



Learning for Quality Improvement: Knowledge Management Approaches and Tools from the USAID ASSIST Project

AUGUST 2020

This document was prepared by University Research Co., LLC (URC) for review by the United States Agency for International Development (USAID) and authored by Lani Marquez and Kate Fatta of URC, drawing on content on knowledge management approaches and tools published on the USAID ASSIST Project website. The USAID ASSIST Project was made possible by the generous support of the American people through USAID.

Learning for Quality Improvement: Knowledge Management Approaches and Tools from the USAID ASSIST Project

AUGUST 2020

Lani Marquez, University Research Co., LLC
Kate Fatta, University Research Co., LLC

DISCLAIMER

The contents of this report are the sole responsibility of University Research Co., LLC (URC) and do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Acknowledgements

The authors recognize the seminal influence of [Dr. Nancy Dixon](#) on their understanding of knowledge management principles and approaches and her foundational contributions to how the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project conceptualized and developed the project's knowledge management activities. They also acknowledge the contributions of Dr. Silvia Holschneider, formerly Senior Advisor for Reporting and Deliverables on the USAID ASSIST Project; Mr. Sidhartha Deka and Ms. Cassie Mickish of Johns Hopkins Center for Communication Programs, who were seconded to ASSIST as KM Officers; Ms. Mayssa el Khazen, formerly Knowledge Management Advisor on ASSIST; Ms. Julia Holtemeyer and Ms. Elizabeth Romanoff Silva, Gender Integration and Knowledge Management Specialists of WI-HER LLC, who were seconded to ASSIST's KM team; Ms. Alison Lucas and Ms. Karina Valenzuela, formerly KM Specialists at URC; Ms. Feza Kikaya, formerly Communications and Social Media Coordinator at URC; Ms. Kim Stover, formerly Improvement Advisor at URC; Ms. Amy Stern, formerly Improvement Director at URC; Ms. Anisa Ismail, formerly Improvement Advisor at URC; and Dr. Tisna Veldhuijzen van Zanten, formerly Senior Vice-President at URC, for their contributions to the knowledge management content of the USAID ASSIST knowledge portal and the implementation of KM activities in ASSIST's country work. We also recognize the critical contributions of ASSIST country-level KM champions: Dr. Bede Matituye in Burundi; Dr. Jean Nguessan in Cote d'Ivoire; Ms. Ximena Gudiño in Ecuador; Ms. Maria Elena Banegas in Honduras; Ms. Gina-Anne Cameron-Turner in Jamaica; Mr. Bill Okaka in Kenya; Ms. Tiwonge Moyo and Ms. Linley Hauya in Malawi; Dr. Lazare Coulibaly in Mali; Dr. Maina Boucar in Niger; Ms. Polo Nyathie and Ms. Carla Visser in South Africa; Dr. Stella Mwita Kasindi and Ms. Delphina Ntangeki in Tanzania; and Dr. John Byabagambi, Dr. Esther Karamagi, Ms. Angella Kigonya, Ms. Tamara Nsubuga-Nyombi, and Mr. Bryan Tumusiime in Uganda.

This document integrates knowledge management principles, approaches, and tools developed by University Research Co., LLC (URC) under the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project, which was funded by the American people through USAID's Bureau for Global Health, Office of Health Systems. The project was managed by URC under the terms of Cooperative Agreement Number AID-OAA-A-12-00101. URC's global partners for USAID ASSIST included: EnCompass LLC; FHI 360; Harvard T. H. Chan School of Public Health; HEALTHQUAL International; Initiatives Inc.; Institute for Healthcare Improvement; Johns Hopkins Center for Communication Programs; and WI-HER, LLC.

For more information on the work of the USAID ASSIST Project, please visit www.urchs.com/assist or write assist-info@urc-chs.com.

Recommended citation

Marquez L, Fatta K. 2020. Learning for Quality Improvement: Knowledge Management Approaches and Tools from the USAID ASSIST Project. Published by the USAID ASSIST Project. Chevy Chase, MD: University Research Co., LLC (URC).

TABLE OF CONTENTS

Acronyms	ii
I. INTRODUCTION	1
II. THE SIMPLE RULES OF KNOWLEDGE MANAGEMENT	2
III. HOW WE BUILT CAPACITY IN KNOWLEDGE MANAGEMENT	5
IV. KM TOOLS AND APPROACHES THAT SUPPORT HEALTH CARE IMPROVEMENT	7
A. Documenting Learning.....	7
B. Synthesizing Learning.....	7
1. Techniques for Integrating and Synthesizing Knowledge.....	8
a. After Action Review.....	9
b. Field Trip Around the Room.....	11
c. Knowledge Café.....	12
d. Knowledge Harvest.....	15
e. 1-2-4-All.....	16
C. Sharing Learning.....	17
1. Skills and Techniques for Sharing Learning	17
a. Storytelling.....	19
b. Speed Consulting.....	21
c. Speed Networking.....	22
d. Knowledge Handover.....	22
e. Learning Interview.....	24
V. RECOMMENDATIONS.....	27
APPENDICES	28
Appendix 1: How to Effectively Draw on the Knowledge of Everyone in the Room	28
Appendix 2: Posters used by ASSIST to Explain the Simple Rules of Knowledge Management.....	33
Appendix 3: Quality Improvement Team Documentation Journal	36

Acronyms

AAR	After Action Review
AIDS	Acquired immunodeficiency syndrome
ASSIST	USAID Applying Science to Strengthen and Improve Systems Project
HCI	USAID Health Care Improvement Project
HIV	Human immunodeficiency virus
IHI	Institute for Healthcare Improvement
KM	Knowledge management
MOH	Ministry of Health
PHFS	Partnership for HIV-Free Survival
QI	Quality improvement
URC	University Research Co., LLC
USAID	United States Agency for International Development

I. INTRODUCTION

The USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project (September 2012-June 2020) of the Office of Health Systems in the USAID Bureau for Global Health was given an explicit mandate in its cooperative agreement to incorporate knowledge management (KM) concepts and techniques in health care improvement work. University Research Co., LLC (URC) interpreted this mandate as supporting the deliberate harvesting of learning from the implementation and evaluation of improvement work at the country level and applying that learning in the design, implementation, and scale-up of improvement activities. The project implemented this mandate by training field and headquarters staff and country counterparts in knowledge management and documentation approaches to support peer-to-peer learning and knowledge synthesis and harvesting and by providing technical support in KM from the project's headquarters team to all countries and technical areas.

Applying KM principles and techniques, ASSIST country and technical teams sought to integrate learning across improvement teams and consolidate successful changes in the form of change packages, guidance documents, and tools that could be readily spread to new sites as well as case studies that explain what specific actions a team in a specific context took to achieve results. While the primary users of these products were implementers in each country, they were also disseminated globally through the ASSIST website, webinars, face-to-face events, and dissemination of written knowledge products in a wide variety of formats, including case studies, blogs, improvement stories, technical reports, and toolkits. The project also leveraged social media (Facebook and Twitter) to connect with implementers who could benefit from improvement methods and these knowledge products and promoted new products through the project's listserv.

The USAID ASSIST website was launched in 2014 to serve as a knowledge portal to provide guidance, tools, and resources to support the application of improvement methods to achieve measurable increases in service quality across all USAID priority health topics. In keeping with the project's mandate to apply KM concepts and approaches to enhance the effectiveness and efficiency of improvement interventions, the website featured extensive content on KM concepts, approaches, tools, and products. This document consolidates the main KM content from the USAID ASSIST website, presented in section IV of this document, to make it available following the close of the website in September 2020.

II. THE SIMPLE RULES OF KNOWLEDGE MANAGEMENT

The *simple rules of knowledge management* are the main concepts that underpin knowledge management and that should be kept in mind when designing learning events to effectively draw on “all the knowledge in the room,” a thoughtful essay written by international KM expert Dr. Dixon based on her work at [Common Knowledge Associates](#) (see **Appendix 1**). The different rules complement and reinforce each other, always emphasizing the power of conversation to share learning and create new insights. On the USAID ASSIST Project, we used these simple rules to improve our ability to learn from improvement work and better convey that learning to others. We held a number of knowledge management trainings for ASSIST staff and partners where we presented and discussed the simple rules using the posters shown in **Appendix 2**. Below each rule is explained, and examples of how to apply it are provided.

The Simple Rules of Knowledge Management

- Circles connect
- How the room is designed makes a difference
- Connection before content
- We learn when we talk
- Knowledge is created and shared in conversation
- Asking opens the door to knowledge
- We know more than we can say and can say more than we can write
- Learn in small groups, integrate knowledge in large groups
- Moving from one to many to many to many
- Learning from experience requires deliberate reflection
- Experts can inform the thinking of others, not provide answers

Simple rules *circles connect* and *how the room is designed makes a difference* emphasize the importance of room set-up. When participants can sit in a circle, away from desks and computers, and see each other’s eyes, it creates a feeling of solidarity in the room. It also removes the feeling of teacher/student or expert/learner and instead emphasizes that everyone has something to share and something to learn. On ASSIST, we tried to seat participants in circles whenever possible, moving from large circles to small group circles and back throughout a meeting. In trainings where we used circles, participants remarked at how it made them feel like a team and contributed to the quality of the interaction.

