item will appear for every patient that is part of the chart review, and may happen for patients who are not depressed as a part of anticipatory guidance. Please answer this item for all patients.

Web Site

https://www.med.uvm.edu/nipn/aya-bh_coiin/c2home

The Virtual Toolkit contains the most up-to-date information relating to the project with new information added regularly. PDF versions of all the data collection tools can be found at the Virtual Toolkit.

This site also contains project-specific materials, such as a project overview, and webinar recordings. Additionally, tools and resources are available on related topics, QI methodology, informational materials for patients and parents, and resources on other adolescent and young adult health topics.

Common Questions

Question: We have multiple providers at our practice, but only one is participating in the project. Do we pull patient charts for the whole practice or just for patients seen by the participating provider?

> **Answer:** As part of this project, NIPN is asking practices to implement systems changes, thus it is preferred that the whole practice be involved and charts be pulled for the whole practice. However, if a provider is at a practice where other providers are unwilling to test or implement changes, then the provider may opt to just look at his/her patients for chart audit. This will allow the provider to see if the changes they are implementing are having an impact. Please contact Rachel if this strategy of chart review is adopted.

Question: I am doing my monthly chart audit and only saw 7 eligible patients for the measurement period. What do I do?

> **Answer:** If there are 7 adolescents and young adults with the visit type your practice is targeting to improve depression screening and additional adolescents who had other visits, you would review the 7 patients with health supervision visits plus an additional 3 charts of the patients at other visit types as described above in section "If your practice had between 1 and 9 patients of the targeted visit type." If there were only 7 adolescents and young adults seen at the practice in the entire month for any visit type, you would review all 7 patients.

Question: I collected our answers for the Office Systems Inventory, but as a group we missed an item in our meeting. Should I "Submit" or "Save and Return Later".

> **Answer:** You should "Save and Return Later". In the Survey Queue, at a later time after getting the answer form the QI team, navigate to the form you did not complete and click "Edit Responses". Enter the Survey Return Code when prompted, and continue with data entry.

Question: I have ten patients to enter this month, but I only have time to completely enter 5 right now. Should I "Submit" or should I "Save and Return Later"?

> **Answer:** You should "Submit". "Save and Return Later" should only be if the record you are entering is incomplete (e.g., you enter just half of the patient data for one patient). In the Survey Queue, at a later time, navigate to the Patient Record Form for the month you are entering and select "Enter Another Patient".

Question: I have a really complicated patient, it is difficult to decipher exactly what happened at the visit. Should I skip this patient and pick another?

> **Answer:** No. Please either confer with your QI team and/or reach out to Rachel if you would like to talk through a particular patient by phone or web conference (no PHI in email, please).

Question: One of the patients selected for review has a previous diagnosis of depression. Should I skip reviewing them?

> **Answer:** No. Please review this patient and for the item, "Does the patient have a known diagnosis of depression or bipolar disorder before this visit?" select "Yes" and continue the review. Later, the NIPN team may exclude this patient from some analyses (i.e., analyses of screening and follow-up for patients with no known history of depression or bipolar disorder), but it will be important for your practice to note your screening and follow-up of all patients.

Appendices

Appendix I: Cohort 2 Learning Collaborative Timeline

Appendix II: NIPN Measure Definitions and Goals

1. Measure Name: Depression screen with validated tool

Definition of Measure: Proportion of adolescents and young adults 12 through 25 years of age seen who are screened for depression using an age appropriate validated screening tool.

Type of Quality Measure: Process measure.

Improvement Target Value: 80% of eligible adolescents and young adults.

Calculation:

Target population: All adolescents and young adults 12 through 25 years of age (up to 26th birthday).
Numerator: Number of adolescents and young adults 12 through 25 years of age (up to 26th birthday) who present for a visit who are screened for depression using a validated screening tool.
Denominator: Number of adolescents and young adults 12 through 25 years of age (up to 26th birthday) who present for a visit.

Exclusions: (1) Patient has an active diagnosis of depression prior to any encounter during the measurement period; (2) Patient has a diagnoses bipolar disorder prior to any encounter during the measurement period. **NOTE: You do not need to exclude these patients from the chart review. Rather, NIPN will exclude these patients during analysis.**

Exceptions: (1) Patient refuses to participate; (2) Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status; (3) Situations where the patient's functional capacity or motivation to improve may impact the accuracy of results of standardized depression assessment tools. For example: certain court appointed cases or cases of delirium.

Data Source: Patient charts (paper or EMR).

Collection Frequency: Sample of 10 charts per month for 9 months entered online via REDCap link.

