



Continuous Quality Improvement

Part 1: Basics for Pregnancy Assistance Fund Programs

What's Covered

This is the first of three briefs on continuous quality improvement (CQI). In this brief you will learn about CQI and why it matters for programs working with expectant and parenting teens, women, fathers, and their families. It covers the basic components of a CQI effort, several examples of quality improvement frameworks, how to get started doing CQI, and how to maintain ongoing CQI efforts. The second brief of this series will take a look at collecting data for CQI, while the third will cover turning data into action.

Who is this for?

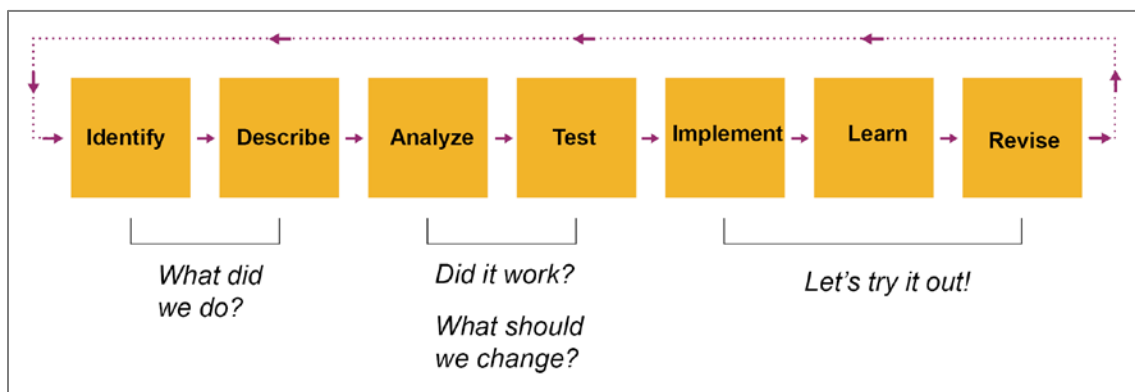
All briefs are intended to be used across agencies, departments, and organizations as well as at the state, regional, and local level. We will use the term "organization" to describe the entity which is organizing the CQI effort throughout.

The Basics of Continuous Quality Improvement

Defining Continuous Quality Improvement

Continuous quality improvement (CQI) is the systematic process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions.¹ More simply, one can describe CQI as an ongoing cycle of collecting data and using it to make decisions to gradually improve program processes. Figure 1 shows this basic process.

