Six Core Elements of Health Care Transition™ 3.0

An Implementation Guide

Transitioning Youth to an Adult Health Care Clinician

Core Element 2 - Tracking and Monitoring

got transition®

I. Purpose, Objectives, and Considerations

Purpose

Tracking and monitoring receipt of the Six Core Elements of Health Care Transition™ (HCT) is the second element in the Six Core Elements. An individual flow sheet within the electronic medical record (EMR) can be used to track when individual transition-aged youth receive each core element. Information from the individual flow sheet can be used to populate a registry and help monitor the extent to which transition-aged youth in the practice/system are receiving recommended HCT services. *See sample transition tracking and monitoring tools in Section III.*

Objectives

Establish criteria and process for identifying transition-aged youth.

Develop process to track receipt of the Six Core Elements, integrating with electronic medical records (EMR) when possible.

Considerations

CONTENT

What information might be included in tracking and monitoring?

Below are some questions and ideas to think about.

- *Demographic and diagnostic information (e.g., name, date of birth, age, diagnosis).*
- *Medical (e.g., disease complexity including utilization) and social complexity information (e.g., social determinants of health/adverse childhood experiences) information. This will be helpful to risk stratify your transition-aged population.*[1-3]
- *Date of receipt of each core element, including:*
  - *When the transition and care policy/guide was shared with youth and parent/caregiver*
  - *When the HCT readiness assessment was administered*
  - *When the HCT education was provided*
  - *When the HCT plan of care was shared with youth/parent/caregiver*
  - *When the medical summary and emergency care plan were shared with youth/parent/caregiver*
  - *When the age 18 privacy and consent changes were discussed*
  - *When supported decision-making (if needed) was discussed*
  - *When the adult clinician was identified*
  - *When the transfer package was sent to adult clinician*
  - *When communication with the adult clinician occurred*
  - *When the first adult appointment was scheduled*
  - *When the first adult appointment was attended*
  - *When feedback was elicited from young adult/parent/caregiver post-transfer about the HCT supports received in the pediatric practice*

PROCESS

What is the process to implement tracking and monitoring?

Below are some questions and ideas to think about.

- *Develop criteria for what youth will be a part of this transition registry. Will it include all transition-aged youth or will it include youth with selected chronic conditions? (See references at the end of this section.)*
- *Decide at what age the registry will begin to track the youth's receipt of HCT services and at what age they should be transferred to an adult clinician. This age range is often stated in Core Element #1, the practice's/system's transition and care policy/guide.*
- *Decide what patient data should be tracked. Will a complexity score or level be used? If so, will it include a combination of medical and social complexity scores?*
- *Choose the format. Will it be an individual flow sheet or a registry via your EMR, REDCap, or an Excel spreadsheet? (See examples in Section III. Due to the variety and proprietary nature of EMRs, none can be provided as an example.)*
- *Work with your practice/system to decide who will input the data and how progress will be monitored. Will the team or the individual clinician be monitoring if all HCT services were offered? If not, who will be responsible for ensuring all services are provided?*
- *Create a written document to describe the clinic approach to implement the process outlined above.*
- *Educate all team members/staff about the process.*

1. Simon TD, Haaland W, Hawley K, Lambka K, Mangione-Smith R. Development and validation of the Pediatric Medical Complexity Algorithm (PMCA) Version 3.0. *Academic Pediatrics.* 2018;18(5):577-580.
2. Schrager SM, Arthur KC, Nelson J, Edwards AR, Murphy JM, Mangione-Smith R, Chen AY. Development and validation of a method to identify children with social complexity risk factors. *Pediatrics.* 2016;138(3):e20153787.
3. Oregon Health Authority. Health Complexity in Children – Statewide Summary Report. 2018. Available at https://www.oregon.gov/oha/HPA/dsi-tc/ChildHealthComplexityData/Statewide-Summary-pub-2019-March.pdf.

II. Quality Improvement Considerations, Tools, and Measurement

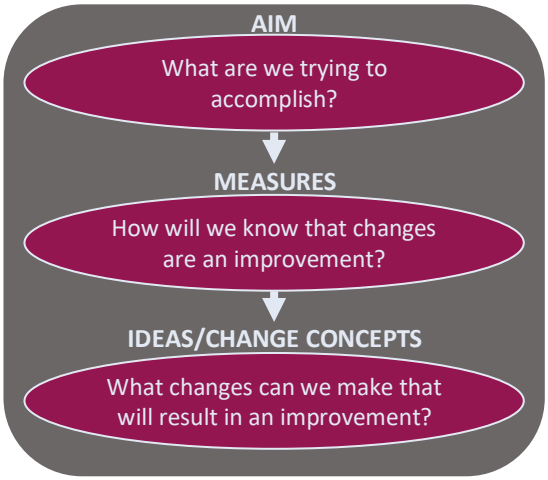
Quality Improvement Considerations

What should be thought about when forming a team? (*See Successful Teams in the QI Primer*)

- Include a representative from all areas of your practice
- Include a youth/parent/caregiver whenever possible
- Depending on what you are aiming to improve, consider any ad hoc members you might need (e.g., information services, lab, pharmacy, supply distribution, etc.)
- Schedule meetings or huddles

What is the Model for Improvement?

