Continuous Quality Improvement Methodologies and Tools for Solving Healthcare Problems

LARC Program Implementation Guide

2024 version

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How to Use this Guide

It is recommended that you review the *LARC Program Implementation Guide* in conjunction with the LARC Workbook. All the quality improvement tools and templates mentioned in this Guide can be found in the *Workbook.* Both the Guide and the Workbook are available on the LARC website.

On the LARC website, under "Our Tools" section, you will also find the agendas, PowerPoint presentations, and other information for conducting the Smart Start and Learning Sessions (see below screen shot).

You will find that many terms in the Guide are hyperlinked for easy reference. These hyperlinked terms appear in blue and are underlined. For example, LARC Workbook, LARC website, or LARC Implementation process.

Frequently Asked Questions (FAQs)

❖ **What is LARC?**

LARC is a learning collaborative initiative designed to enhance HIV (or other sectors of healthcare) service delivery by facilitating multidisciplinary teamwork in health facilities using the continuous quality improvement (CQI) approach. The program's purpose is two-fold:

- To strengthen the viral load cascade to achieve better patient result (i.e., viral load suppression)
- To improve institutional capability for viral load scale-up

❖ **Where can I find additional information about LARC?**

The official LARC website (https://www.larccqi.org/)

❖ **For what does LARC stand? Is it an acronym?**

Born from the African Regional Collaborative (ARC), a collaborative around nursing governance, LARC was designed specifically to work with multidisciplinary teams across the laboratory-clinical interface.

❖ **How long does it take to implement LARC?**

LARC collaboratives may be implemented over a 6-month to 1-year timeframe, with an additional 2-3 months in advance for planning and preparation. However, with adequate planning, a limited project scope, and proper resources, the program itself could be implemented in a little as 100 days.
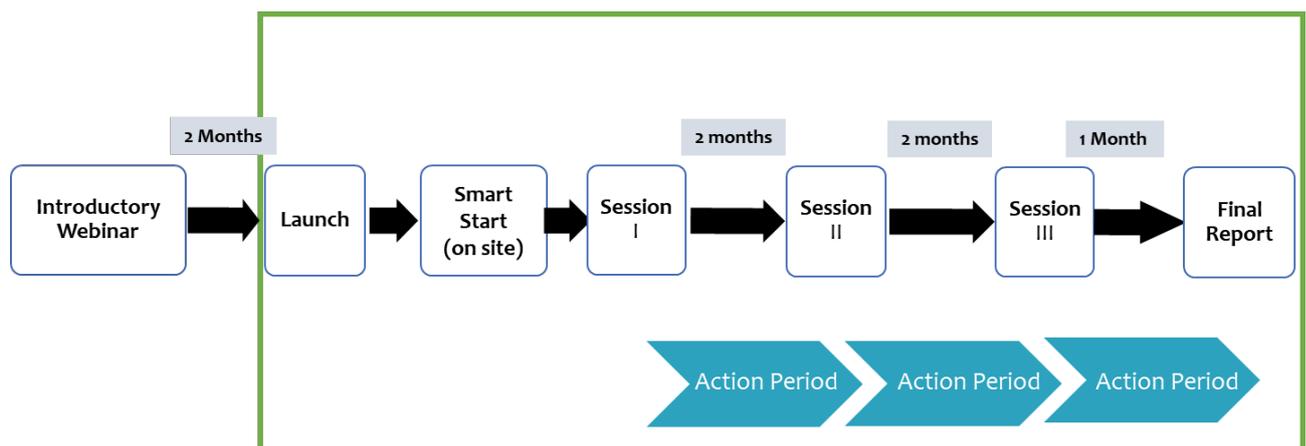
❖ **What is the basic implementation model for LARC?**

LARC employs the Learning Collaborative Model – didactic training sessions immediately followed by action periods. However; a few unique elements (see the "Unique Features" FAQ) are added to maximize the impact of the learning sessions. See LARC Implementation process in this document.

❖ **What are the unique features of the LARC program?**

- The Continuous Quality Improvement (CQI) tools and methodologies are NOT unique to LARC; however, the specific methodologies selected, the *structured, sequenced implementation* of these methodologies, and the application to solving an actual significant clinical problem with *step-by-step guidance and coaching* is where LARC stands out from other programs.
- The *on-site Smart Start session* utilizes guided process mapping to allow the team to actually see and understand the problem. This insight into the problem is crucial to engaging and motivating the team with a desire to learn the methodologies, to solve the problem, to achieve change, and ultimately to embed CQI into the way that work is done.
- The focus on the laboratory clinic interface, actively engaging all cadres who touch the process of interest, provides a multidisciplinary approach to problem solving and service improvement.

❖ **How much does it cost to implement LARC?**

Many factors influence the implementation costs, including the number of facilities and participants, travel and logistic costs for the learning sessions and site visits, faculty remuneration and the engagement of implementing partners and their scope of work. See Resource Requirements in this document.

❖ **Why implement LARC?**

LARC is one of the few initiatives that bring laboratorians and clinicians together for problem solving and service improvement. Through rigorous application of a structured CQI methodology and relentless focus on results and data, the LARC approach has proven successful in producing measurable outcomes as well as facilitating inter-cadre collaboration and team building. Additionally, LARC builds capacity at the facility level by engaging the front-line workers in identifying/prioritizing opportunities for improvement and devising local solutions using local data. Facility teams learn to set ambitious and measurable aims that are achievable through process redesign, and not necessarily by working harder or adding more resources.
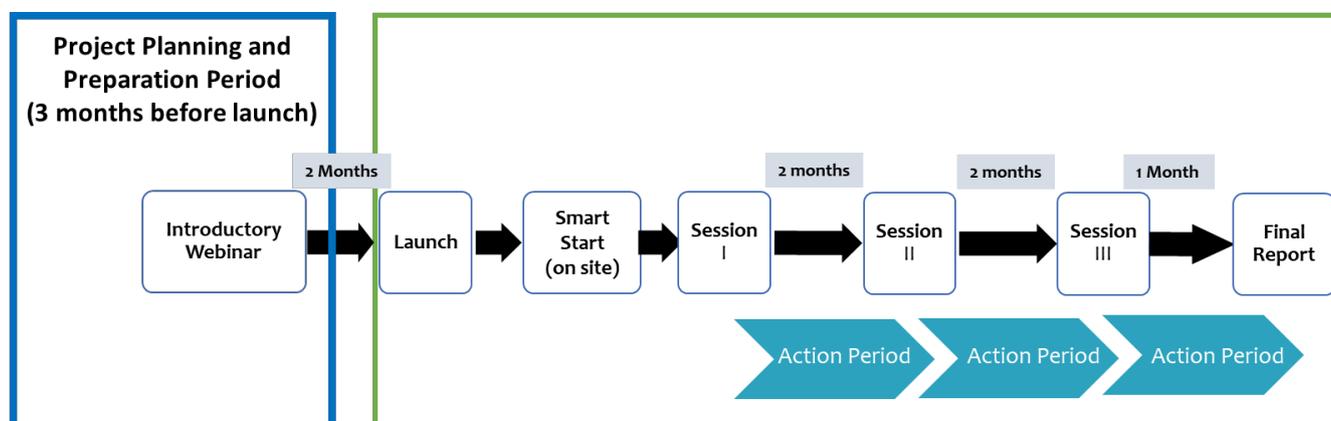
❖ **In what situations would LARC be beneficial?**