Simple rule *connection before content* emphasizes the importance of allowing people to build rapport with each other before asking them to share details of their work. When people are comfortable with one another and know each other, they are more at ease and willing to share with one another. This rule can be applied to work in a number of ways. Depending on the event or meeting you are having, this can be done by having an initial meal with everyone before the meeting begins; it can be done at the start of the meeting through speed networking, and can be facilitated through the use of storytelling early in a meeting.

Simple rule *we learn when we talk* shows that it is through the process of explaining ourselves that we understand what we know. When asked to explain something, we have to reflect and respond, and it’s in that moment that we discover what we know and what is worth telling

others. In learning sessions for improvement work¹, we tried to provide participants with the chance to talk often to describe their experience improving care so they and their peers can learn. We used techniques like storytelling, speed consulting, learning interviews, knowledge exchanges, and liberating structures² to get people talking.

Simple rule ***knowledge is created and shared in conversation*** highlights that it is during the give and take of conversation that we share experiences and create new knowledge. On ASSIST we recognized the importance of letting improvement teams talk with one another to ask questions about experiences and explain what they have done. It is during this exchange that each team learns and creates new knowledge. Knowledge cafes are one way to facilitate conversations, as are field trips around the room, and other small group techniques

Simple rule ***asking opens the door to knowledge*** highlights the value of giving people the opportunity of asking questions to avail themselves of the experience and knowledge of others, rather than assuming what people need to know and presenting the information to them. By asking, we learn, and by providing answers to questions, we also learn. On ASSIST we applied this generally by creating space for implementers to ask each other questions, as well as through specific techniques like learning interviews, speed consulting, and knowledge cafes.

Simple rule ***we know more than we can say and can say more than we can write*** points out that during the process of saying and writing what we know, richness is lost. As we sit down to write a report with our heads full, we tend to edit ourselves and lose detail and context. To counteract this, on ASSIST we emphasized the use of conversational techniques during meetings, including storytelling and knowledge cafes, and by holding harvest meetings to gather information in small groups rather than simply relying on written reports.

Simple rule ***learn in small groups, integrate knowledge in large groups*** explains that it is during small group conversations that we learn, not in large plenaries. The learning from small groups can then be integrated into the large group in a number of ways. On ASSIST when we had day-long meetings, we moved between small groups and the whole group during the day, so that learning was integrated throughout the meeting and not just in a rush at the end. One technique to integrate back to the large group without just asking for lists of what was said is 1-2-4-All. We found that a technique as simple as asking people what they heard that resonated with them was also a very effective way of integrating insights across the group.

Simple rule ***moving from one to many to many to many*** shifts the focus from knowledge transfer from one “expert” to others in a one-way flow, to focusing on knowledge exchange between peers with similar experiences. On ASSIST we supported this through small group

¹ Our insights about how to design and implement learning sessions is presented in the ASSIST technical report, *Tips for Design and Facilitation of Learning Sessions in the Context of Collaborative Improvement of Zika-related Services* (September 2018), available at: https://pdf.usaid.gov/pdf_docs/PA00WH5H.pdf.

² The handbook *Engaging Everyone with Liberating Structures*, published by Group Jazz in 2010, describes a number of simple group engagement exercises which can help facilitate rich conversation in small groups and then bring the small groups together to integrate their ideas around an important question or issue. The Liberating Structures guide and related resources are available at: <http://www.liberatingstructures.com/>.

exercises, knowledge cafes, field trips around the room, and knowledge exchanges, and by holding handover meetings.

Simple rule ***learning from experience requires deliberate reflection*** reminds us that to effectively learn from an experience and apply that learning to our work going forward, we must build in time to reflect on the experience and incorporate the lessons in our work. One way to do this is by holding After Action Reviews after an event or activity has been completed. When facilitating a multi-day event, facilitators can hold After Action Reviews at the end of each day to capture learning and improve the event as it goes on.

Simple rule ***experts can inform the thinking of others, not provide answers*** reminds us that experts can guide us in meetings, but knowledge exchange happens most effectively between peers. On ASSIST we applied this rule by facilitating exchange between improvement teams rather than dictating or lecturing. We did this through conversational techniques such as those in the guide, [Engaging Everyone with Liberating Structures](#) and the KM techniques field trips around the room and speed consulting, both described in section IV.

III. HOW WE BUILT CAPACITY IN KNOWLEDGE MANAGEMENT

With support from Dr. Nancy Dixon, in the project's first year of implementation the ASSIST KM team designed regional knowledge management trainings for field staff where a mix of staff experienced KM approaches and thought through how these could be applied in their ASSIST work. Two regional trainings were held in 2013 involving ASSIST staff from 11 African countries: one training was conducted in English in March 2013 in Durban, South Africa (involving ASSIST staff from Cote d'Ivoire, Malawi, Mozambique, South Africa, Swaziland, Tanzania, and Uganda) and the other in French in June 2013 in Abidjan, Cote d'Ivoire (involving ASSIST staff from Burundi, Cote d'Ivoire, Mali, Niger and MOH and partner staff from Cote d'Ivoire). The four-day trainings built the capacity of country staff to incorporate KM into improvement programs, including how to develop KM strategies for their improvement work, how to apply KM principles and techniques to the design and facilitation of learning sessions, and how to design knowledge transfer/handover processes, events and written products to convey key learning about a specific practice area or topic. The training workshops involved a cross-section of staff, including Chiefs of Party, technical advisors, KM/communications specialists, and monitoring and evaluation staff. Participants practiced several KM techniques during the training and received written guidance on how to apply specific KM techniques. Additionally, participants practiced creating "knowledge nuggets" – turning learning into actionable information –and were introduced to the concept of creating knowledge assets – compilations of knowledge nuggets and supplemental information (case studies, videos, etc.) to enable new implementers (i.e., Ministry or other local partners) to apply essential learning from improvement activities.

In addition to the regional trainings, members of the ASSIST headquarters KM team also visited country offices to conduct KM training for local staff, advise on KM activities and strategies, and support learning sessions and knowledge handovers.

One of the early adopters of KM approaches in improvement work was ASSIST's team for the Partnership for HIV-Free Survival (PHFS), which received enthusiastic encouragement for the use of KM approaches from the USAID project manager for PHFS, Dr. Tim Quick in the Office of HIV/AIDS. ASSIST's KM team worked with the ASSIST headquarters PHFS team to develop a strategy for sharing learning internally and with the larger PHFS community through the PHFS listserv and Facebook page which were managed by ASSIST partner the Institute for Healthcare Improvement (IHI). The ASSIST PHFS team convened its first regional knowledge exchange in June 2013 in Kampala, bringing together team members from Kenya, Malawi, Mozambique, Tanzania, Uganda, and headquarters to learn from each other, develop a common strategy of measures and key change concepts, and identify the key learning questions that all teams will try to answer through the PHFS improvement work. Insights from the Uganda team, which was further along in the implementation of PHFS activities than the other countries, were particularly helpful to the other teams.

The ASSIST Uganda team shared two knowledge nuggets on their key learning about simplifying the baseline assessment in order to launch improvement work more quickly and prototyping the strategy in one site before rolling it out to all sites. The headquarters ASSIST PHFS team created a space for internal technical sharing among the ASSIST PHFS teams on URC's corporate intranet. The one-page knowledge nuggets were accompanied by the detailed coaching guides that were developed and refined through field testing by the Uganda team and

a simplified data collection tool that they found more helpful for starting up improvement work with facility-based teams.

Over time we moved away from developing nuggets and instead focused on developing broader knowledge products. The nuggets, we found, were too narrowly focused. They took too much time to develop and still required the creation of another product (for example case study, change package, etc.) to transfer the knowledge and make it actionable. Therefore, we focused on creating case studies, job aids, change packages, and guidelines as knowledge products to share with others to enable them to apply learning from improvement activities in their own work.

In October 2016, ASSIST's KM team supported a regional meeting in Abidjan to discuss across Francophone ASSIST countries what has worked and not worked in implementing improvement work, to sustain improvement results, achieve large-scale impact, and institutionalize QI. ASSIST headquarters staff and country staff from Burundi, Cote d'Ivoire, Mali, and Niger discussed strategies and developed plans to maximize the documentation and dissemination of learning and results in the final year of ASSIST implementation in these countries. Mayssa el Khazen, ASSIST's French-speaking knowledge management advisor worked with participants on planning the development of case studies, short reports, blogs, guidance documents, and success stories to document and convey improvement knowledge and results.

Following the costed extension of the ASSIST cooperative agreement in August 2017 to allow the project to support USAID's Zika emergency response, the project's KM team redirected its focus to support learning within and across country teams supporting the Zika response in Latin America and the Caribbean. The KM team was actively engaged in integrating and synthesizing learning within ASSIST's three regional Zika improvement collaboratives implemented in the eight Spanish-speaking countries, which focused on prenatal care, newborn care, and care and support for Zika-affected children and families. The KM team also provided in-country support for learning sessions and harvest meetings in the Dominican Republic, Honduras, Paraguay, and Peru.

IV. KM TOOLS AND APPROACHES THAT SUPPORT HEALTH CARE IMPROVEMENT

A. Documenting Learning

Improvement is a *learning* endeavor: an active process of testing changes to learn what does and does not work to make care better. Learning from improvement activities begins with documentation of what the team has tried and learned. To learn from its improvement effort, a team needs to be able to record information from a test or multiple tests of changes, derive insights on the effectiveness (or lack thereof) of tested changes, and plan next steps.

