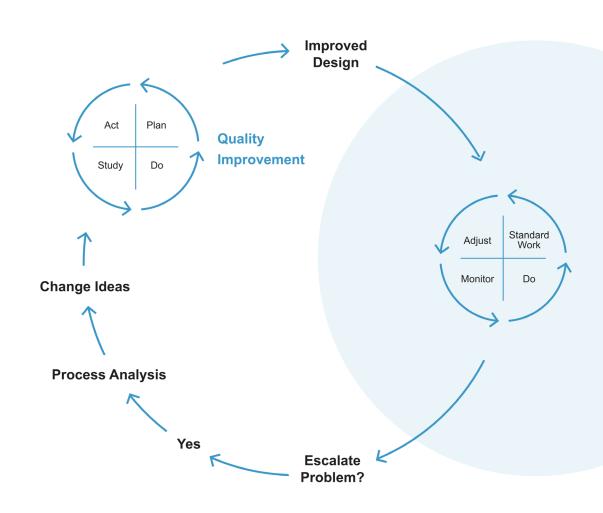
NPPC Framework for Sustaining a Performance Improvement Initiative: Adverse Childhood Experience Screening in Clinic Settings

The National Pediatric Practice Community (NPPC) partnered with 6 pilot sites in 2017-2018 to implement the ACE-Q tool in their clinic settings via the performance improvement model of PDSA. As the pilot sites continued their data collection journey and approached the end of the 6 month pilot, a sustainability framework was proposed to aid in continued success of the screening process.

Since initial implementation of the screening tool into the practices was accomplished utilizing the PDSA model, it was determined that utilizing a similar methodology for quality control and sustaining the improvements gained would be most widely accepted and familiar to our clinical partners.

The figure below from IHI (2016) illustrates how in the sustainability phase evaluating the original design and making appropriate improvements must be considered and evaluated before implementing a second phase PDSA cycle, which includes standardizing the work.



Capturing the original PDSA cycle in written form can also aid in addressing the 10 key factors described by Jeffcott (2014) to sustain and spread change throughout an organization. These include:

Innovation
Leadership

Measurement
Knowledge in Action

3. Human Factors 8. Engagement

4. Culture 9. Evaluation

5. Change Management 10. Empowerment

The initial implementation of the ACE questionnaire in the clinics employed Innovation, Measurement, Human Factors (training of staff), Culture (clinic tours and integration of screening into current workflow), Change Management (utilizing the PDCA Cycle, and monthly coaching calls).

Documentation of the PDCA cycle can be utilized to engage Leadership regarding the value and gains of the initiative. This Performance Improvement document can also be utilized to meet clinic needs for HRSA, Patient Centered Medical Home Certification, Joint Commission, and external grant funders.

The IHI (2016) adapted PDCA model then is utilized to standardize a workflow plan that will ensure sustainability of the project, using insights and lessons learned (Knowledge in Action) to educate and train additional staff, new Team Leaders and Physician Champions, and re-engage (Engagement) of current Team Leaders, Physician Champions, and strategic leaders.

As Phase 2 of implementation begins, the pilot site engages in the "Do" activities, and a thorough monitoring plan is put in place with support from the NPPC Coach.

NPPC Sustainability Framework

The following outlines the steps and action required to fulfill the NPPC Sustainability Framework.

1) Document the (Phase 1) PDCA Cycle for each Pilot Clinic Site:

Plan: Target Population to be screened, screening interval, and rationale for screening.

Do: Final implementation workflow and operational definitions for performance measures

Check: Present 6 month pilot data and coaching call insights.

Act: Write summary of the pilot and conclusions including lessons learned (from coaching call insights). Capture and document any "mission moments" where clinical provider and/or patient families had unique insights or experienced high levels of satisfaction or engagement.

Prior to implementing a Phase 2 PDSA cycle, a 6 month summary coaching call with the pilot site will be conducted to answer questions in the following decision matrix and to document needed design improvements. The domains to be explored in the matrix were adapted from Maher (2005) and include examination of 1) Process factors involving innovation, adaptability, data collection and monitoring, 2) Staff factors of engagement and training, and 3) Organizational factors of fit with strategy, and infrastructure needs.

2) Complete Reflection and Sustainability Matrix

6 Month Pilot Reflection and Sustainability Matrix

Part I Process: Value of Innovation and Adaptability

- 1) Describe what, if any, was the value or improvement the pilot brought to your clinic?
- 2) What would need to be changed for the project to bring value/improvement to the clinic?
- 3) Describe what, if any, was the value or improvement the pilot brought to patient care?
- 4) What would need to be changed for the project to bring value/improvement to your patients?

Staff: Staff Engagement and On-going Training

- 5) Describe if and how staff saw value and were engaged in the pilot.
- 6) What would need to be changed to bring greater value/engagement for the staff in phase 2?
- 7) Was there a clear need for additional training of any of the clinic staff for the pilot's success, which was not provided in the initial NPPC training?
- 8) Is there additional training that needs to occur for Phase 2 to be successful?