If you desire any of the following, then LARC is for you and your organization.

- If your organization is tired of talking about *quality, safety, and efficiency*…. If instead, you would like to see *action*…
- If you would like to *improve service* to your patients and clients…
- If your organization is not meeting healthcare delivery goals, including the UNIAIDS 90-90-90 HIV-care goals, *Tuberculosis Care* goals, or goals related to any disease process…
- If you would like to develop a culture where employees are engaged and invested in their work, collaborating as multidisciplinary teams across the *laboratory-clinical interface*…
- If you would like your organization to be continuously engaged in learning and quality improvement, thus embedding a new and sustainable way to work.

Planning and Preparation

Early and rigorous planning is critical for project success. Allow at least 3 months for planning and preparation before launching LARC. Visit the LARC website to become familiar with the LARC approach, implementation requirements and tools.

Complete the following tasks before launch:

TASK	HOW TO
Define project scope	- Determine project focus (e.g., HIV viral load cascade, TB care, etc.) - Reach consensus on desired outcomes and proposed metrics with country and project leadership - Specify the number of sites to enroll and site selection criteria (for example, high-volume sites, low coverage geographic areas). See Site Selection.
Select implementing partners and sites	- Select implementation partners and sites based on pre-determined criteria. See Site Selection. - Obtain approval from the facility management for enrollment of their sites into the project
Engage stakeholder and seek their support	- Identify all stakeholders - Complete Stakeholder Analysis tools as well as Communication Plan and Action Plan (tools can be found in the Workbook). See Step ❶ Stakeholder Engagement. - Sensitize stakeholders: - Meeting with them in person - Sharing the LARC website and LARC video with them - Conduct the Introductory Webinar, preferably at least 2 months prior to project launch - Follow through on stakeholder communication and engagement strategies

TASK	HOW TO
Create budget and implementation plan, including scale-up	- Obtain financial support for the project and subsequent scale-up - Create budget - Create implementation plans, including scale-up (consult the following two resources for guidance) - IHI Open School Course QI 201: Planning for Spread, From Local Improvement to System-wide Change - Lessons Learned from Ghana's Project Fives Alive! A practical guide for designing and executing large-scale improvement initiatives
Obtain subscription to IHI Open School	- Determine the number of users for the IHI Open School subscription. - All program leads, coaches and facility team members should have access to the courses. - Consider providing the subscription to facility leadership and other key stakeholders as access to these courses has proven to be a great engagement tool. - Negotiate a group discount and pay for the subscription - Provide the subscription to all team members so they can begin completing the courses before project launch.
Ensure team readiness	- Use Team Formation Tools and Quality Improvement Project Outline (see the Workbook) to help implementing partners and facility management form quality improvement teams and define roles and responsibilities. - Form effective quality improvement teams - Determine which cadres touch the process of interest - Select one member from each cadre to form the core team - Assign roles and responsibilities - Work with facility management to allow team members time to attend the Introductory Webinar, Smart Start, and Learning Sessions. - For team members unable to attend the Introductory Webinar, make sure they review the Introductory Webinar PowerPoint presentation. - Ensure team members complete the 7 mandatory IHI Open School courses prior to project launch.
Plan logistics	- Plan the logistics for Smart Start - Plan the logistics for Learning Sessions - Select appropriate venue - Plan for catering, transportation, lodging, and participant per diem, if necessary - Plan for printing of workbook, handouts, etc. - Plan for provision of training supplies

Resource Requirements

Faculty Requirements and Itemized Budget List

FACULTY - At least one quality improvement (QI) expert with LARC implementation experience is required to conduct the webinars and learning sessions and to provide overall guidance and oversight of the LARC collaborative. Coaches/mentors, with practical QI experience, are required to support the teams during the learning sessions and conduct the site visits – matched to the number of sites selected.

ITEMIZED BUDGET LIST - Many factors influence the implementation costs, including sourcing expert faculty and local mentors who provide ongoing coaching/mentoring, subscriptions to the IHI Open School online learning courses, and supporting the three (3) Learning Sessions plus Smart Start. Below is an itemized budget list of factors to consider when allocating and sourcing funding for LARC implementation.

Categories	Unit	Categories	Unit
External Consultant/CQI Expert consultancy: ▪ Guide project planning ▪ Conduct monthly webinars ▪ Lead the Smart Start session (SS) ▪ Lead 3 learning sessions (LS) ▪ Conduct site visits before each LS Mentor local project staff	45 days	**3 Learning Sessions** ▪ Venue hire, conference package ▪ Supplies and stationary ▪ Printing costs ▪ Participant per diem, if applicable ▪ Transportation cost, if applicable	Cost based on # participants
External Consultant Travel Expenses ▪ Air ticket ▪ Per diem ▪ Lodging	3-4 trips	**Final Dissemination Meeting** ▪ Venue hire, conference package ▪ Supplies and stationary ▪ Printing costs ▪ Participant per diem, if applicable ▪ Transportation cost, if applicable	Cost based on # participants
Local coaches (# depending on the number of sites enrolled) ▪ Participate in all LARC sessions (webinars, SS, LS) ▪ Conduct SS at assigned site(s) ▪ Conduct weekly or monthly site mentoring visits ▪ Provide mentorship on as needed basis (email, calls)	Cost based on # coaches	Annual Subscription to IHI Open School – See Appendix A	
Local coaches site visit expenses ▪ Per diem ▪ Lodging, if applicable ▪ Transportation costs (bus fare, air tickets, driver, vehicle, fuel, etc.) ▪ Airtime	Cost based on # site visit trips		