Documentation may take many forms, but the most basic documentation requirement is that teams have a record of what they have tried, both successfully and unsuccessfully, to test change ideas to improve care. In its simplest form, this may be notations on a time series chart. Team notes are another simple way of keeping track of what has been tried.

This documentation also serves to help improvement teams communicate their results to others, including what changes yielded improvement, what changes did not, what evidence supports these conclusions, and how to implement the changes. Such communication could be verbal, such as sharing results through conversation; visual, such as storyboards or drawings of annotated time series charts; or written, such as a case study or entries in a documentation journal. The section below Tools for Presenting Data offers advice on a number of formats for displaying results of improvement activities.

The USAID Health Care Improvement (HCI) Project developed a generic documentation journal which can be adapted to guide a quality improvement team in documenting any improvement activity. The journal is organized around one improvement objective (aim) and guides the team in recording when specific changes were introduced and the measurements over time of a key indicator. The Ministry of Health of Uganda adopted a similar tool for use in all improvement work in the health sector. The QI team documentation journal developed by HCI is found in **Appendix 3**.

Another common way to support document learning is to have coaches support the documentation of what is happening at a given site during coaching visits. This strategy is especially useful in low-literacy settings where it may be challenging for teams to record what changes they have tested. Two other advantages of involving a coach in documenting team-level improvement work are: 1) it helps the coach to integrate information from multiple teams, and 2) the coach can more easily pass that knowledge to higher levels, so that learning from multiple teams can be consolidated and synthesized for the collaborative improvement effort as a whole.

B. Synthesizing Learning

A critical task in collaborative improvement is integrating what has been learned across all improvement teams about how to meet the aim of the improvement effort. Such synthesis of learning involves collecting information about the changes each team tested, making judgments about which changes appear to be most closely associated with improvement (taking into account the experience of all teams), and developing guidance that can help others apply that knowledge to improve care elsewhere.

To summarize what has been learned and package it in ways that facilitate scale-up to new places, leaders and organizers of an improvement initiative involving multiple teams need to:

- Maintain an inventory of changes tested by each team or site
- Regularly consolidate and share learning about tested changes across the improvement initiative
- Analyze the consolidated changes in light of results (data) to understand what's working, what's not working, and the key implementation challenges faced by sites, to determine which changes seem to lead to better results
- Package and share learning about effective changes with others

Aggregation and analysis of the tested changes is best done on an ongoing basis as learning emerges. This can be accomplished through regular analysis of learning following coaching visits and during times when representatives from many teams come together, such as at learning sessions. These channels also provide a conduit for disseminating “consolidated learning” so that all teams are learning from the collective experience of the improvement activity.

When an intervention has demonstrated good results and is ready for scale-up, a dedicated workshop with representatives from the participating sites, coaches, and government officials can be helpful to review the results and consolidated learning to determine the most effective changes to be promoted during scale-up. Such workshops are often called “harvest meetings” because their purpose is to “harvest” the key learning from an improvement activity.

1. Techniques for Integrating and Synthesizing Knowledge

The field of knowledge management provides many techniques for integrating and synthesizing information which have proven invaluable for use in improvement initiatives. General principles that facilitate synthesis include:

- ***Use small groups to generate new knowledge and insights.*** We learn and create new ideas through our conversation with others in small groups. A small group is 3-5 members. This is the size that produces the richest and most in-depth thinking. It is large enough to contain diverse views yet small enough for members to engage each other. Engaging each other means asking questions to clarify the meaning another has expressed and challenging as well as building on others' ideas. It is in this give and take of small group conversation that new knowledge is generated.
- ***Use large groups to integrate knowledge.*** After small groups have been in conversation, their ideas need to be brought together in a large group setting to integrate their insights into the thinking of the whole. In a lengthy meeting, small and large group discussions can be alternated to stimulate knowledge creation and synthesis.
- ***Use time for reflection.*** Before beginning a discussion or conversation, ask each participant to think silently for a minute about the question or topic under discussion. Giving just a small time for individual reflection increases the quality of each person's contribution. Routinely making time for group reflection—bringing together the collective thinking of a group to make a judgment about key lessons—facilitates ongoing synthesis of learning.

- **Integration of knowledge benefits from diversity.** Having different perspectives in meetings designed to develop collective knowledge provides a more robust environment for the generation of new knowledge. The greater the diversity of prior knowledge in the room, the more likely that new knowledge and insights will be generated.

Many techniques have proven useful for stimulating the synthesis of knowledge among improvement teams. These include:

- After Action Review
- Field Trip Around the Room
- Knowledge Café
- Knowledge Harvest
- 1-2-4-All

An excellent resource for group techniques to facilitate the integration and synthesis of ideas is the resource guide, **Engaging Everyone with Liberating Structures**, which is also available in French.

a. After Action Review

After Action Review (AAR) is a brief meeting of team members to reflect on an event or task they have just accomplished. The purpose of the AAR is for the team to learn from its experience in order to take the lessons learned into the next phase of the project or to accomplish the task more effectively the next time it is done. The AAR seeks to help the team develop insights about the event or task and turn that knowledge into action.

To keep the meeting focused on its purpose, the AAR has a specific format of group discussion around these four questions:

- 1) What did we set out to do? What was our intent? What should have happened? Were there any differences of opinion among team members?
- 2) What did we actually do? What would a video camera have shown? Avoid blaming any individual. Look at the sequence of events, roles, etc. to establish what actually happened.
- 3) What have we learned? Focus on what we have learned, not what we will do next. What do we know now that we didn't know before? What strengths and weaknesses have we discovered? What advice would we give to others about how to best undertake the task or event?
- 4) What are we going to do? Based on what we learned, what will we do next time? Are there follow-up actions to be taken? If so, who will do what, by when? Are there others to whom we should communicate this learning?

Guidance for Conducting AARs

When should an AAR be held?

AARs are held at the end of a defined action, that is, a phase of a project or the accomplishment of a key event. It is the discipline of the regularity of these meetings that makes them effective. They are not called just to address an exception or a problem; rather they are a part of the way the work of the team gets accomplished – a work routine. The regularity also reduces team

members' anxiety that the meeting is about placing blame – a concern that arises when meetings are only held after something has gone wrong.

How long should the AAR meeting be?

AARs should be quick and to the point. The focus is on what just happened and what can be learned from it. AARs are not the time to address long-standing problems. In some organizations, AARs are “standing meetings” - everyone stands rather than sits - as a kind of tacit assurance that the meeting will be short. An AAR might last as little as 15 minutes or perhaps an hour, if held at the end of a month-long activity.

Who should participate?

Because the goal of the AAR is for the group to improve, the meeting should bring together all the people involved in carrying out the event or task. The information and ideas of everyone are necessary to get a full picture; someone may well have seen or been aware of some action or detail that others did not see. When everyone is in attendance, it sends an important visual message about accountability - no one is so unimportant (top to bottom) that they can avoid responsibility for what happened, and everyone (top to bottom) is responsible for making it happen more effectively the next time. In this way, AARs can help build the shared understanding of actions and results that is often critical to effective team performance.

AARs need to be facilitated.

AARs need to be facilitated by a member of the team. The facilitator's responsibility is to keep the discussion focused on the few critical questions. After repeated meetings that responsibility may become almost perfunctory. The facilitator role may rotate between members or may be taken by someone in the group that is recognized as having particularly good facilitation skills.

Don't assign blame.

The only way to learn in AARs is to get everything out on the table. To do that there has to be an agreement that no one gets into trouble (put on report; reflected in performance evaluation) because of what is discussed in an AAR. Without such a rule, team members are unwilling to own up to mistakes and equally reticent to speak about the mistakes of others. This is a hard rule to believe in, and it often takes a team a while to get comfortable with speaking openly. Equally important, this is not a “find the blame” meeting. Rather, mistakes are data to be taken into account in figuring out how to make the action more effective the next time.

Notes take are only for the use of the team itself.

Notes are taken at the meeting are only for the team's use and are not distributed to other parts of the organization. The openness of the discussion in an AAR is greatly reduced if team members think their mistakes will be broadcast to higher levels. If important issues are raised that others in the organization need to learn from, at the end of the meeting the team can agree to what items can be shared and how.

What Does the AAR Look Like?

- The team meets as soon as possible following an action or event.
- The facilitator puts the questions to be addressed on a flipchart or white board.
- The questions are addressed one at a time.
- The facilitator manages the contributions:

- o Calling on individuals who might have some special knowledge to contribute
- o Preventing any one person from dominating the discussion
- o Stopping any blaming behavior or punitive remarks
- o Bringing the group back to the topic when the discussion strays
- The facilitator captures the ideas on a flip chart or asks a member of the team to do this.
- The facilitator manages the time so that all the questions are addressed in a minimum amount of time.
- Individual members take notes for themselves about what they need to do differently next time.
- Near the end of the meeting the facilitator asks for agreement on actions to be taken to get the desired results.

b. Field Trip Around the Room

The field trip is a technique that can be used in a meeting to organize how members of the group discuss several topics and integrate their ideas for how to address them. It uses small group conversation and successive discussions of the same topic by different groups to help to integrate the ideas of the whole group around specific topics and questions.