Is the measure validated or endorsed? No, but this measure is based on NQF 0418. Our measure allows for additional flexibility in eligible visit types.

2. Measure Name: Documentation of a follow-up plan for depressed adolescents and young adults

Definition of Measure: Proportion of adolescents and young adults 12 through 25 years of age who screen positive for depression using an age appropriate valid tool and have a documented follow up plan for their depression.

Type of Quality Measure: Process measure.

Improvement Target Value: 80% of adolescents and young adults who screen positive for depression using an age appropriate valid tool will have a documented follow-up plan of care for their depression.

Calculation:

Target Population: All adolescents and young adults 12 through 25 years of age (up to 26th birthday) who screen positive for depression using an age appropriate valid tool.
Numerator: Number of adolescents and young adults 12 through 25 years of age (up to 26th birthday) who screen positive for depression using an age appropriate valid tool and have a documented follow-up plan of care for their depression.
Denominator: Number of adolescents and young adults 12 through 25 years of age (up to 26th birthday) who screen positive for depression using an age appropriate valid tool

Exclusions: (1) Patient has an active diagnosis of depression prior to any encounter during the measurement period; (2) Patient has a diagnoses bipolar disorder prior to any encounter during the measurement period. **NOTE: You do not need to exclude these patients from the chart review. Rather, NIPN will exclude these patients during analysis.**

Exceptions: (1) Patient refuses to participate; (2) Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status; (3) Situations where the patient's functional capacity or motivation to improve may impact the accuracy of results of standardized depression assessment tools. For example: certain court appointed cases or cases of delirium.

Data Source: Patient charts (paper or EMR) or immunization registry.

Collection Frequency: Sample of 10 charts per month for 9 months entered online via REDCap link.

Is the measure validated or endorsed? No, but this measure is based on NQF 0418. Our measure allows for additional flexibility in eligible visit types.

3. Measure Name: Impact on staff

Definition of Measure: Does the time and effort required to implement office systems interventions benefit staff in planning, scheduling, and conducting visits for adolescents who are due for health supervision visits or other visits.

Type of Quality Measure: Balancing measure.

Improvement Target Value: N/A.

Calculation: Likert scale score will be calculated from survey of participating practitioners at the endpoint of the project.

Exclusions: N/A.

Data Source: Practitioners, staff by survey.

Collection Frequency: Survey to be conducted at the endpoint of the intervention.

Is the measure validated or endorsed? No. We will not be using a validated survey instrument to measure satisfaction.

Appendix III: REDCap Return Code Tracking Log

Each time you enter data into REDCap, you will be given a unique return code that will allow you to save an incomplete record and return later to complete **OR** to return to a completed record to change your response.

Please use the log below to track the return codes for each data entry tool so that you do not need to re-do data entry.

Project Period	Due Date	Survey/Form	REDCap Return Code
Pre-Intervention	10/27/21	Office Systems Inventory-Pre	
		Clinic Demographics	
	10/27/21	Patient Record Form Baseline 1: 9/1/21-9/30/21	
	11/16/21	Patient Record Form Baseline 2: 10/1/21-10/31/21	
	12/15/21	Patient Record Form Baseline 3: 11/1/21-11/30/21	
Intervention			
	1/18/22	PDSA Log Month 1: 12/1/21-12/31/21	
		Patient Record Form Month 1: 12/1/21-12/31/21	
	2/15/22	PDSA Log Month 2: 1/1/22-1/31/22	
		Patient Record Form Month 2: 1/1/22-1/31/22	
	3/15/22	PDSA Log Month 3: 2/1/22-2/28/22	
		Patient Record Form Month 3: 2/1/22-2/28/22	
	4/15/22	PDSA Log Month 4: 3/1/22-2/31/22	
		Patient Record Form Month 4: 3/1/22-2/31/22	
	5/19/22	PDSA Log Month 5: 4/1/22-4/30/22	
		Patient Record Form Month 5: 4/1/22-4/30/22	
	6/15/22	PDSA Log Month 6: 5/1/22-5/31/22	
		Patient Record Form Month 6: 5/1/22-5/31/22	
End of Project			
	6/22/22	Office Systems Inventory-Post	
	6/22/22	Staff Impact Survey	
	6/22/22	Project Evaluation	

Appendix IV: Office Systems Inventory and Clinic Demographics

Appendix V: Staff Impact Survey

Appendix VI: PDSA Log

Appendix VII: Patient Record Form for Monthly Chart Review

Note: The Patient Record Form from REDCap will have you select responses for patient race, gender, ethnicity, visit type and visit modality, which are not shown in the attached form but will appear as below.