The Model for Improvement (see *Model for Improvement in the QI Primer*) is an approach to process improvement, developed by Associates in Process Improvement, which helps teams accelerate the adoption of proven and effective changes. The figure here illustrates the three questions that make up the Model for Improvement. This is a simple but robust model widely used for improvement in many industries, including health care.



Adapted from Langley GL, et al. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance, 2nd ed. San Francisco: Jossey-Bass Publishers, 2009.

As you continue to work through this document and the Six Core Elements, you will find that the QI tools and other items below have been customized to each element for each kind of practice. However, you will find the basic team considerations described above remain the same for most if not all of your QI work.

Quality Improvement Tools

The most important QI tools to guide a team's improvement work include ***Tools 1-5*** listed below. Using these tools in the following order will increase your chances of success, but teams can make modifications as needed. For more information and examples, see *Tools for Improvement* in the *QI Primer*.

- ***Tool 1: An aim statement*** is a fundamental element of this model and answers the question of what you are trying to accomplish.
- ***Tool 2: Key driver diagrams*** allow teams to visualize the relationship between the project aim and contributing factors, helping them determine key actions necessary to meet this aim.
- ***Tool 3: Process flow maps*** can help you visualize the steps in your change process.
- ***Tool 4: The simplified failure mode and effects analysis*** form helps teams recognize what problems might arise in each step of the process and think of possible solutions.
- ***Tool 5: Plan-Do-Study-Act (PDSA) cycles*** allow teams to trial and learn from their process changes. Using Tools 1-4 before initiating a PDSA cycle helps teams assess root causes before jumping to solutions.

Tool 1: Aim Statement

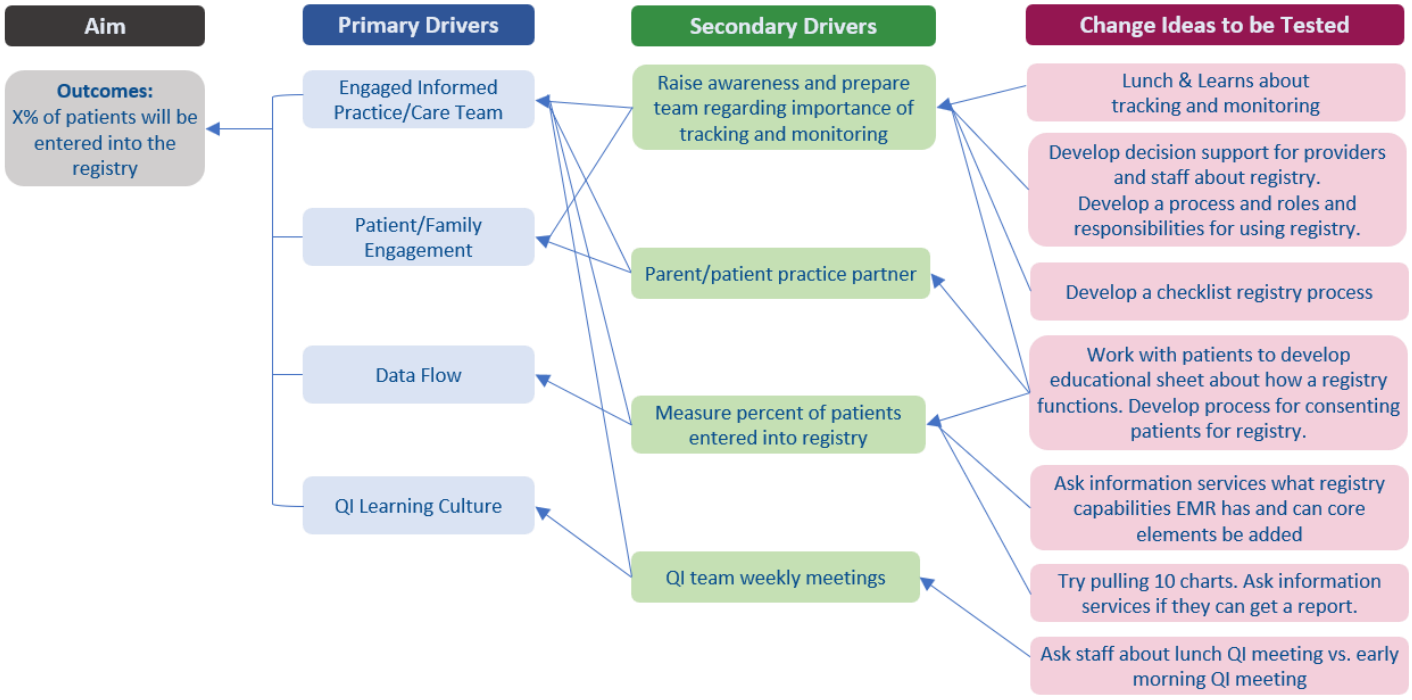
The aim statement is a written statement that describes the improvement effort and includes the rationale for doing the work, the target population, the time period of the work, and measurable numeric goals. For more information and examples, see *Model for Improvement* in the *QI Primer*.