Steps in a Field Trip Around the Room

1. Prior to the meeting, decide on the key topics and questions or topics that will be discussed. The topics or questions should be issues that matter and ones where those who will participate in the meeting have experience. The topics/questions should each be written on a flip chart and placed at distance from each other around the edge of the room. If the purpose of the meeting is action planning, possible questions might be: What needs to change to make this happen? What could keep this from working? Who should be held responsible for making this happen? How will we know that it has improved? The questions can be anything that would benefit from group thinking.
2. At the beginning of the meeting, the group leader explains why this meeting is important and what are the issues the group will work on. The facilitator then explains the process:
 - Divide the participants in groups—one group for each issue to be discussed (ideally, 5-8 people per group). The groups should be “mixed”—made of people from different levels or sites. (A quick way to divide participants into groups is to have them count off in sequence—1, 2, 3, 4, 5, 1, 2, 3, 4, 5, etc.—and join the group of the number they said.)
 - Have each group stand by one of the flip charts.
 - When instructed to do so, each group discusses the questions and writes their answers on the flipchart.
3. Carry out the field trip: Each group has the opportunity to address the issues on each chart sequentially in 10-minute intervals. Each group has 10 minutes to make notes on the chart in front of them before moving on to the next chart. Each group leaves one person behind to explain what their group has just put on the chart – that person has 1 minute to explain before moving on to rejoin his or her group.
4. After every group has worked on every flip chart, have the groups return to the flip chart they started at. Give each group 5 minutes to study the comments left by all groups.

5. The large group reconvenes. The facilitator asks each group to give a 3-minute report-out of the key ideas noted on the chart and suggest next steps to follow up on these ideas.

6. The leader thanks the groups and talks about what will happen next.

c. Knowledge Café

A Knowledge Café is a conversational process that is sometimes called World Café. It is an innovative yet simple methodology for hosting conversations about questions that matter. These conversations link and build on each other as people move between groups, cross-pollinate ideas, and discover new insights into the questions or issues that are important in their work or community. As a process, a Knowledge Café can evoke and make visible the collective intelligence of any group, thus increasing people's capacity for effective action in pursuit of common aims.

How to Conduct a Knowledge Café

The most critical factors for success of a Knowledge Café are: 1) clarifying the reason for bringing people together, and 2) constructing stimulating, open-ended questions. Other crucial success factors are described below.

Clarify the Purpose

The facilitator and the organizer of the Knowledge Café must be very clear about the purpose of the meeting. A clear purpose enables the facilitator to consider which participants need to be there and what parameters are important to achieve the purpose.

Create a Hospitable Space

It is important that the meeting organizers create a hospitable space—one that feels safe and inviting. When people feel comfortable to be themselves, they do their most creative thinking, speaking, and listening. In particular, organizers should consider how their invitation and the physical set-up of the meeting room contribute to creating a welcoming atmosphere.

Explore Questions that Matter

Finding and framing questions that matter to those who are participating in the Café is an area where thought and attention can produce profound results. A Knowledge Café may only explore a single question, or several questions may be developed to support a logical progression of discovery throughout several rounds of dialogue. In the latter case, the meeting organizers must select one question for each café table (and there will be one café table for each 5-7 meeting attendees). The meeting organizers must carefully select questions that focus discussion towards the purpose of the event and are sufficiently open to allow good dialogue.

Connect Diverse Perspectives

Invite a widely diverse group of participants. The opportunity to move between tables, meet new people, actively contribute thinking, and link discoveries to ever-widening circles of thought is one of the characteristics of the Knowledge Café. As participants carry key ideas or themes to new tables, they exchange perspectives, greatly enriching the possibility for surprising new insights.

Encourage Everyone's Contribution

Leaders are increasingly aware of the importance of participation, but most people don't only want to participate, they want to actively contribute to making a difference. It is important that the meeting facilitator encourages everyone in the meeting to contribute their ideas and thoughts, while also allowing anyone who wants to participate by simply listening, to do so.

Each Table Has a Host Who is Paying Attention to Themes and Insights

One host is needed for each table. The table hosts should be briefed on the role in advance of the meeting. They are to take notes on the discussion but are not expected to facilitate or direct the discussion. The participants can easily facilitate themselves with brief instructions from the table host.

Room Setup

- Small round tables of 36-42 inches in diameter are ideal but small square tables will also work
- Each table has a table tent or card indicating the discussion question or topic for that table
- If possible, cover the tables with paper and provide colored markers to allow the participants to draw or write comments on the paper table coverings as one means of sharing their thoughts with other table visitors
- One chair per participant
- No podium or projectors are used

Knowledge Café Meeting Process

Welcome: The Café host welcomes the participants and establishes a tone of curiosity and friendliness. The host states that he or she is not there to guide the group to a specific conclusion, because through the exchange of thinking, the unexpected can happen, that is, new ideas, new ways of thinking, and new solutions can emerge. The Café host introduces the guidelines for the Café.

Sitting at Tables: The Café host asks the meeting participants to sit as groups of five to six people at small tables. The table at which people start the Café is their "home table". If the distribution of people at the tables is too uneven, the Café host will direct a quick re-distribution. In that case, whatever table each participant is at after the re-distribution is his or her home table.

Round 1 of the Table Discussions: At each table, participants discuss the "table question" for 20 to 30 minutes. The table hosts encourage the table guests to write or draw key ideas on the table paper, or to note key ideas on large cards or placemats in the center of the group. The table host uses a notebook or pad to summarize the discussion as it continues.

Moving On: When the allotted time is almost up, the café facilitator sounds a bell to give the "two-minute warning". This means it's time to finish up and get ready to move on. When the café facilitator gives a second signal, everyone except the table host moves to another table of their choice. Ideally, the members of the table should try to choose different tables so that they do not move from table to table as a group.

Round 2 of the Table Discussions: The table host welcomes the new guests and briefly shares the main ideas, themes and questions of the initial conversation (no more than 3 minutes – it is not necessary to share everything that was said, only a broad outline). The host encourages the

new table guests to link and connect ideas coming from their previous table conversations—listening carefully and building on each other's contributions. Again, each table host continues to and record the discussion. By providing opportunities for people to move in several rounds of conversation, ideas, questions, and themes begin to link and connect. At the end of the second round, all of the tables or conversation clusters in the room will be cross-pollinated with insights from prior conversations.

Subsequent Rounds of Discussion: The meeting organizers decide in advance how many rounds of discussion there will be. There should be a minimum of three rounds, but in any case, the number of rounds should not be greater than the number of café tables. In further rounds, the table guests continue travelling to new tables, leaving the same host at the table. If there are more tables than topics, it is fine to repeat some topics (that is, have conversations about the same topic at more than one table). Some guests may also want to repeat a topic (that is, participate in a second conversation about the same topic with new guests).

Final Round of Discussion: When the Café host announces the final round, everyone returns to their home table. The table host shares what visitors contributed to the table topic since the others left the table. Table guests share what they learned in their visits to other tables. The table host records the collective results in a form that can be used after the Knowledge Café to build a consolidated view from the entire Café.

Whole Group Conversation: The Café host asks the meeting participants to move the tables to one side and gather all the chairs into one large circle. The host then facilitates a whole group conversation to share discoveries and insights. It is in these whole group conversations that patterns can be identified, collective knowledge grows, and possibilities for action emerge.

Variations

The Knowledge Café is a very versatile process that can be used in many situations and can accept many modifications. For example, one question can be used for all tables, or different questions can be used for different tables. In some situations, a “talking stick” (the person holding the stick is the only one that can speak until it is passed to another) may be used, but in others conversation is more natural. Some Knowledge Cafés end with a gallery walk with participants taking a tour of the tablecloths to read what is written there; in others, notes from the tables are published or distributed to all participants after the Café.

When Not to Use a Knowledge Café

A Knowledge Café should not be used just to build relationships or to just get people acquainted. It must always be used to address serious issues that matter to the group that has been brought together. It should not be used to get “buy in” on an issue that has already been decided. If an issue has been decided, people will view asking for their thinking about it as a waste of their time.

Roles

The roles associated with the Knowledge Café are as follows:

The Café Host or Facilitator is responsible for:

- Working with the planning team to determine the purpose of the Café and decide who should be invited to the gathering.

- Naming the Café in a way appropriate to its purpose, for example: Leadership Café; Strategy Café; Discovery Café, etc.
- Helping frame the invitation
- Create a welcoming environment
- Welcoming the participants as they enter
- Explaining the purpose of the Café
- Presenting the questions for rounds of conversation and make sure that the question is visible (for example putting the question on table tents or standing cards at each table)
- Explaining how the logistics of the Café will work, including the role of the table host (the person who remains at each table throughout all the rounds of conversation)
- During the conversation, moving among the tables to listen in on conversations
- Encouraging everyone to participate
- Reminding people to write down key ideas, doodle, and draw on the tablecloths or write notes on the tablecloths
- Letting people know in a gentle way when it's time to move and begin a new round of conversation
- Asking people NOT to move as a group, but for each member to select a different table
- Making sure key insights are recorded visually or are gathered and posted.