Site Selection
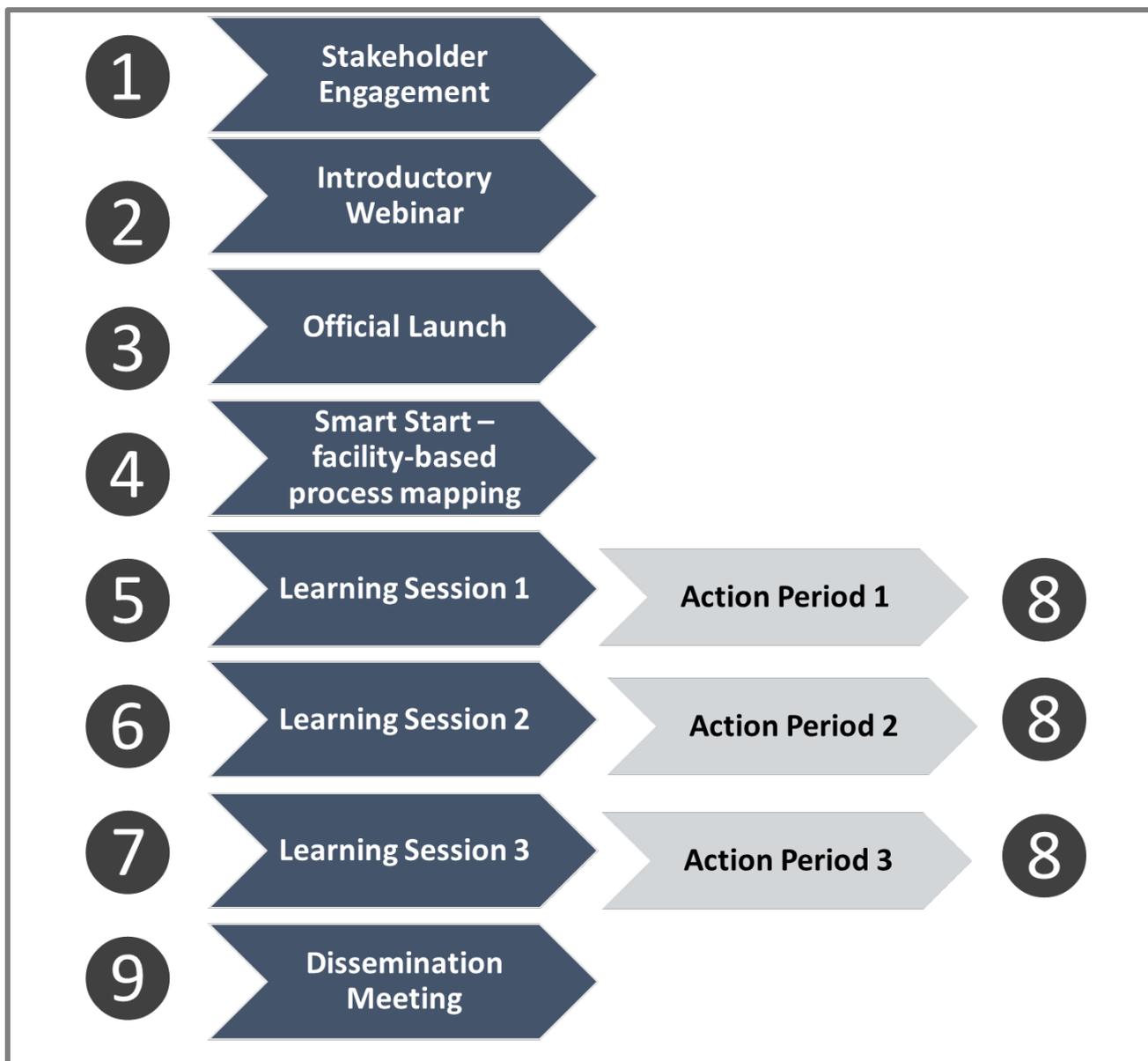
Two questions to consider:

- What is the right number of sites to include in each learning collaborative?
- Which sites should be selected?

Factors driving the decision on the optimal number of sites to enroll	Criteria to consider when selecting sites to enroll:

- **Number of qualified coaches and their capacity**
  o Who are these coaches? What are their qualifications?
  o Where are they located geographically?
  o Do they coach full time or part time?
  o Given their availability to coach, how many sites can they reasonably mentor at any given time? For example, one full-time coach may be able to mentor 5 sites concurrently if these sites are geographically close to each other.
- **Available financial resources**
  o See Itemized Budget List for cost requirement. You must include:
    - Manpower costs –salary for local coaches as well as costs associated with hiring external CQI consultants, if applicable
    - Site Visit Costs - Each enrolled site requires at least 2 mentorship site visits during each action period, or preferably one per month. Each visit should be at least one-day duration.
    - Learning Session Costs
- **Workshop capacity of the learning sessions**
  o All cadres that touch the process in question should be represented on the facility's team and ideally all should participate in the learning sessions. Typically, each facility team is composed of 5-7 members. The workshop venue capacity must be considered in determining the number of sites that can attend.
  o Each team is also expected to present their project progress in the beginning of each learning session. There needs to be a balance between time allocated to those presentations and subsequent discussion, and other required learning activities.
  o Even with unlimited resources and large venue to accommodate a large number of participants, it is recommended that the class size be limited to facilitate interaction and group discussion.
	- Sites that have already been prioritized by the program or MOH (such as high-volume sites, or failing sites)
	
	- Distance (geographic location of the sites)
	  o Select sites that are accessible, without excessive costs, by coaches and faculty member for mentorship visits.
	  o Sites need to be close enough for the entire team to be able to attend all the Learning Sessions.
	