Figure 1. The Basic CQI Process

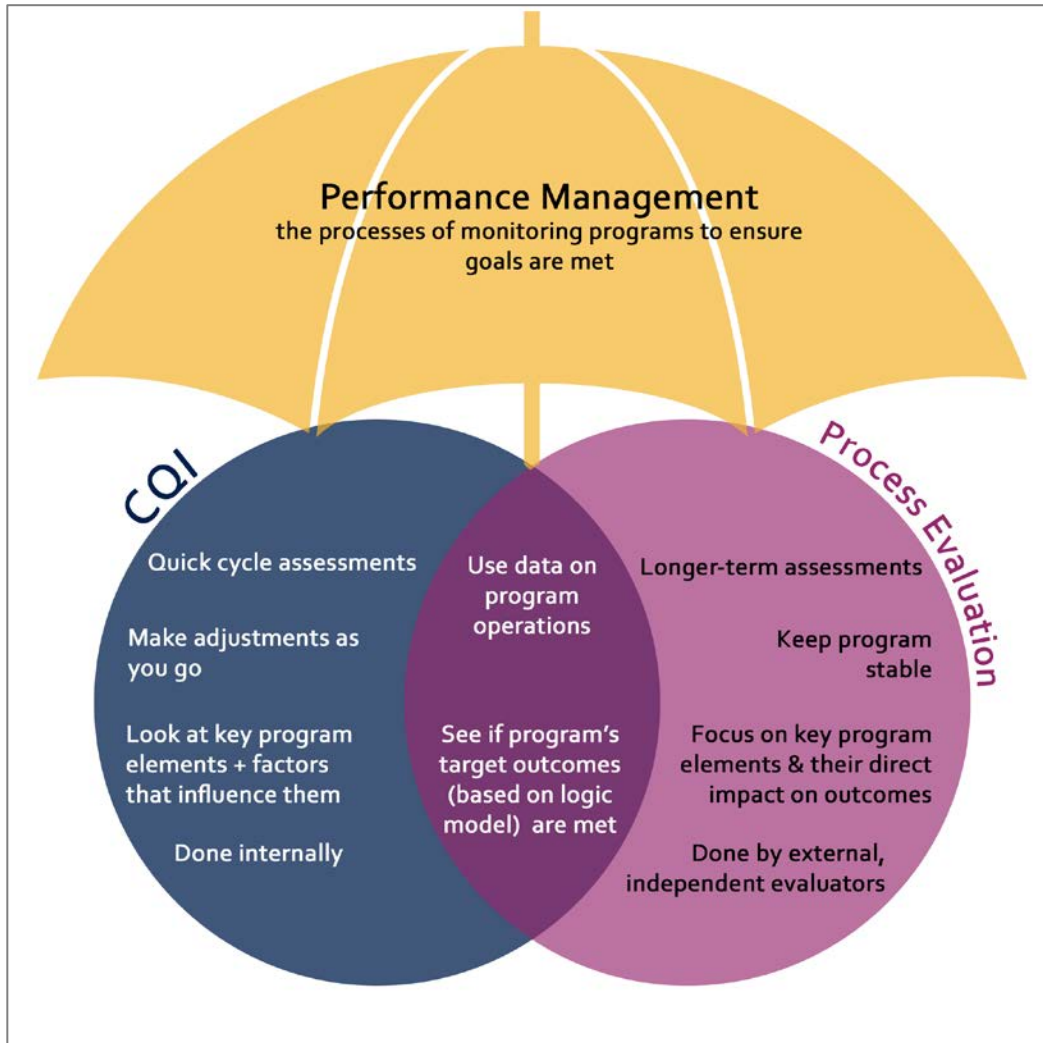


Distinguishing CQI from Performance Management and Process Evaluation

CQI works within the larger framework of performance management, a process organizations use to engage staff in monitoring the implementation of programs to accomplish the organization's goals.^{2,3} Process evaluation is the other piece of performance management, and

it checks whether program activities are being done as intended and leading to desired results.⁴ Figure 2 expands on the differences and relationships between performance management, CQI, and process evaluation.

Figure 2. Relationships and Differences between Performance Management, CQI, and Process Evaluations