The table host is responsible for:

- Reminding people at their table to jot down key ideas, discoveries, and deeper questions as they emerge
- Remaining at the table when others leave and welcome travelers from other tables
- Briefly sharing key insights from the prior conversation so others can link and build on them using ideas from their respective tables
- Taking notes to summarize for the next group
- They are NOT responsible for correcting other people's ideas

Participants are responsible for:

- Listening for themes, patterns and insights, when others are talking
- Sharing their discoveries with others at the table
- Freely contributing their own ideas

d. Knowledge Harvest

A Knowledge Harvest is a meeting designed to capture lessons learned from a project or activity after it has been completed. A harvest meeting is intended to bring out the key knowledge acquired through the project or activity and capture it for reuse and for the benefit of future projects.

In the context of a collaborative improvement project, a Harvest Meeting provides the opportunity to consolidate and reflect on the key lessons learned by improvement teams and changes tested that were found to lead to improved outcomes.

Although it has some features in common with an After Action Review, a Knowledge Harvest takes longer, goes into greater depth, and expresses the learning in terms of detailed recommendations and advice for future activities and projects. By facilitating an in-depth

dialogue with all the key actors involved in a project, knowledge can be identified that any one individual may be unaware of, but which the team as a whole knows.

Different organizations approach the design of a Knowledge Harvest differently, and there is no single formula for conducting a Knowledge Harvest. The guidance below is intended to help you plan a Knowledge Harvest to extract key lessons from your particular improvement effort.

Considerations in Preparing for a Knowledge Harvest

A Knowledge Harvest should be planned to take place at the end of a collaborative improvement activity as part of the overall implementation schedule for the project. It should be planned as a face-to-face meeting and not conducted by email or telephone. The meeting should be held as soon as possible after the project is completed—ideally within a few weeks. If you wait too long, memories fade.

The harvest meeting does not have to wait until the completion of the project. In some cases, it may be preferable to schedule several “mini-harvests” as discrete phases of the project are concluded or to gather learning on specific topics where the improvement project managers feel “enough” has been learned to merit harvesting of lessons to date.

For example, in Uganda, the USAID ASSIST team conducted a “mini-harvest” meeting with 22 teams working to improve post-natal care for HIV-exposed mother-baby pairs. The meeting focused on learning related to two improvement aims that most of the teams had already made good progress in achieving. The mini-harvest was conducted in conjunction with a learning session at which teams discussed how they would approach work on the other improvement aims going forward.

Other considerations for the scheduling of a Knowledge Harvest meeting are to allow time for preparatory work to consolidate and analyze results across all teams in advance of the harvest meeting and ensure that the date set does not conflict with other events that may draw key people away.

e. 1-2-4-All

1-2-4-All is a group process from the [Engaging Everyone with Liberating Structures](#) guide that facilitates rich conversation in small groups and then brings the small groups together to integrate their ideas around an important question or issue. It can be done on its own or in combination with other group engagement techniques described in the Liberating Structures guide. Because of the need to form pairs and then bring pairs together, 1-2-4-All works best in a room where participants can easily pick up their chairs and re-assemble them in small groups as needed. The technique can also be done as 1-3-6-All, using trios rather than pairs.

Steps in 1-2-4-All

1 (Individual Reflection): Give participants a short amount of time (a couple of minutes is fine) to reflect on a question or issue. Some may want to jot down a few notes. Others may want to close their eyes. Ask for silence during this time so that individuals really have time and space to get their own thoughts together.

2 (Reflection in Pairs or Trios): Ask participants to find one other person and share their ideas. You can invite them to talk to the person next to them or, if you'd like them to move around and

mix it up a bit more, ask them to stand up and find a partner. Depending on how much time you have, you could spend 5-10 minutes in pairs.

4 (Small Groups of Two or Three Pairs or Two Trios): Invite each of the pairs to join up with one or more pairs to make groups of 4-6. (Larger than six is too big to give everyone a chance to talk.) Suggest that they each first share interesting things they heard or said in the previous rounds. Then continue with the conversation as a group.

All (Whole Group): Invite everyone back to the whole group. Without “calling on” individual small groups, ask an open question such as “What insights emerged from your conversation?” or “How has your understanding/view of the issue changed?” Then ask, “What did you learn in your small group that is important for the large group to understand?” Let individuals speak up with ideas they consider important to share.

Group report-outs should be used sparingly. It is better to have individuals speak for themselves.

C. Sharing Learning

In supporting collaborative improvement in over 20 countries during the past 25 years, we have come to define sharing learning as a key principle for effective health care improvement.

During a collaborative improvement activity, sharing learning across participating teams allows for rapid spread of ideas that have been shown to improve care, informs teams about unsuccessful changes to avoid, and allows for consolidation of effective changes to develop an evidence base for how to improve a specific area of care in a particular setting.

After the learning from a collaborative improvement activity has been synthesized to create key insights and guidance that can help others improve the same area of care, this learning needs to be deliberately shared with others.

Those who have made improvements need to convey the overall results from the tests of changes they implemented, what changes yielded improvement, what changes did not, what factors may have influenced these results, what evidence supports these conclusions, how to implement the changes, and what advice they have for others so as to best apply what they have learned.

1. Skills and Techniques for Sharing Learning

Sharing learning during and after an improvement activity requires both communication skills and the thoughtful design of opportunities to allow those who have implemented improvements in care to talk with and answer the questions of those who can learn from them.

Such communication may involve verbal, visual, and/or written means. In thinking of how to best convey learning from improvement, it is useful to keep in mind the advice of knowledge management expert Dave Snowden, who notes that “We always know more than we can say, and we will always say more than we can write down.”

Learning can be shared most effectively through small group conversation during meetings or workshops or during coaching or supervision visits. Video clips, photographs, diagrams, and other visual aids can often convey key information more effectively than written documents.

While written products may be the least effective method of sharing on their own, they can help to summarize key messages and points of learning.

In thinking of written products that convey the key advice to others, it is helpful to keep in mind the various intended audiences for the learning from improvement and decide on the most appropriate format and content for each audience. As a general principle for development of written materials, it is helpful to “field test” draft versions with representatives of the intended audiences to ensure that the materials clearly convey what they are intended to.

For sharing a consolidated set of lessons from a large improvement activity, it can be useful to think of this sharing process as a handover of knowledge from those who have made improvements to those who want to learn from them.

The field of knowledge management provides many insights and techniques for sharing information which have proven invaluable for use in improvement initiatives. General principles that encourage sharing include:

- Utilize small groups of 4-8 people to allow people to exchange knowledge; use larger groups to integrate knowledge that has been created in small groups.
- Give every person a chance to say something early on (for example, within the first 30 minutes) in a meeting. This puts participants in an active mode of participating, rather than a passive mode of just listening.
- Give people a chance to get connected to each other before they try to construct new ideas together. Use introductions, social activities, information provided before the meeting, or ice-breakers that allow participants to talk informally to get a sense of each other.
- Before asking participants to discuss their thoughts on an idea or question, ask them to reflect silently for a minute to think about their answer first. Even a short time for individual reflection improves the quality of individual responses.

Finally, an important principle in transferring knowledge is that we learn when we talk. Listening provides us new ideas but as long as those ideas are just swimming around in our heads, they are neither fully formed nor implementable. It is only when a person puts an idea together in a way that allows him or her to explain the idea to others, that the idea takes shape for the person, as well as for those the person is talking with. (For more ideas on how to draw on all the knowledge in the room, see Dr. Nancy Dixon’s essay.)

Many techniques have proven useful for stimulating the sharing of learning among improvement teams. These include:

- Storytelling
- Speed Consulting
- Speed Networking
- Knowledge Handover
- Learning Interview

Some of these techniques are also useful for integrating insights across teams. The resource guide, [Engaging Everyone with Liberating Structures](#) contains a large number of simple group process techniques that can facilitate sharing of insights among meeting participants.

a. Storytelling

Storytelling is an effective way of sharing knowledge between people that incorporates context, emotion, and tacit knowledge. In a short amount of time, a wealth of information with a high level of detail can be expressed. Not only does the listener learn from the story, but the storyteller can gain new insights to what they are describing through the practice of telling their story.

A Good Story Is...

- About an event — something that really happened to you or someone you know
- “When I was
- “My friend told me about when he
- Told from your perspective.
- Different people see things differently.
- This is important, as much of the richness of opinions and ideas comes out only if you tell the story from your viewpoint.
- A description of something that happened at a specific time
- “Last year when I was working on

Why Tell Stories?

1. *To share knowledge between members of a group:*

- Stories help members of a group build relationships. Ask members to tell a story about a topic the group members are interested in, for example, “Think about a time when you felt really successful in counseling a patient.” You don’t need to use the word “story”—you can just ask people to tell about that experience.
- It is helpful for the facilitator to give an example so that participants can understand the length and detail expected.
- Relationships are built in small groups, not large groups. Have participants tell their stories in small groups (4-6 people), rather than to the whole room. Telling a story to a large group feels like “public speaking,” while telling a story to a small group feels like talking to friends.
- Stories can be quick: 2-3 minutes is all that is needed.
- Ask members to tell about a success. Only after members have built a strong trust relationship should you ask people to tell stories of failure.
- After a group meeting, members may forget the names of others they met, but they will remember their stories. And from the story, they will remember how they connected with that person because they could identify with the story.