	- Sites that have already been sensitized to QI, or have shown interest in QI
	
	- Sites that have full support from the facility leadership and administration for the project
	
	- Sites with low staff turnover – Sites that can commit to the same team members attending all the learning sessions, without being moved to another facility during LARC implementation
	
	- Sites that have staff with desire, energy, excitement, and engagement to learn and improve

Pitfalls to Avoid in LARC Implementation

TIME FRAME	PITFALLS
BEFORE the project	**Lacking clear understanding of the LARC initiative before implementation**. Most other mistakes flow from and are subsequent to this first mistake. Inadequate communication, mistakes around site selection, and inadequate resource assignment can all be linked to an initial inadequate understating of the LARC initiative. **Project scope overly ambitious** – Implementers may select more sites than resources allow or select sites where the stakeholders are not fully supportive of the project. They may also under-estimate the time required to implement LARC, specifically to coach the teams, to hold team meetings, to collect data and to test and implement changes. **Failure to communicate clearly and widely**– Inadequate communication about the program from the leadership to the stakeholders, i.e. site leadership does not inform site team members about LARC prior to the Smart Start. **Failure to take full advantage of the IHI Open School course resources** by not completing the courses prior to the Smart Start Learning Session
DURING the project	**Not engaging front-line staff** in understanding the process, identifying the opportunities for improvement, and designing the solutions. **Inadequate coaching support and contact time at the facility**. QI is best "learned by doing". Successful implementation requires on-site support by qualified couches. **Not utilizing *PDSA (Small Tests of Change) to the full advantage*** - Trying to shortcut PDSAs with "one and done" versus multiple iterative small tests of change.
AFTER the project	**Not planning for spread from the start**, thus not fully capitalizing on the momentum of the LARC implementation to drive full-scale spread of new and improved processes.

LARC Implementation Process

1. **Stakeholder Engagement**
2. **Introductory Webinar**
3. **Official Launch**
4. **Smart Start – facility-based process mapping**
5. **Learning Session 1** → **Action Period 1** → 8
6. **Learning Session 2** → **Action Period 2** → 8
7. **Learning Session 3** → **Action Period 3** → 8
9. **Dissemination Meeting**

Step ❶ - Stakeholder Engagement

What is it?	Stakeholder engagement is important because it aims to: • Identify, sensitize, educate, and engage stakeholders, partners, and implementers • Provide guidance on the implementation model, including the number and type of sites that will be selected, the personnel and resources needed, and roles and responsibilities of each stakeholder • Ensure adequate financial support • Begin the planning and preparation for the implementation
Why is it important?	It is critical that stakeholders are informed, engaged, apprised of progress (or lack thereof) and given opportunities to provide input into solutions. Without stakeholder involvement, support and active intervention, the project will not succeed.
When does it happen?	Stakeholder engagement begins preferably at least **3 months** prior to planned implementation and continues throughout the implementation period.
Who is involved?	In country LARC program leads such as MOH and CDC staff are responsible for stakeholder engagement as they are more familiar with their own country's political landscape and resources. They may be, however, assisted by faculty members (if from outside of the country), who will provide expertise and information about the LARC curriculum and implementation. **Stakeholders** - The following will serve as a list of potential stakeholders, applicable throughout the Implementation Guide: • Funding Source/s • Ministry of Health Leaders – National and/or county as appropriate • In-country LARC leadership • CDC leadership • Site/Facility leadership - the Medical Officer, the Administrator, the Sister or Nurse in Charge • Site/Facility staff – front line workers who touch the process, including physician/nurse/clinician, laboratory staff, including phlebotomists, transporters, counselors, data clerks, expert clients, etc. • Community leaders (as appropriate) **Implementers** - The following will serve as a list of potential implementers for the entire Implementation Guide: • MOH/Government health sector • Centers for Disease Control and Prevention (CDC) or USAID • Implementing partners, including Laboratory and Care and Treatment partners • LARC Improvement Coaches
What do you need?	• The LARC website, which provides a wealth of information about LARC and can be used as a sensitization tool • Stakeholder Analysis tools in the Workbook

Step ❷ - Introductory Webinar

What is it?	A 1-2-hour webinar designed to provide an overview of LARC - sharing the design and key elements of the LARC program virtually, prior to beginning the LARC implementation
Why is it important?	The introductory webinar serves the following purposes: ▪ To provide a broad overview of the LARC program ▪ To sensitize, orient, and engage all involved, including: the stakeholders, the team, the site leadership, the coaches, and the implementing partners ▪ To clarify the program, the expectations, and the roles and responsibilities prior to the launch (optional) and in-country workshops ▪ To provide an opportunity for Questions and Answers ▪ To ensure proper planning and preparation prior to the implementation, especially for the on-site Smart Start ▪ To establish the Coaching Network – the group of coaches/mentors that will support the LARC implementation ▪ To ensure that the prerequisites are clearly outlined ▪ To ensure that IHI Open School Subscriptions are secured/available ▪ To prepare for the baseline assessment of the Capability Maturity Model (Appendix B)
When does it happen?	2 months or more prior to the launch (optional) or the Smart Start
Who is involved?	▪ Hosted by the lead LARC faculty member ▪ Attended by: ○ Stakeholders – See Step ❶ Stakeholder Engagement for suggested list ○ Implementing partners - See Step ❶ Stakeholder Engagement for suggested list ○ Site Team Members - It is best to have identified the cadres which touch the process of interest, named the representative from each cadre who will serve as a team member, and include them all in the Webinar. It is imperative that the site coaches participate in the Webinar. See Team Formation Tools in the Workbook. **Tips**: Cast a broad net when inviting attendees. This is a great opportunity to inform any and all interested parties about LARC. Since this is a Webinar, there is no limitation as to whom or how many can attend online.
Where does it happen?	Access to the internet is the only requirement to participate in the webinar. No physical venue is required unless people need to gather in a conference room equipped with the internet to access the webinar.
What do you need?	▪ Agenda ▪ Computer with access to a webinar platform (such as Zoom or Skype Business) ▪ Introductory Webinar PowerPoint presentation ▪ The Capability Maturity Model (Appendix B)

Step ❸ - Official Launch (Optional)