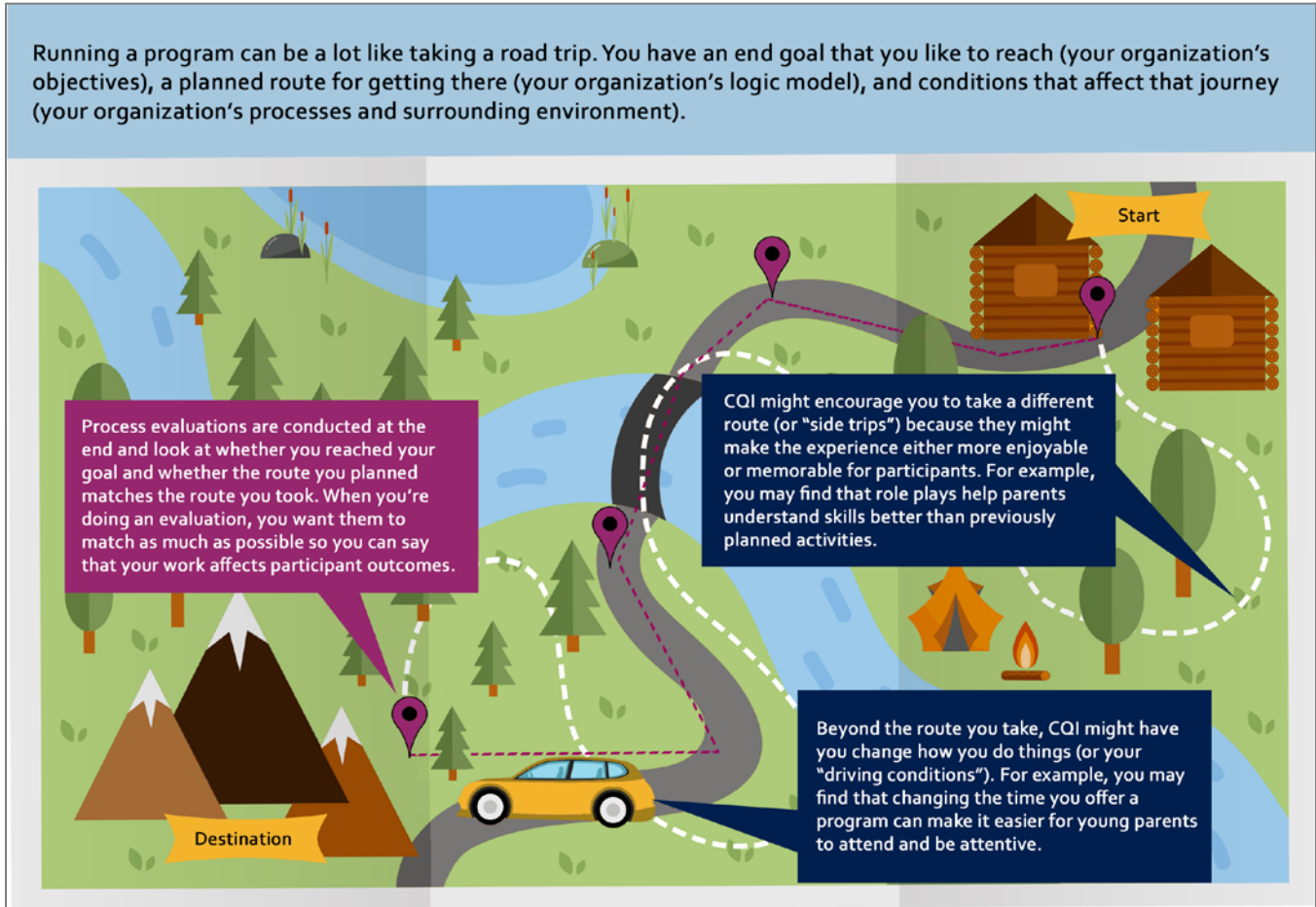


Why We Use CQI

Process evaluations focus on a limited set of indicators, namely the aspects of the program that developers believe will drive changes in outcomes. Because of this focus, CQI plays an important role in performance management, since it takes a broader look at systems in which programs operate. Think of your organization’s collection of programs as a road trip (see Figure 3). Just like any functional car can get you from point A to point B— but a car that is in really good shape or with added amenities can make the trip more enjoyable— a program that continually improves can be more efficient and create a more positive experience for its clients. When the expectant and parenting teens, women, fathers, and their families in your program have more positive experiences, recruitment and retention can get easier, which also

means that participants are getting either more exposure to your program or more effective versions of your programs. Additionally, by not needing to wait to test solutions and refinements, program staff and participants can see results more quickly.

Figure 3. The CQI and Performance Management Road Trip



Setting Up CQI

Doing a CQI effort requires putting in place some key components, namely the people who will lead your CQI effort, the approach you will take, and knowledge about your program. This next section covers those pieces.

Assembling a Team

As part of a performance management system, CQI requires bringing together multiple individuals, organizations, and fields (e.g., social work, education, public health). While everyone participates in the CQI effort, the people that make up your **CQI team** will lead the work and make sure that it gets carried out. At minimum, members of a CQI team should include representation from these groups listed in Table 1. This combination of personnel ensures the appropriate expertise to gather and analyze program outcomes meaningfully and to then suggest, implement, and evaluate any quality improvement efforts at the program and organizational level.

Table 1. Members of a CQI Team

Needed Representation	Potential Tasks
Program Administrators (frontline staff, program directors, etc.)	<ul style="list-style-type: none"> • Provide a realistic view of how programs operate • Flag potential staff burden issues in data collection • Work with data specialists on gathering and interpreting data • Take the lead on implementing changes proposed through CQI process
Community Stakeholders (program participants, community funders, etc.)	<ul style="list-style-type: none"> • Guide the prioritization of CQI efforts • Help share impact of improvements with the broader community
Data Specialists (program evaluators, data managers, data analysts, etc.)	<ul style="list-style-type: none"> • Help identify data sources and note any special instructions about how data sets are used • Link together data sets, if possible • Analyze data

Out of this group, one or two **CQI champions** should be identified within the team to lead CQI efforts. Since CQI efforts will be supplementary to program efforts and may entail multiple agencies, CQI champions play an important role in managing logistics and keeping all involved organizations motivated. They can complete tasks such as leading meetings, setting agendas, and coordinating communication. Their work ensures that CQI remains a top priority for the organizations involved and that momentum of the effort continues.⁵

Aside from the CQI team, leadership of the organizations involved in the CQI effort (executive directors, CEOs, administration directors, etc.) ideally need to be involved, but at a minimum need to be supportive of CQI. Their support can help staff understand why CQI is needed, as well as ensure that staff have the necessary time and training to do CQI properly and that results can be acted upon either through added resources or training.