Example Aim Statement

We aim to improve care by implementing a tracking and monitoring database. By [insert date], 80% of patients with sickle cell disease will be in the database.

Tool 2: Key Driver Diagram

Key driver diagrams (KDDs) require teams to identify their theories or "key drivers" which lead to outcomes. They help teams see relationships and organize work, especially in complex systems. They are frequently used for analysis, organization, and communication to direct improvement work. For more information and examples, see *Tools for Improvement* in the *QI Primer*.



Adapted from ST3P UP, a collaborative sponsored by Patient Centered Outcomes Research Institute® (PCORI) Award MCSC-1608-35861 Titled A Comparative Effectiveness of Peer Mentoring Versus Structured Education Based Transition Programming For The Management Of Care Transitions In Emerging Adults With Sickle Cell Disease.

Tool 3: Process Flow Map

A flow map is a visual display of the separate steps in a process placed in sequential order. It is extremely helpful in documenting different views of the same process. It can show the sequence of actions, materials/inputs entering and leaving the process, decision points, and people involved. Flow maps can be used to document steps in the process of either how things are or how things could be. Posting the flow map gives staff an opportunity to clarify the steps in the process and can uncover conflicting understandings. For more information and examples, see *Tools for Improvement* in the *QI Primer*.

Tool 4: Simplified Failure Mode and Effects Analysis (sFMEA)

Simplified Failure Mode and Effects Analysis (sFMEA) is a proactive method for evaluating a process to identify where and how it might fail and to assess the relative impact of different failures, in order to identify the parts of the process that are most in need of change and help generate ideas to prevent those possible failures. This is a good companion to the flow map – a flow map lets you see the process as it is, and the sFMEA helps you look more closely to identify breakdowns. The example below has a few solutions filled in, to illustrate how teams might start completing an sFMEA. For more information and examples, see *Tools for Improvement* in the *QI Primer*.

Adapted from the copyrighted Simplified Failure Mode Effects Analysis Worksheet (sFMEA) from Cincinnati Children's Hospital Medical Center. This version of the sFMEA has been modified and has been reprinted with permission.