What is it?	A formal meeting involving all key stakeholders, serving as an official initiating function for the LARC program in-country.
Why is it important?	A properly conducted project launch can serve several purposes: ▪ Stakeholder sensitization and engagement ▪ Creating a "burning platform", establishing the need for change ▪ Achieving a shared vision for the outcomes of LARC ▪ Providing an overview of the LARC process ▪ Clarifying roles and responsibilities ▪ Alignment of the implementing partners (IPs)
When does it happen?	Before the Smart Start and after all preparation tasks have been completed
Who attends the session?	▪ Stakeholders – See Step ❶ Stakeholder Engagement for suggested list ▪ Implementing partners - See Step ❶ Stakeholder Engagement for suggested list ▪ LARC In-Country program leads ▪ LARC Faculty (trainers and coaches) ▪ Facility team members (depending on meeting location, travel distance and resources)
Where does it happen?	A meeting venue that can accommodate the number of invited participants and is suitable for the event.
What do you need?	[Optional] A one-pager explaining the LARC initiative and the project details such as scope, sites, timeframe, etc. (see Appendix C for an example)

Step ➍ - Smart Start

What is it?	A one-day facility-based exercise designed to produce two outcomes: ▪ To see and understand the problem through process mapping ▪ A complete project outline – with aims and measures – to provide clear direction for the project
Why is it important?	The Smart Start session is one of the unique features of LARC and is designed to set up the project for success. At the core of the Smart Start is a facility-based process mapping exercise that involves all cadres who touch the process. This exercise is most effective if done at the facility (instead of a classroom) where actual processes are being examined, validated, and presented visually for all to see. This exercise often leads to an "ah-ha" moment, or eye-opening experience for the team. It also provides the opportunity to further engage the facility management and key stakeholders to support the project.
When does it happen?	Prior to the first learning session. Ideally the Smart Start should be conducted in most (if not all) of the selected sites, so participants can engage fully in LS #1.
Who attends the session?	▪ QI expert, trainer, or coach, who leads the session ▪ QI coaches in training, who are expected to learn the skills and replicate the session later ▪ Site Team members (one representative from each cadre who touches the process being mapped) NOTE: Given that this session occurs on-site, the number of participants should be limited in order to avoid inhibiting patient care at the site or overwhelming the site space and staff.
Where does it happen?	On-site at the healthcare facility, in two settings: <table><tr><td>**Activities**</td><td>**Location**</td></tr><tr><td>▪ Orientation and initial process mapping exercise</td><td>Conference Room</td></tr><tr><td>▪ Visiting the various locations in the facility where each step of the process occurs, including the reception, data management, clinic, counseling, pharmacy, laboratory, etc.</td><td>Physical locations or rooms in the facility</td></tr><tr><td>▪ Group discussion to complete the project outline</td><td>Conference Room</td></tr></table> Note – if the process being mapped includes outside facilities (such as a central reference laboratory), those places should also be visited if feasible. Alternatively, a team member from the outside facility participates in the session, describing the process at the off-site facility.

What do you need?	▪ Flipcharts, markers, self-stick notes (Post-It Notes), wall tape, electronic version of the process table (Word document) and visual map (PowerPoint document). ▪ Sample agenda, outline/SOP, and PowerPoint – available at https://www.larccqi.org/implementation-process/3. ▪ Chart Review Template in the Workbook
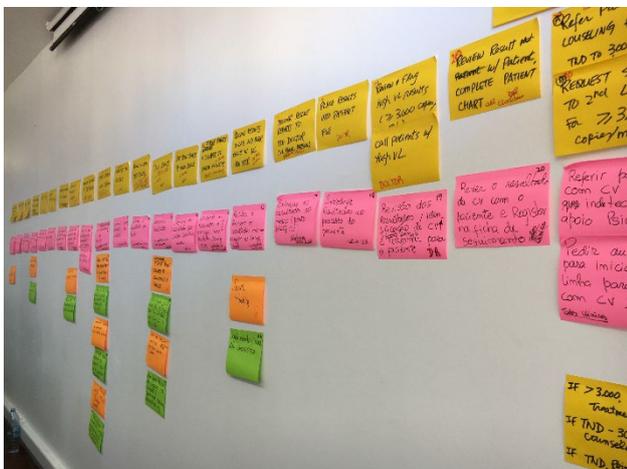
Process mapping in a conference room

Brainstorming the opportunities for improvement

"Walking" the process at the facility
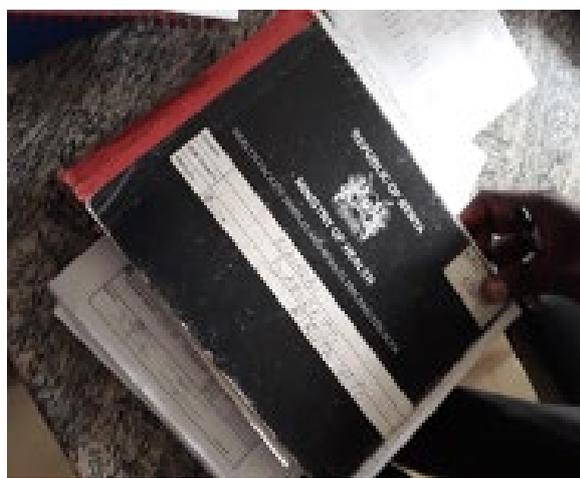
Reviewing records during process walk-through

Steps ❺ ❻ ❼ - Learning Sessions

What is it?	Learning sessions where facility teams come together to report the progress of their improvement work, share lessons learned, and engage in interactive didactic sessions to learn new tools and skills. LARC uses a structured curriculum following the Define, Measure, Analyze, Improve, and Control (DMAIC) framework - a standardized, evidence-based approach used in Lean and Six Sigma in healthcare as well as industries for problem solving and process improvement. LARC provides coached guidance through an actual quality improvement project. Deliverables or outputs from quality improvement tools and activities are associated with the DMAIC framework and are due at each learning session. The figure below illustrates the deliverables assigned at each of the three learning sessions.
Why is it important?	The collaborative learning model is a proven method. The key outcomes are as follows: ▪ The learning sessions provide the guided, step by step "how-to" of improvement tool/methodology use ▪ Facilitate peer-to-peer learning
What is the timing and duration of each session?	Each learning session (LS) is conducted over 3 days* and is followed by a 3-month* action period to allow sufficient time for project implementation. LARC has three learning sessions. ▪ For the 9-12 month collaborative – it is recommended that the learning sessions will be scheduled approximately every 3-4 months. ▪ If the overall timeline is compressed to 90-100 days* and accordingly a limited-scope project is selected, it is recommended that the learning sessions will be scheduled monthly (every 30 days), with the LS duration shortened to one day.