Choosing a CQI Framework

A CQI team’s primary task is identifying which CQI framework they want to use. Several factors can affect which CQI framework to choose, including:

- The goals and objectives of the CQI team
- The size and depth of the CQI effort
- The amount, type, and quality of data available
- The amount of staff time it would take to implement the CQI framework

There are many different types of CQI frameworks. Table 2 below is not an exhaustive list of CQI frameworks, but shows three frameworks that are relevant for agencies and systems working with expectant and parenting teens, women, fathers, and their families (see the Resources box at the end for links to more information).

Table 2. Some CQI Frameworks

Framework	Description
Getting to Outcomes (GTO)	A program management tool, which uses a 10 step process towards program management and includes the Plan, Do, Study, Act model to ensure CQI. GTO walks programs through the lifecycle of programming (planning, implementation, and evaluation) through the lens of quality improvement. It has been used in programs working with young people, home visiting programs for parents and children, and in teen pregnancy prevention programs. This framework is easy to follow and can be used by organizations both well-versed and new to outcome evaluation and quality improvement.
Plan, Do, Study, Act	A structured, cyclical process for developing and implementing change. “Plan” means to collect and analyze data and develop solutions. “Do” means to implement one of the proposed solutions. “Study” means to measure any changes as the result of the proposed solution that was implemented, and “Act” means to adopt the solution of standard practice, or start over. ⁶ This framework has been used with both programs and larger systems and can be very broadly applied.
Collective Impact	A framework to tackle deeply entrenched and complex social problems. It is an innovative approach to making collaboration work across government, business, philanthropy, and non-profit organizations to achieve lasting social change. This framework in particular is good for larger collaborations or systems. The foundational concepts for the framework include: developing a common agenda, developing shared measurement, having mutually reinforcing activities, providing continuous communication, and having a backbone organization.

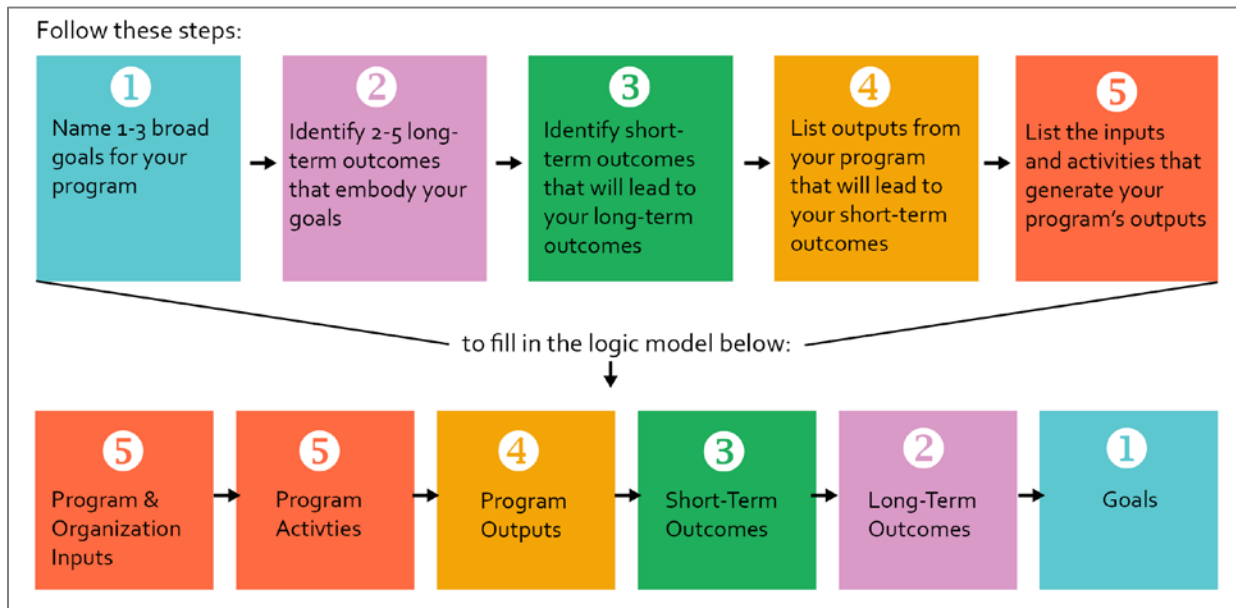
Once a framework is chosen, the CQI team needs to determine a baseline for the CQI effort using any data collected on the target population before program implementation, any recent process and outcome evaluation data, and any other relevant organizational or program data. Using these data, as well as stated program objectives, the team will then set goals for the CQI effort. Following implementation of the CQI effort, it is important for all agencies involved to give feedback on the process, to make appropriate adjustments, and then to support continued improvements.