Organization: Infrastructure

- 9) What other team members did you identify as being critical to the success of the pilot that were not initially engaged when the pilot started?
- 10) How should the other (critically) identified team members be engaged in furthering the pilot?
- 11) Describe what other resources (staff/ equipment/services) would have been useful in the pilot?
- 12) What needs to happen for you to get the identified additional resources for phase 2 of the project?

Part II Process: Data Collection and ongoing Monitoring

- 5) Was the performance data easily captured?
- 6) Was performance data easy to aggregate and report?
- 7) What would need to be changed to easily capture data?
- 8) What needs to be changed to easily aggregate and report data?

Part III Staff: Clinical and Leadership Engagement

- 13) Are the previously identified Lead and Champion ready, and able to continue with Phase 2, or do new leaders need to be identified?
- 14) Describe if and how other clinical providers saw value or were engaged in the pilot.
- 15) What would need to be changed to get more clinical providers to see value or be engaged in furthering the pilot?
- 16) Describe if and how senior leadership saw value or were engaged in the pilot.
- 17) Would it be helpful to sustaining this project if Senior Leadership was more engaged, or saw value? If yes, How should this be done?

Organization: Fit with Strategy

- 22) In what ways do you identify that the pilot fits with broader organizational goals or strategic initiatives?
- 23) How can the pilot be improved/changed to align better with organizational goals and/or strategy?
- 24) What could make phase 2 of the project valuable to outside funders?
- 25) What could make phase 2 of the project valuable to community partners?

Based on the answers to the matrix above, is the organization ready to it	dentify their p	riority to
sustain, or sustain and spread the project?		

(3) Create Phase 2 PDCA cycle

Upon completion of the matrix, the NPPC team will summarize and assimilate the data to produce a draft cycle including:

- 1. **Plan:** Describing any changes to the target population to be screened, screening interval, and rationale for screening in Phase 2.
- 2. **Do:** Document the revised phase 2 workflow, or the standardized Phase 1 workflow with expansion details, and detail operational definitions for ongoing or new performance measures.
- 3. **Check:** Outline the sustainability of Phase 2 by documenting a monitoring plan that will be used by the pilot site with their identified infrastructure needs and find ways to disseminate monthly information to staff, clinicians, and leaders that will further engagement.

This portion of Phase 2 will include a shift in NPPC support, from coaching on the implementation of screening to coaching focused on sustaining and spreading ACEs screening. The main objective of coaching during this period will be focused on aiding the Team Lead and the Physician Champion in creating monthly learning/sharing via whatever platform would be widely accepted by their organization. The goal of the monthly communication will be three-fold: change management (continue emphaisizing the need for the project), disseminate data collected and highlight opportunities for improvement, and engage staff, clinicians and leaders in the change process. The NPPC will be available to support ongoing activities, but regularly scheduled calls will not be set by the coach.

4. **Act**: At the end of the 6-month cycle the pilot site Team Lead and Physician Champion will complete a summary of the phase 2 pilot and with their conclusions, via a template provided by the NPPC team.

Sample Agenda for Sustainability Meeting

Date & Time: 12:30-1:30	
Agenda Item	Pilot PDCA Document Review and Validation
Participants	NPPC team, Team Leader, Physician Champion, Senior Leadership Designee
Desired Outcome	Review Summary of the first 6 months of the ACE screening pilot, including data and lessons learned
Action Item	Revise and validate documentation of the 6 month pilot from the Organizations perspective.
Date & Time: 1:30-3:00	
Agenda Item	Complete Sustainability Matrix: Part I
Participants	NPPC team, NPPC team, Team Leader, Physician Champion
Desired Outcome	Reflect and respond to in-depth inquiry regarding future state needs for pilot to be sustained and or spread to additional clinical sites.
Action Item	Identify changes, and additional resources for ongoing success of implementation
Date & Time: 3:15-4:00	
Agenda Item	Complete Sustainability Matrix: Part II
Participants	NPPC team, Team Leader, Physician Champion, IT/EHR Specialist
Desired Outcome	Reflect and respond to in-depth inquiry regarding future state IT needs
Action Item	Identify changes, and additional IT resources for ongoing success of implementation
Date & Time: 4:00-4:45	
Agenda Item	Complete Sustainability: Matrix Part III
Participants	NPPC team, Team Leader, Physician Champion, Senior Leadership Designee
Desired Outcome	Reflect and respond to in-depth inquiry regarding future state Senior Leadership support for pilot
Action Item	Identify changes, and additional Senior Leadership support/ resources for ongoing success of implementation

ACEs Screening Phase 2 Implementation Timeline



References

Buchanan, D. F. (2005). No going back: A review of the literature on sustaining organizational change. International Journal of Management Reviews, 189-205.

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Scoville R, Little K, Rakover J, Luther K, Mate K. (2016) Sustaining Improvement an IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement.

Maher, L., Gustafson, D, & Evans, A. (2005) Sustainability: model and Guide. Coventry, UK: NHS Institute for Innovation and Improvement.

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