2. *To gain greater understanding of a complex issue:*

- Stories contain context and reasoning as well as facts. This helps the members who are listening learn: 1) why the storyteller took a specific action, and 2) what the conditions were that required that action. By contrast, PowerPoint bullets only provide the what, not the why.
- When the story provides listeners an understanding of the context and reasoning, it allows them to decide if the solution would be effective in their own context.
- Because stories naturally have an emotional content (how the person felt about the situation described), the storyteller seems more approachable. Members who listen to

another member tell a story are more willing to give that person a follow-up call or email to learn more detail about what happened.

- Stories can also allow the storyteller to reflect on a specific insight. The storyteller might be asked, “When you implemented [the activity], tell about a time when you were frustrated or pleasantly surprised.”

3. *To build stronger relationships between members:*

- Invite 5-10 people to a story circle to talk about a difficult issue they all face. Make sure the group is made up of peers only.
- By collecting a large group of stories on a specific issue, for example, “Tell a story about your experience working with the community health teams,” it is possible to analyze the stories to determine how to help participants get up to speed faster.

Ground Rules for Storytelling

- Be honest and open.
- Be respectful of others — their experiences, anecdotes, and ideas.
- Celebrate the people who share “things that went wrong.” Sharing such stories takes courage.
- Give permission to not use the real names of people in the story. What is important are the issues or themes across all the stories. Instead of naming individuals, the storyteller can describe personalities and characteristics.
- Listen - Give people a chance to share their stories without interruption.
- Share context – Encourage storyteller to make their stories as vivid and as rich as they can.
- Give examples – don’t just state concerns.
- Set the ground rule that members don’t correct others about what happened as the other is telling a story. The issue is not accuracy but perspective. If someone interrupts with a correction, ask them to wait and then tell the story from their perspective when the current storyteller is finished.
- At the end, let participants know what will happen with the stories and how they will be used.

Example of Using Storytelling in a Large Group

Activity: Have people gather in small groups of three to five. The facilitator should explain the exercise and ask someone (usually this is arranged ahead of time) to tell an example story. In each small group, each member has two minutes to tell a story centered on a question provided by the facilitator. Use a bell or other signal to let all groups know when it’s time to begin and when it’s time to go on to the next story. After two minutes, the next person begins their story.

Once each person in the small group has told their two-minute story, everyone is asked to get up and find a new small group of three to five people that have not yet heard their story. Repeat the process of each person sharing a two-minute story in groups of three to five people. Continue until each person has had the chance to tell their story three or four times.

Processing: Bring everyone back into the large group. One way to process what people heard in the stories is for the facilitator to ask people to share what they learned from the stories they heard and from the act of telling them. What new methods have they heard about? What

insights have they gained into the problem being discussed? What do they want to know more about?

Another way is to ask everyone to “vote” on the one story that “most resonates” with them. A simple way to accomplish such voting in a large group is to ask each person to put her or his hand on the shoulder of the person whose story most resonated with them. Participants will soon be linked in clumps of people, all with one hand on the shoulder of specific person. The person with the most hands on his or her shoulder can be identified as the storyteller with the most captivating story. Ask the chosen storyteller to retell the story to the entire group.

b. Speed Consulting

Speed consulting is a group technique that draws on the experience of participants to advise another participant on how to address a specific problem or issue. It uses small group conversation and a fast-paced schedule to focus participants on providing concrete, actionable advice.

Steps in Speed Consulting

Identify some issue owners: In advance, identify a number of people (around 10% of the total) with a program implementation challenge which they would like help with – they are to play the role of the client who will be visited by a team of brilliant management consultants.

Implementation issues should not be highly complex; ideally, each issue could be described in three minutes or less. Brief the issue owners privately coach on their body language, active listening, acknowledgement of input, etc. Remind them that if they are seen to have stopped taking notes (even when a suggestion has been noted before); they may stem the flow of ideas.

Arrange the room: You need multiple small consultant teams working in parallel, close enough to generate a “buzz” from the room to keep the overall energy high. Round tables or circles of chairs work well. Sit one issue owner at each table. Everybody else at the table plays the role of a consultant. The issue owner will remain at the table throughout the exercise, whilst the groups of “visiting consultants” move around.

Set the context: Explain to the room that each table has a program implementation issue and a team of consultants. The consultants have a tremendous amount to offer collectively – from their experience and knowledge – but that they need to do it very quickly because they are paid by the minute! They have 15 minutes with each client before a bell sounds, and they move on to their next assignment.

The time pressure is designed to prevent any one person monopolizing the time with detailed explanation of a particular technique. Instead, they should refer the issue owner to somewhere (or someone) where they can get further information. Short inputs also make it easier for less confident contributors to participate.

Start the first round: Reiterate that you will keep rigidly to time and that the consultants should work fast to ensure that everyone has shared everything that they have to offer. After 15 minutes, sound the bell and synchronize the movement to avoid a “consultant pile-up”.

Repeat the process: Issue owners need to behave as though this is the first group and not respond with “The other group thought of that!” They may need to conceal their notes. Check the energy levels at the tables after the second round. More than two or three rounds can be tiring for the issue owners.

Ask for feedback and reflection on the process: Emphasize that the issue owners are not being asked to “judge” the quality of the consultants! Invariably, someone will say that they were surprised at the breadth of ideas and that they received valuable input from unexpected places. Ask members of the “consulting teams” to do the same. Often they will voice their surprise at how sharing an incomplete idea or a contact was well received and how they found it easy to build on the ideas of others.

c. Speed Networking

Speed networking is a simple technique for getting all participants in a meeting to reflect on a question and share their insights with others in small group conversation. Speed networking is a great way to generate energy at the beginning of a meeting by providing an opportunity for everyone to speak early on.

Steps in Speed Networking

Ask everyone to stand up, leave their belongings behind, and move into a space where there is some room for everyone to stand comfortably and still be able to walk around—ideally an open space with no tables or chairs.

Invite everyone to think individually about a provocative question that relates to the purpose of the meeting or the group. Make it a question that levels the playing field and for which there is no “right” answer—something that everyone in the group has an equal ability to talk about.

Tell participants that when they hear the bell, they should find a partner. Explain that partnering with a person they know less well than they know others will be most interesting. Invite the pairs to have a conversation about the suggested question. After a short time (5-10 minutes depending on how much total time you have), ring a bell or use some signal to let participants know it is time to find another partner and have another conversation.

Ask participants to raise their hand if they are looking for a partner so everyone can see who else needs a partner. Three “rounds” are usually sufficient to allow for a lot of mixing and conversation.

Tell participants that when the bell rings continuously, they should stop their conversation and come back to the large group. Have a short large group conversation about what the participants experienced in the exercise.

One distinct benefit of speed networking with a large group is that the process allows everyone to speak early in the meeting. The distance between not having said anything and making a first comment is vast. But the distance between having said something and saying another thing is much smaller.

In the discussion, ask if participants noticed how much “air time” everyone has had. In a 30 minute session, everyone will have had 12-15 minutes of air time – no matter how many participants are in the meeting.

d. Knowledge Handover

A knowledge handover is a face-to-face meeting between those who have improved care and have learning about that process to share with others, and those who need to learn from them to apply that learning in their own setting. The meeting provides the opportunity for those with

knowledge (the transmitting team) to share that knowledge with others (the receiving team). It is an example of PUSH by the transmitting team and PULL by the receiving team.

Who attends

Since a handover meeting is mainly for the benefit of the receiving team, there will be more participants from the “receivers” than the “transmitters.”

In improvement work that may have involved a large number of teams, a decision should be made on who are the most knowledgeable individuals who know and can convey the key learning from an improvement effort who could represent all the teams who have implemented improvements in the handover meeting. It is important to make sure that all key actors in the care process are represented in the handover.

The “receivers” who attend the knowledge handover meeting should represent all the different types of facilities and providers who are involved in the care process that is the subject of the handover.

Preparation

The transmitting team hold a pre-meeting to discuss the key learning points they may wish to share with the receiving team. The transmitting team will also compile any documents that might be useful to the receiving team.

A presentation will be created by the transmitting team to illustrate the key learning points they wish to share with the receiving team. Where appropriate, notes can be added to the PowerPoint slides to add context to the learning point illustrated in the slides. Typically one slide per learning point will be used.

The receiving team also holds a pre-meeting to discuss what they would like to learn. This information is sent to the transmitting team so that the receiving team’s needs can be incorporated into the presentation.

The handover meeting

The receiving team will appoint one of their members to take notes.

The leader of the transmitting team presents the PowerPoint presentation on key learning points.

At the conclusion of each slide, the transmitting team leader invites the receiving team into a conversation. The conversation clarifies the context of both the transmitting team and the receiving team and discusses how the learning might be relevant to the receiving team.

Each key learning point is covered in turn until all the key learning points have been covered.

Summarizing

At the end of the meeting the receiving team leader will summarize the key learning that the receiving team will take away for further consideration.