Developing Logic Models

CQI frameworks guide your approach for data collection and how you will go about carrying out your CQI effort; however, there is one other piece you need – a logic model. **Logic models** show how your organization’s efforts get from point A to point B by linking activities to outputs and subsequent outcomes. Consequently, they serve as a starting point for where to begin improvements. As Figure 4 shows, logic models are built backwards. They can and should be built for individual programs, but organizations overseeing multiple programs can combine them into broader models. This broader model would not only reflect how CQI team members feel their respective programs work individually, but also how the programs fit together and reinforce or complement each other’s efforts. These models would focus at the points where programs interface with each other and points of transition among participants (e.g., if one program teaches parenting skills to participants and another focuses on home visiting, one

thing that might be part of an expanded logic model is whether home visitors check in on what young parents have learned from their classes).

Figure 4. Building Logic Models



Keeping CQI Going

Building Capacity

Organizational culture greatly influences the success of CQI efforts, including whether there is adequate staff buy-in and a team approach.⁵ Specifically, organizations need a growth mindset that emphasizes changing inefficient processes instead of blaming individuals.⁷ The organization's leadership fosters this mindset by managing the quality of two things: communication of CQI results and investments in staff development. Effective communication of CQI efforts includes regular reporting of results, highlighting what is going well and encouraging discussion when efforts stall. CQI teams should ensure that discussions about findings include honest assessments of what skills program staff need to successfully implement changes. Once those needs are identified, organizational leadership should then coordinate with the staff members affected on the best way to develop these skills. It can span from informal coaching between peers (e.g., a higher performing peer showing a lower performing one how to do a task) to formal classes (e.g., a group training led by external experts, attendance at a conference). Beyond building staff's program skills, organizational leadership should also strive to build the capacity of the CQI team to collect, interpret, and discuss data. Building capacity both to conduct the CQI and respond to it is one of the primary functions of engaging organizational leadership in CQI efforts.

Sustainability

The success of any quality improvement effort requires intentional long term sustainability. This includes maintaining staffing over time and having a plan for how to transition new staff into the CQI team and process smoothly. This especially applies to those on the data team.

Having written protocols for collecting, evaluating, and analyzing data can make turnover less detrimental to the CQI effort. Maintaining adequate representation from key groups on your CQI team is also important to the sustainability of CQI. Organizations should consider adding involvement in CQI efforts to MOAs or MOUs with their partners to ensure all programs they work with are well represented and actively involved in the CQI initiative.

Finally, programs can further work toward sustainability by communicating results and progress to funding entities. You are showing funders not just that individual programs work, but that programs are working together to change outcomes for expectant or parenting teens, women, fathers, and their families. Be creative when sharing your data and outcomes. Combine your data with stories of the real people and lives your programs have impacted. Celebrating success is an important part of CQI; it is an important part of working together to improve outcomes for expectant and parenting teens, women, fathers, and their families.