Who attends the sessions?	Faculty members, program leads and key stakeholders:
	
	  ▪ QI experts, trainers, and coaches
	  ▪ QI coaches in training (who are expected to learn the skills and replicate LARC in country)
	  ▪ In-country LARC program leads, including stakeholders from MOH, CDC office, and Implementing partners
	  ▪ Other key stakeholders, as deemed important or necessary
	
	Health facility teams:
	
	  ▪ All cadres who touch the process of interest - may include a physician/clinician/nurse, laboratory manager, data clerk, counselor, and expert client (also called peer educator). Given that the curriculum is progressive, with each session building on the previous one, it is important that the <u>same participants</u> (especially facility team members and coaches) attend the entire series of learning sessions.

Where does it happen?	Venue that is appropriate for:
	
	  ▪ The number of participants
	  ▪ The proximity to the facilities/sites
	  ▪ The budget for the LARC implementation

What do you need?	▪ Normal training supplies – computer, projector, flipchart, markers, self-stick notes, etc. ▪ Sample agenda and PowerPoint presentations for each learning session – available at https://www.larccqi.org/ under *Our Tools*.

Tips	Remember the following:
	
	  ▪ Participant learning is more important than rushing to complete the Learning Session agenda. Address unfinished business during the next site visit.
	  ▪ The learning session should focus on team work, group discussion, and peer-to-peer sharing of experience. Spend less time on didactic session and theory.
	  ▪ Create a fun environment for learning. Use energizers, role plays, team competitions, and games to keep participants engaged.

Participants engaged in highly interactive, hands-on group activities during the learning sessions

Step ➑ - Action Periods and Site Visits

What is it?	**Action Periods***:*
	  ▪ The time when teams are responsible for carrying out an actual improvement project, completing the assigned deliverables in the process.
	  ▪ This is where the actual improvement occurs – at the site, using the LARC tools, working with and engaging the entire facility.
	
	Site Visits:
	Conducted by the mentors/coaches to review and provide guidance on the following:
	  ▪ The overall project progress – tool usage, team engagement, using data for improvement, embedding Continuous Quality Improvement (CQI) into the facility
	  ▪ The actual raw data & ongoing data collection
	  ▪ The team PowerPoint presentation (for the next LS) to assure accuracy and clarity
	  ▪ Answer questions or resolve team concerns
	  ▪ Validate the project changes

Why is it important?	CQI is a science – the science of improvement. Learning CQI requires a didactic component and an active "doing" component. The action periods are the time to "learn by doing." During the site visits, the mentors/coaches provide invaluable guidance to ensure that the project is completed, and that learning is ongoing.

When does it happen?	**Action Periods**:
	  ▪ Immediately follow each Learning Session, where the tools/deliverables are taught and assigned.
	  ▪ Depending on the overall timeframe of the collaborative, the action periods usually occur over a 3-month span.
	
	Site Visits:
	  ▪ Scheduled prior to leaving the Learning Session
	  ▪ To occur preferably on a monthly basis, at least two visits between learning sessions (if possible)
	  ▪ The visits typically are scheduled for a half day; however, the visit time may vary depending on the workload of the site and the frequency of the visit.

Who attends the session?	**Action Periods**: The actual improvement occurs in the "using of" the tools, as assigned, to work through the project. This project work is done on a daily basis by the team members as assigned. Ongoing team meetings, held on a weekly basis, are crucial to the project success. The meetings are where the work is reported, the data analyzed, and new actions are planned. **Site Visits**: The "sessions" are on-site mentoring/coaching exercises. As such, the assigned mentor meets with the facility team. Courtesy calls to the facility administration may be carried out at each visit, dictated by the facility protocols.

Where does it happen?	**Action Periods**: In the day-to-day activities of the facility **Site Visits**: A conference room for the initial meeting may be arranged. In addition, the coach will always want to see the project data and ongoing project activities at the site, thereby, providing an opportunity for the changes to be validated.
What do you need?	Site visit checklist (Appendix D)

	Remember the following about site visits:
	
	• Plan these visits well in advance and follow through in a reliable manner to ensure success.
	• Make each visit count – the coach should become familiar with the site and its data prior to the visit.
	• Begin each site visit by meeting the site management. Encourage their involvement in the project and seek their support.
	• While on site, engage the facility staff involved in the project work beyond the core group. Make sure everyone knows about the project (aim, metrics, etc.) and can give the elevator speech.
	• It is important to focus the coaching conversation around the team's own data and challenges. Provide assistance if team members have difficulty with applying any of the QI tools.
	• Facility teams should prioritize their coach's visits as crucial to their success. The visit provides an invaluable opportunity to gain expert guidance around the actual problem to be solved in the setting in which it is occurring. Teams demonstrate that they value the coaching visits by doing the following:
	   ○ Have the raw data readily available for review
	   ○ Have the entire team present for the meeting
	   ○ Respect the time of the coach by meeting the pre-arranged appointment time

Step ❾ - Final Dissemination Meeting

What is it?	A half-day to one-day meeting where all key stakeholders gather to: ▪ Chart the way forward – Taking LARC to scale will require leveraging methodology and lessons learned, planning strategically, and engaging commitment and leadership. ▪ Celebrate the LARC leadership and teams for their successful improvements within these health facilities.
Why is it important?	Stakeholder engagement is a continuous process that should occur before, during and after the project. This event allows the program leads to communicate project outcomes, tell success stories, and share lessons learned as well as facilitate consensus on next steps – how to sustain or further expand the program in country.
Who attends the session?	All key stakeholders at different levels: ▪ MOH, national programs, county/district health officials ▪ Implementing partners from both clinic and laboratory sides ▪ Facility representatives ▪ Program leads and faculty members
Where does it happen?	Venue that is appropriate for: ▪ The number of participants ▪ The proximity to the facilities/sites ▪ The budget for the LARC implementation
What do you need?	▪ Normal meeting supplies – computer, projector, flipchart, markers, etc. ▪ Sample agenda, one-pager, and PowerPoint presentations – available at https://larccqi.org/dissemination-meeting.
	▪ Consider a recognition of the team and facility efforts, e.g. a trophy, certificate, etc. ▪ Consider this as an opportunity to seek an affirmation of commitment from stakeholders to the scale-up and sustainability of the LARC initiative