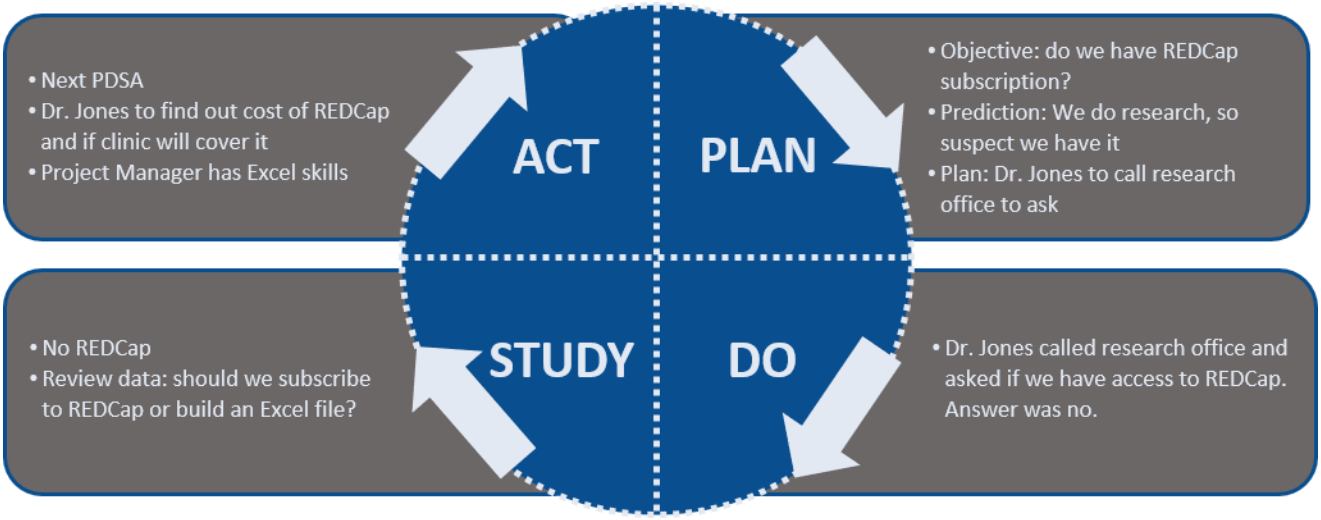
Tool 5: PDSA Cycles

PDSA cycles are a structured test of a process change. These are meant to be done rapidly, for example one patient, one afternoon, with one doctor. To accelerate learning and improvement, small tests with reflection allow for change ideas to be adapted, adopted, or abandoned easily within busy healthcare settings. Learning to do rapid cycle testing is key to keeping the momentum going; it is not necessary to schedule a full separate meeting, just a quick huddle allows teams to plan the next cycle. For more information and examples, see *Model for Improvement* in the *QI Primer*. This effort includes:

- **Plan** the test: who, what, where, when;
- **Do** try the change and observe what happens;
- **Study** reflect on what was learned from the test; and
- **Act** decide next steps based on the reflection.

Examples of Ideas to Test

- Using Excel vs. REDCap
- Creating a mock database and testing, are any key components missing?



Adapted from AHEC QI 101, a Quality Improvement course sponsored by Charlotte Area Health Education Center.

Quality Improvement Measurement

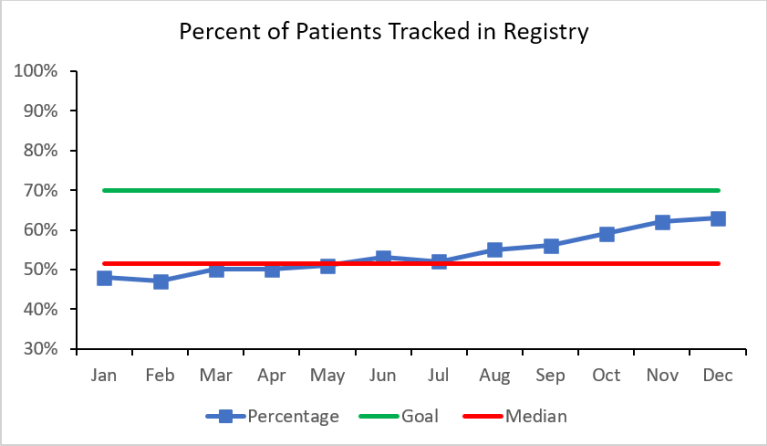
This step will sometimes be informal, while other situations will require a more formal process. Tracking your progress can be as simple as using a check sheet for a short period of time or a more formal use of a run chart which displays improvement over time. Specifically, the Current Assessment of HCT Activities or the HCT Process Measurement Tool in the Six Core Elements package can be used by teams to track progress of specific core elements or the overall HCT process. For more information and examples, see *Measuring for Improvement* in the *QI Primer*.

Example Data Collection Check Sheet

- ☐ Track how long it takes to enter the data per patient.
- ☐ Track the number of patients entered for 1 week.
- ☐ Generate reports.
- ☐ Track how the report is used.
- ☐ Once the process is refined, weekly or daily track the percent of patients seen who are entered into the database.
- ☐ Note what is achieved from the reports.

	Mon	Tues	Wed	Thurs	Fri
# pts put in database	||||	||	||||	|	|

Data display is important for teams to assess the impact of the changes they are making. In QI, run charts are most often used. Run charts are a dynamic display of data over time. They require no statistical calculations and should be easily understood. Use a clear title. Data points are plotted around a median line. When possible, adding annotations to the chart to explain when certain changes were introduced can make the chart more informative and robust.



Sustain & Spread

For strategies on how to sustain and spread your work, please see Steps 6 and 7 in *How to Implement the Six Core Elements of Health Care Transition*.

III. Sample Tracking and Monitoring Tools

Sample Registry Tool from the Six Core Elements of HCT™

- Sample Excel spreadsheet from Got Transition's "Transitioning Youth to an Adult Health Care Clinician" *(click here)*

Sample Transition Flow Sheet from the Six Core Elements of HCT™

- Sample transition flow sheet from Got Transition's "Transitioning Youth to an Adult Health Care Clinician" *(click here)*

Sample REDCap Tracking and Monitoring System

- *Click here* for information about how to access a customizable REDCap example for a tracking and monitoring system.

Suggested Citation: White P, Schmidt A, Ilango S, Shorr J, Beck D, McManus M. *Six Core Elements of Health Care Transition™ 3.0: An Implementation Guide.* Washington, DC: Got Transition, The National Alliance to Advance Adolescent Health, July 2020.

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THE NATIONAL ALLIANCE TO ADVANCE ADOLESCENT HEALTH
1615 M Street NW, Suite 290, Washington DC 20036 | 202.223.1500
www.GotTransition.org