Key Terms Review

- **Continuous Quality Improvement (CQI):** the systematic process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions
- **Performance Management:** a framework used to engage staff in monitoring the implementation of programs to accomplish goals
- **Process Evaluation:** systematically using data to analyze how programs operate
- **CQI Team:** a group of individuals representing different stakeholders gathered to carry out the CQI plan
- **CQI Champion:** an individual who can lead CQI efforts and ensure that it stays a priority
- **Logic Model:** a snapshot of program implementation that shows how activities link to subsequent outputs and outcomes

Resources

Additional CQI Basics and Sample Applications of CQI

- Continuous Quality Improvement (HHS, Administration for Children & Families, Family and Youth Services Bureau) – http://www.healthyteennetwork.org/sites/default/files/Tip%20Sheet_CQI.pdf
- Continuous Quality Improvement Q & A (Louisiana Department of Children & Family Services) – <http://www.dss.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=114>
- Improving Research and Evaluation Around Continuous Quality Improvement in Health Care (Robert Wood Johnson Foundation) – <http://www.rwjf.org/en/library/research/2012/11/improving-research-and-evaluation-around-continuous-quality-impr.html>
- Redesigning a System of Care to Promote Quality Improvement (HHS, Health Resources and Services Administration) – <http://www.hrsa.gov/quality/toolbox/methodology/redesigningasystemofcare/index.html>
- Understanding Data Use for Continuous Quality Improvement in Head Start (Urban Institute and HHS, Office of Planning, Research, and Evaluation) – http://www.acf.hhs.gov/sites/default/files/opre/brief_cqi_in_head_start_finaldraftcleanv2_508.pdf

CQI Frameworks

- Getting to Outcomes (RAND Health) – <http://www.rand.org/health/projects/getting-to-outcomes.html>
- Plan, Do, Study, Act (Institute for Healthcare Improvement) – <http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>
- Collective Impact Framework (Collaboration for Impact) – <http://www.collaborationforimpact.com/collective-impact/>
- Tools and Strategies for Quality Improvement – <http://www.ncbi.nlm.nih.gov/books/NBK2682/>

Logic Models

- Basic Logic Model Template (HHS, Office of Adolescent Health) – <http://www.hhs.gov/ash/oah/resources-and-publications/learning/tpp-evidence-based/assets/worksheet3.pdf>
- BDI Logic Models: A Useful Tool for Designing, Strengthening and Evaluating Programs to Reduce Adolescent Sexual Risk-Taking, Pregnancy, HIV and Other STDs (ETR) – <http://recapp.etr.org/recapp/documents/BDILOGICMODEL20030924.pdf>
- Evaluation Brief: Logic Model Basics (HHS, Centers for Disease Control and Prevention) – <http://www.cdc.gov/healthyyouth/evaluation/pdf/brief2.pdf>
- Evaluation Toolkit (FRIENDS National Center for Community-Based Child Abuse Prevention) – <http://friendsnrc.org/evaluation-toolkit>
- Online Training: Logic Models and Theory of Change (HHS, Administration for Children & Families) – <http://ncfy.acf.hhs.gov/node/18853>

References

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- ³ Thomas, C., Corso, L., Pietz, H. *Evaluation, Performance Management, and Quality Improvement: Understanding the Role They Play to Improve Public Health*. Centers for Disease Control and Prevention. Division of Public Health Performance Improvement. Office for State, Tribal, Local, and Territorial Support. August 6, 2013. <https://www.cdc.gov/std/products/progevalwebinar-slides.pdf>
- ⁴ Centers for Disease Control and Prevention. (n.d.). Types of Evaluation. Retrieved from: <https://www.cdc.gov/std/Program/pupestd/Types%20of%20Evaluation.pdf>
- ⁵ Kaplan, H.C., Brady, P.W., Dritz, M.C., Hooper, D.K., Linam, W.M., Froehle, C.M., and Margolis, P., The influence of context on quality improvement success in health care: a systematic review of the literature. *Milbank Quarterly*, 88(4), 500-559.
- ⁶ Hunter, S., Ebener, P., Chinman, M., Ober, A, Huang, Y. (2015). *Promoting Success. A Getting to Outcomes Guide to Implementing Continuous Quality Improvement for Community Service Organizations*. Santa Monica, CA: Rand Corporation. Retrieved from: <http://www.rand.org/pubs/tools/TL179.html>
- ⁷ University of Kansas. (n.d.). Chapter 40: Achieving and Maintaining Quality Performance. Community Toolbox. Retrieved from: <http://ctb.ku.edu/en/table-of-contents/maintain/maintain-quality-performance/overview/main>