Example

A few months after a two-year chronic care improvement intervention in District A was over, the project team gathered notes from the final harvest meeting on the most important changes that facility-level improvement teams found would lead to better chronic care. They compiled these

notes into a set of recommendations and lists of key changes organized by major process of chronic care. To introduce these ideas to District B, they interviewed district leaders and heads of major health facilities in District B to find out what questions they had about the chronic care model. The project team then worked with leaders from District A to think through what was the key advice District A would give to District B, taking into account District B's questions. The project then held a one-day handover meeting to discuss the lessons and questions. The meeting was designed to allow interactive discussion around each of the key questions and lessons. The handover meeting was attended by 50 people—5 from the project and the Ministry of Health, 10 from District A, and 35 from District B, representing various facilities and types of providers. Follow-up visits to specific facilities in District A were organized over the following weeks, to provide implementers in District B with the chance to see the chronic care model in practice in District A facilities.

e. Learning Interview

The learning interview is a technique for capturing knowledge from an individual. It can be used in a variety of settings, for example “learning after” from an individual, after an activity has been completed, or “learning during” as part of on-the-job learning while observing an expert at work. Interviewing is a form of dialogue involving a question and answer process which continues until the interviewer feels he/she has reached core knowledge, expressed as future recommendations, based on real experience.

Before the Interview

Identify key questions you have for the interviewees—be clear why you want to interview them—what you want to learn. Take a list of the questions with you, but try to memorize them so that you can ask them as naturally as possible.

Select a quiet location for the interview where you will not be disturbed. Make sure that the door is closed, that your cell phone is shut off, and if you are recording the interview, that any noisy fans or air-conditioning units are switched off.

Prepare for the interview. Take a thick notepad and plenty of pencils or pens. Unless you can write very quickly or take shorthand, also consider taking an audio recording device to record the interview. The audio file can then be transcribed later, to give you a way to verify sections of the interview where your notes may not be adequate. It is also sometimes very useful to take short video summaries of some key learnings, so consider taking a video camera. Before you record or film the interviewee, make sure the person is comfortable with that and has given you explicit permission to do so. If you cannot record the interview, consider having a colleague sit in on the interview to write down the interviewee's responses.

Ahead of the interview, let the interviewee know about the process that you will use, and make sure that he/she is willing to be interviewed, and ready to be asked many questions.

Tips for Being an Effective Interviewer

Pause 3-4 seconds after receiving each answer to think about what you just heard.

Don't accept unclear or vague answers - press for specifics. You should only accept recommendations that will help the next person doing similar work. Also listen for mention of key documents, tools, and other materials which will be useful to complement the interview.

Demonstrate active listening and make appreciative comments (such as, “I hadn’t thought about it that way, that was very helpful” “That’s a very good point”).

Offer the respondent appropriate nonverbal responses. If he/she describes something funny, smile. If he/she tells you something sad, look sad. Present yourself as interested and aware.

During the Interview

Before you start the interview, spend a few minutes chatting with the interviewee to build rapport—explain who you are and why the interview is being conducted (what you want to learn). The goal is to put your respondent at ease and establish a warm and comfortable rapport.

During the interview, remember your purpose—what kind of information you want to obtain. Try to keep the respondent on track. Always have a copy of the interview questions in front of you—even though you should have your questions memorized.

Ask only one question at a time. Provide context for the question if needed.

A good place to start is to ask the interviewee to identify successes

- “Tell me about the successes you’ve had in [the activity in question].”
- “What were the most important accomplishments?”
- “Where did you have the most impact?”

Then probe for challenges:

- “What didn’t go well?”
- “What were the challenges you faced?”

For each experience the interviewee mentions, probe deeper:

- “What were the key factors that made this a success?”
- “What were the main things that disappointed you about the initiative?”

Probe for causes of the successes and ask for examples:

- “One of the success factors you mention was teamwork. Tell me a story that illustrates what you mean by good teamwork.”

Probe with similar questions for challenges or disappointments:

- “Give me an example of a time when you thought the relationship was not very good.”

Be intentional in asking closed or open questions:

- Closed questions ask for facts
- Open questions ask the respondent to think and reflect, tell you what he/she sees as important

Closing the Interview

End the interview by asking the interviewee to summarize the main lessons. The following question is very useful in prompting a good summary: “As a summary of what we have been discussing (and this will probably be repeating some of the things we’ve been through); if you were speaking to somebody who was just about to start on a similar improvement activity

tomorrow, what would your key points of advice be?" or "If you were advising someone starting similar improvement work, what steps would you recommend they do to ensure the best results?"

Ask a parting question:

- "What else have I not covered that might be helpful to me?"
- "Is there anything else you think I need to know"
- "I am wondering if anything has occurred to you as we've been talking that would be useful?"

Thank the interviewee when you finish and explain how what you learned in the interview will be used.

V. RECOMMENDATIONS

Through the implementation of KM techniques and principles on the USAID ASSIST Project, we learned a lot about learning. We recommend the following to others looking to make use of KM in their work:

- Use KM when building capacity for KM. During our trainings we used KM techniques and principles while learning about KM. We were able to have discussions about the role of learning in our work while practicing the techniques to enhance learning.
- Be adaptive. There is no one way to incorporate KM into our work. The principles remain true across projects and activities, but the way they are implemented is variable and flexible. Learn and continuously adapt.
- Incorporate KM into everyone's work. While we had KM Advisors in many country offices to shepherd products along and provide guidance on designing events, we emphasized that KM was part of everyone's job. KM is not an outside, additional task, but instead is a way of doing the work that enhances technical implementation.
- Highlight early successes. If KM is new to your organization or project, highlight early successes to increase buy-in and enthusiasm. KM can be met with skepticism or seen as onerous, so it is important to share when it is successfully applied in your work.
- Keep your audience in mind. When designing learning events and creating knowledge products, keep in mind who has the knowledge and who needs the knowledge. Create knowledge products that are forward looking, providing recommendations to others who may want to do similar work.

APPENDICES

Appendix 1: How to Effectively Draw on the Knowledge of Everyone in the Room

Knowledge workers have a wealth of knowledge that organizations can call upon to solve the difficult issues they are facing. But drawing out that knowledge requires, not just bringing knowledgeable people together, but a purposeful design. This 2012 essay from knowledge management expert Dr. Nancy M. Dixon discusses design principles for ensuring that events draw on the insights of all participants and provides practice suggestions for making knowledge sharing events effective.

How to Effectively Draw on the Knowledge of Everyone in the Room

By Nancy M. Dixon, Common Knowledge Associates, www.commonknowledge.org, nancydixon@commonknowledge.org (2012)

I have had the opportunity to see many ways to transfer best practices. I want to describe two of them that are familiar, but I think are flawed, and then describe the one I think works best.

Model 1 – The Beauty Contest. This is the event in which a team that is excelling is paraded in all its finery, seeking admiration. Often the whole team is on stage displaying all its successes. There is little said about problems or the uniqueness of the situation of the contestant. When the “beauty team” is done, it walks off the stage to great applause and the facilitator brings up the next contestant. For the beauty contestants the “pageant” is a very positive experience. Not so much for the listening teams. After 2 or 3 contestants they are feeling woefully inadequate. They are fully aware of the subtext of the beauty contest, which is “get out there and do what they did.” Feelings of inadequacy do not inspire teams to want to return for the next learning session.

Model 2 - Distinguished House Tour—The Distinguished House Tour begins with an expert explaining the 5 steps (the tour) that everyone needs to take to have a house as beautiful as this one. The listening teams spend some time exploring that idea as they might an interesting house. They ask questions of the expert and look for inconsistencies (e.g. “What if your surgeon won’t participate?”) and try hard to understand the conception in terms of their own house. The problem, of course, is how to make the design work when your house doesn’t have a sunroom. The distinguished house tour problem is fitting participating teams reality into the ideal the expert is drawing. If everyone is being measured on the five steps and a team can’t get past step one, it is embarrassing to be compared to teams that are 75% of the way there.

The problem with both of these models is that they are based on comparison. The intent is to motivate those not doing as well by seeing the good work of others – but the reality is it is discouraging. The model I favor I have labeled Peer Learning

Model 3 – Peer Learning – The basic proposition of the Peer Learning model is that every team that comes to a joint meeting of peers is doing something well that others could learn from. The task is to put the participants in configurations where that learning can happen. Over the years, as I have designed such meetings, I have come to rely on seven principles that work together to make the most of all the knowledge in the room. The principles have been assembled from the work of many researchers and thought leaders. Where possible I have identified the source of each idea.

1. Connection before content – Knowledge workers in a meeting need to get connected to each other before they try to construct new ideas together (Peter Block). In order to work effectively with others, they need to know:
 - a. who is in the room
 - b. what knowledge others have
 - c. how others think about the issue of the meeting, and
 - d. the group's strengths and weaknesses

Connecting is best accomplished by engaging participants in small group conversations. To build connections, those conversations have to be structured in a way that allows participants to frame themselves in a positive light, relative to their experience and successes. Icebreaker type exercises are less useful because they do not provide adequate understanding of others' knowledge and experience.

Example:

Start each meeting by everyone sharing a positive experience - something they are proud of. It needs to be about the "work" but does not have to be about the specific topic of the session. For example, What gives meaning to your work? What was your proudest moment over the last two months?

When a group has come together many times, the period of connecting can be brief, but not neglected altogether. Just as two friends typically engage in "small talk" for a few minutes each time they meet, any group that comes together regularly also needs a brief period of re-connecting before turning to content. In both situations the "small talk" affirms the relationship and the readiness to engage the topic.