Key Success Factors

To ensure successful implementation, keep the following things in mind:

Communication and Engagement	Ensure facility ownership and top management engagement
	Spread the QI knowledge to the entire facility and involve everyone in the implementation
	Facilitate multi-disciplinary teamwork and laboratory-clinic collaboration
	Plan sufficient mentoring contact time during the action periods, and stick to the mentorship visit schedules
	Communicate effectively and often about the projects and results to all stakeholders
	Overcome time constraints and find creative ways to hold regular team meetings
Fidelity of Implementation	Plan early and methodically before project launch
	Rigorously adhere to the structured methodology for improvement
	Accurately and faithfully apply the CQI tools
	Use data for decision making
	Focus relentlessly on results
	Fully leverage the support and expertise of the faculty and mentors

APPENDICES

Appendix A - IHI Open School On-Line Courses

http://www.ihi.org/education/ihiopenschool/Pages/default.aspx
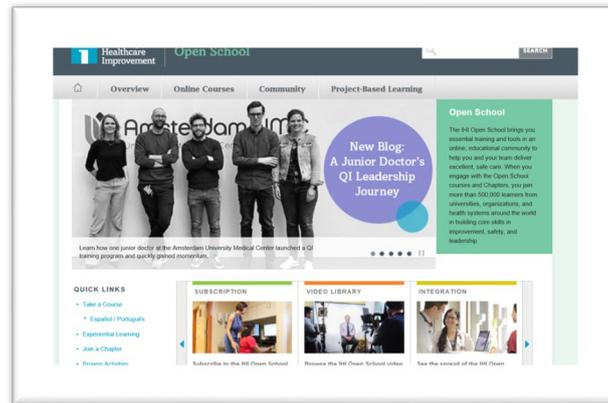
The Institute for Healthcare Improvement (IHI) is a global leader in healthcare improvement using the CQI approach. Its website (www.ihi.org) provides a lot of resources such as tools and videos, many of them free. You may create an account and sign up to receive their weekly newsletter there. The Open School offer 25 on-line courses on Quality Improvement, Patient Safety, Person-Centered Care, Leadership, and Triple Aim (see course catalogue). Each course takes about 1.5-2 hours to complete and provides a certificate upon completion. CEUs may be offered as well. A Basic Certificate in Quality and Safety is also available upon completion of 13 designated essential courses. Some of these courses are available in languages other than English: Spanish, French, and Portuguese.

There is an annual fee associated with subscription to the IHI Open School. Contact IHI directly for the fee. However, individual students, residents, and professors — as well as learners from the Least Developed Countries — may access the online courses for free. Other low-and-middle income countries may be able to negotiate a discount for the subscription.

LARC recommends the following seven IHI courses to supplement its curriculum.

Improvement Capability series
QI 101: Introduction to Health Care Improvement
QI 102: How to Improve with the Model of Improvement
QI 103: Testing and Measuring Changes with PDSA Cycles
QI 104: Integrating data: Run Charts, Control Charts, and other Measurement Tools
QI 105: Leading Quality Improvement
QI 201: Planning for Spread, From Local Improvement to System-wide Change
Leadership series
L 101: Introduction to Health Care Leadership

Appendix B -HIV Viral Load Capability Maturity Model (CMM)

Demand Creation for Testing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
☐ Clinicians unaware of access to viral load testing and have not been educated on its role in ART monitoring ☐ Community leaders/CSOs unaware of access to viral load testing and have not been educated on its role in ART monitoring ☐ Clients unaware of access to viral load testing and have not been educated on its role in ART monitoring ☐ No standard operating procedures for viral load testing and education	☐ Increased awareness of VL testing in clinicians, however minimal information is shared with clients ☐ Clinicians occasionally order viral load testing for clients ☐ Community leaders/CSOs have an increased awareness of viral load testing and its role in ART monitoring ☐ Clients have an increased awareness of viral load testing and its role in ART monitoring ☐ Standard operating procedures for viral load testing and education are in development	☐ Clinicians routinely educate clients about viral load testing and its benefits ☐ Clinicians routinely order viral load testing in-line with national guidelines ☐ Community leaders/CSOs play an active role in educating their community about knowing their viral load status ☐ Clients are aware of and actively seek viral load testing ☐ Viral load testing and education standard operating procedures are established and implemented across the organization	☐ Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for clinician use of viral load testing and education of clients ☐ All stakeholders (e.g., clinicians, client groups, community leaders, etc.) play active role in community education about VL testing and promote campaigns for all individuals to know their VL	☐ Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of demand creation for viral load testing

Appendix B -HIV Viral Load Capability Maturity Model (CMM)

Specimen Collection and Processing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
☐ No client access to viral load testing/specimen collection ☐ No standard supply chain system for specimen collection commodities (e.g., DBS bundles) so supplies limit ability to collect specimens ☐ Clinicians/personnel not trained to complete specimen requisition forms ☐ No standard operating procedures for appropriate viral load specimen collection and preparation	☐ Viral load specimens are collected occasionally and only on certain days, limiting client access to testing and increasing burden for clients to return for VL sample collection ☐ Increased capacity for supply chain system for specimen collection commodities, however not standardized ☐ Increased awareness in clinicians/personnel for properly completing requisition forms ☐ Standard operating procedures for appropriate viral load specimen collection and preparation are in development	☐ Viral load specimens are collected routinely with few barriers for clients ☐ Standardized supply chain system for specimen collection commodities ☐ Clinicians/personnel complete specimen requisition forms accurately and completely ☐ Viral load specimen collection and preparation standard operating procedures are established and implemented across the organization	☐ Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for specimen and collection preparation ☐ All stakeholders (e.g., clinicians, personnel, clients, etc.) play active role in appropriate viral load specimen collection and preparation to facilitate clients to know their VL	☐ Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of specimen collection and preparation

Appendix B -HIV Viral Load Capability Maturity Model (CMM)

Laboratory Testing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
☐ Inadequate lab infrastructure for viral load testing (i.e. space/storage/ equipment/reagents/kits for viral load testing) ☐ Laboratory staff are not properly trained nor competent to test viral load specimens ☐ Laboratory has little or no capacity for viral load testing ☐ No standard operating procedures or competency standards for laboratory viral load testing	☐ Improved laboratory infrastructure, however, laboratory is only able to receive and test viral load specimens occasionally or must refer to another laboratory ☐ Laboratory staff are trained, however, competencies are minimal ☐ Laboratory is has minimal capacity and viral load testing is occasionally completed in a timely manner ☐ Standard operating procedures and competency standards for laboratory viral load testing are in development	☐ Laboratory is able to regularly receive and test viral load specimens in timely manner ☐ Laboratory has appropriately trained and competent staff ☐ Laboratory is working at capacity and viral load testing is completed in a timely manner ☐ Laboratory viral load testing standard operating procedures and competency standards are established and implemented across the organization	☐ Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for viral load specimen testing	☐ Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of laboratory viral load specimen testing

Appendix B -HIV Viral Load Capability Maturity Model (CMM)

Results Reporting

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
☐ Results are not received in a timely manner at the clinic from the laboratory ☐ Results are not recorded in the client's chart in a timely manner ☐ No standard operating procedures for results reporting and documenting results in the client's chart	☐ Results are occasionally received in a timely manner by the clinic from the laboratory ☐ Results are occasionally recorded in the client's chart in a timely manner but often not returned to clients ☐ Standard operating procedures for results reporting and documenting results in the client's chart are in development	☐ Results are regularly received by the clinic in a timely manner from the laboratory ☐ Results are regularly recorded in the client's chart in a timely manner and returned to the client regularly ☐ Results reporting and chart documentation standard operating procedures are established and implemented across the organization	☐ Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for results reporting ☐ Clinic ensures a facility-based person is accountable for timely recording of VL results in client charts and notification of clients with VL>1000 to return to clinic prior to scheduled appointment	☐ Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process for results reporting

Appendix B -HIV Viral Load Capability Maturity Model (CMM)

Results Interpretation and Client Management

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
☐ Viral load results are difficult to read and interpret and requires laboratory assistance ☐ Clinicians are not properly trained to interpret viral load results ☐ Clinicians are uncomfortable integrating viral load results into ART care ☐ Clients do not understand their viral load results ☐ Clinicians have no backup person to call to discuss difficult cases or clients who require 2nd line treatment ☐ No standard operating procedures for result interpretation and client management	☐ Viral load results are occasionally readable and interpretable and requires minimal laboratory assistance ☐ Increased awareness of result interpretation by clinicians ☐ Few clinicians are comfortable integrating viral load results into ART care ☐ Clients have a limited understanding of their viral load results ☐ Intermittent availability of consultation for 2nd line treatment ☐ Standard operating procedures for result interpretation and client management are in development	☐ Viral load results are consistently readable and interpretable by clinicians ☐ Clinicians are adequately trained in viral load result interpretation ☐ Clinicians regularly discuss VL results with clients ☐ Clients understand their viral load results and can repeat their understanding back to the clinician ☐ Standardized system in which all providers have a designated POC/referral system in place to consult for management of VL results and switch to 2nd line ☐ Result interpretation and client management standard operating procedures are established and implemented across the organization	☐ Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for client management ☐ All stakeholders (e.g., clinicians, personnel, clients, etc.) play active role in client management and their viral load ☐ Clinic has ability to identify missed opportunities for ensuring VL results are integrated with client management	☐ Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process of client management

Appendix C – Sample Launch One-Pager
(Example from Kenya)

(Front)

(Back)

Appendix D – Site Visit Checklist for Mentors

Mentor:	Site:	Time/Date:
Overall Project Goal:		
Project Aim Statement:		
Intervention Tested:		

When	Task
During project planning	❑ Schedule all mentorship visits for each action period
One week prior to the scheduled visit	❑ Finalize the visit objectives and agenda ❑ Confirm with the QI team lead and share the objectives and agenda ❑ Review the site's project outline and previous deliverables ❑ Get ready for the visit (including preparing site data in an Excel spreadsheet, if necessary)
The day before the scheduled visit	❑ Send a reminder to the facility to ensure staff awareness and readiness
On the day of the scheduled visit	❑ Call the QI team lead before beginning travel to the site ❑ Plan to arrive 30 minutes ahead of schedule
Upon arrival on site	❑ Meet with the team lead to review the visit objectives and agenda; revise as necessary ❑ Check in with the head of the facility
During the visit	❑ Gather the team members around the Learning Board and review project progress; seek understanding and implement corrective action as necessary o Coaches may need to help the team put data in Excel for analysis; if possible, do this prior to the visit. ❑ Perform data quality checks – examine data collection/tally sheets to ensure accuracy and completeness, resolve inconsistencies in the data ❑ Review challenges and discuss possible solutions ❑ Check completion of all deliverables assigned (see next page); provide assistance and guidance as necessary ❑ Meet other stakeholders if necessary or when they are available; seek their collaboration and support
At the end of the visit	❑ Review visit objectives with the team and ensure they have been met ❑ Agree on action plans, including roles and responsibilities ❑ Confirm or agree on the time/date of the next visit ❑ Clarify any other expectations or questions, if any ❑ Summarize meeting notes, including areas for discussion during the next visit ❑ Check out with the head of the facility, if required

Check completion of deliverables assigned after each Learning Session.

	Deliverable Completed?	Comment
Learning Session #1		
❑ Stakeholder analysis		
❑ Team formation tools		
❑ Process mapping (current)		
❑ Project Outline		
❑ Brainstorming and Impact-effort grid		
❑ Baseline Metrics - Data Collection Tool and Plan		
❑ Run chart		
❑ Action Plan		
❑ Elevator Speech		
❑ Voice of customer		
❑ Analyze tools (5 whys, etc.)		
❑ The Model for Improvement - PDSA		
❑ Presentation at the next learning session		
Learning Session #2		
❑ Project Outline (refined)		
❑ 5S		
❑ Visual Management		
❑ The Model for Improvement - PDSA		
❑ Process mapping (future state)		
❑ Standard Work		
❑ Presentation at the next learning session		
Learning Session #3		
❑ Project Outline (refined)		
❑ Control Plan		
❑ Result communication		
❑ Final Presentation		