2. Circles connect – circles represent unity. They help individuals in the group view themselves as part of the whole. For example, the UN meeting hall is designed in concentric circles to provide a visual representation of what the UN stands for – unity among nations.

I was reminded of the benefits of seeing oneself, and being seen, as a part of a whole, when I conducted an exit interview with Lieutenant General Maples, then Director of the Defense Intelligence Agency. He told me that one of his first actions as Director had been to remove the large rectangular conference table in his office and have it replaced with a round table. He very clearly understood the difference a circle would make to the many, very difficult conversations he would have in the coming years.

It is a useful symbolism to begin and end learning sessions with chairs in a circle. It can be a big circle of 35, or many small circles of 5. Ideally it is a circle of just chairs, without a table. Participants have a profoundly different experience when they converse in a group absent a table. The meeting organizers and even some participants will feel a bit awkward for the first few minutes without a table, but that feeling goes away quickly.

3. Learn in small groups – integrate knowledge in large groups

We learn and create new ideas through our conversation with others in small groups. A small group is 3-5 members. This is the size that produces the richest and most in-depth thinking. It is large enough to contain diverse views yet small enough for members to engage each other.

Engaging each other means asking questions to clarify the meaning another has expressed and it means challenging as well as building on others' ideas. The give and take of the small group serves to exchange existing knowledge as well as generate new knowledge.

After small groups have been in conversation their ideas are brought together in a large group setting to integrate their insights into the thinking of the whole. In a lengthy meeting, small and large group discussions regularly alternate.

4. Diverge then converge

Any meeting that is focused on collective knowledge must first diverge in order to draw new ideas out and to stimulate thinking. "Knowledge diversity facilitates the innovative process by enabling the individual to make novel associations and linkages" (Cohen and Levinthal). Meeting leaders intentionally invite people from other disciplines, stakeholder groups, and outside experts to introduce that diversity.

Without time for divergence the many differences within a group are not expressed and without their expression they cannot be made use of by the group. It is in the critical space that lies between divergent ideas that innovation often emerges (Scott Page).

Participants are reluctant to turn their thinking to what they have in common until they have had an opportunity to give voice to their differences (Marvin Weisbord). The way the human brain works is to first recognize differences and only after those are clarified to focus on similarities.

The first part of a meeting, whether it is half a day or 3 days, is dedicated to divergence. The second part of a meeting converges to put those divergent ideas to work in terms of complex ideas.

Example:

One way to get divergence on the table is to start a meeting asking people either in a small group or if less than 25 in a large group to say one hope and one concern about the meeting or topic. That give participants permission to express concern without feeling they are being negative.

5. Outside experts are present to inform the thinking of others, not provide them answers

Bringing outside experts into a meeting can provide much needed diversity, but experts cannot provide solutions. It is the workers of an organization, who function within its context and who together understand the complexity of its issues, who are uniquely capable of developing workable solutions.

Experts can stimulate the thinking of participants by talking about what others have done in similar situations. But any practice from another organization or team always has to be adapted, not adopted. Even the best of examples have to be modified to fit a new context.

Fifteen minutes is adequate time for an expert to stimulate a group's thinking. The expert's presentation needs to be immediately followed by a period of time dedicated to participants connecting what the expert has said to their own knowledge and to thinking with others about how that knowledge can be used. Without committed time for processing, an expert's ideas are forgotten within a couple of hours. Unfortunately, the ubiquitous Q&A does not provide the needed processing time; rather what is needed is time for colleagues to talk with each other in small groups.

6. Connect new ideas to what knowledge workers already know

Processing is about moving new ideas from short term to long-term memory by connecting the new ideas to knowledge worker's existing knowledge. The term, absorptive capacity (Cohen and Levinthal), references the ability of knowledge workers to recognize the value of new, external information, assimilate it, and apply it to their organization's issues. An individual's or an organization's absorptive capacity, is a function of their prior knowledge. That means that without related knowledge to connect new ideas to, new knowledge will not be absorbed.

In meetings designed to exploit collective knowledge, a more robust environment for knowledge linkages to be made is provided when participants from varying disciplines are present. A knowledge worker from engineering, for example, will have different prior knowledge than one from R&D, and different yet from a knowledge worker from legal. The greater the diversity of prior knowledge in the room the more likely that new knowledge, from outside or internally, will be connected to prior knowledge which will spur insight. To process new knowledge, group discussion, made up diverse participants, is most effective. If the group is small (3-5 participants) each knowledge worker has enough airtime to put their ideas into words – which leads to the last principle.

7. We learn when we talk

This principle is central to transferring knowledge. Listening provides us new ideas but as long as those ideas are just swimming around in our heads, they are neither fully formed nor implementable. It is only when a participant puts an idea together in a way that allows him or her to explain the idea to others, that the idea takes shape for the participant, as well as for the person the participant is talking with.

Johnson & Johnson, researchers at the University of Minnesota, have shown that we organize information in a different way when we are preparing to explain our thinking to others. The information not only becomes more logically organized, but new connections are made, often in the act of speaking. It is fair to say, "We don't learn when we listen, we learn when we speak," or write, or even create a visual representation of our understanding. Giving participants the time needed to put their thinking into words, not only shares knowledge, but creates it.

What these principles mean for bringing people together to learn from each other:

- Have a poster with the picture of all participants with their name so everyone can learn the names of everyone else. Pass out a list of attendees with contact information so that participants can reach each other between learning sessions
- Eliminate tables and use movable chairs so that the room can be configured in different shapes.
- Start with food and drink so people have a chance to renew acquaintances
- If someone needs to welcome the group invite a participant to do the welcome, rather than "staff" – it is their meeting
- Start with small groups in conversation, or the whole group if it is under 25 – don't start with a presentation – that puts attendees in a passive mode. Start with storytelling (what has happened in the last two months that you are most proud of?) or (what gives

meaning to your work?) or a check in (what are your hopes and concerns as you join this meeting today)

- Always start with the opportunity for attendees to put their best foot forward, rather than starting with problems. Don't start with, "What have you achieved on this topic since the last session?" because that will embarrass some who have not made progress.
- Design the knowledge sharing during the meeting by using knowledge markets, knowledge exchanges, knowledge cafes and storytelling rather than having the "best" present to others. Be assured that in the many conversations everyone will hear the "best."
- Intentionally invite in diversity to every meeting, someone(s) from a different discipline (anthropologist, patient, family member, staff working to improve a different area of care).
- Highlight groups that have actively shared with others through peer assist, telephone sharing, sharing documents – small group discussions about what have you share or learned from others between learning sessions.
- Mix participants, configuring small groups sometimes as hospital teams and other times as groups from several hospitals
- Follow small group discussions with a whole group session, giving 5-10 individuals a chance to say, "What did you learn in your small group that is important for the group to understand." Group report-outs should be used sparingly because what is reported is too often a very limited representation of a rich discussion and are inevitably boring. It is better to have individuals speak for themselves
- Limit any presentations to 15 minutes and always follow them with small group discussions about what was just said (Q&A doesn't count as small group discussion)
- Have many note takers armed with notepads, laptops and cameras on their smart phones who are assigned to capture stories, lessons and insights.

Appendix 2: Posters used by ASSIST to Explain the Simple Rules of Knowledge Management

Circles Connect



Circles represent unity, they help the group feel as a whole.

How the room is designed makes a difference



Connection before Content



People are more willing to share their knowledge and expose their thinking when they have built a trust relationship with others.

We Learn When We Talk



Ideas only take shape in our mind
6 when we explain them to others.

Knowledge Is Created and Shared in Conversation



Asking Opens the Door to Knowledge



5 Knowledge sharing begins when someone asks a question.



We always know more than we can say, and we will always say more than we can write down.

The process of taking things from our heads, to our mouths (speaking it) to our hands (writing it down) involves loss of content and context. It is always less than it could have been as it is increasingly codified.

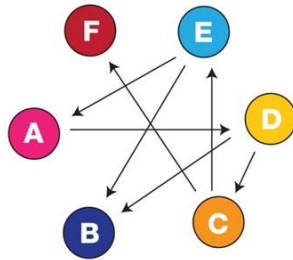
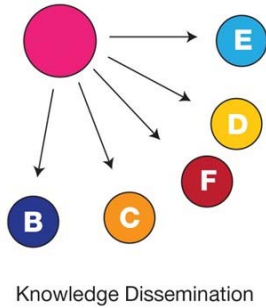
Dave Snowden
7 Principles of Knowledge Management

Learn in Small Groups, Integrate Knowledge in Large Groups



9

Moving from One to Many to Many to Many



Nancy Dixon, Common Knowledge Associates

We learn “how to” knowledge from peers
4 who are doing similar work.

Learning From Experience Requires Deliberate Reflection

*Experience
is inevitable;
learning is not.*

Reflection is most effective when it involves
8 others with similar experiences.

Experts Can Inform the Thinking of Others, Not Provide Them Answers



3

Appendix 3: Quality Improvement Team Documentation Journal

This tool was developed by the USAID Health Care Improvement Project for use by quality improvement teams to document the changes they test to reach their improvement objective and to plot the results of the data they collect as a time series chart. Developed originally for use as part of a larger Standard Evaluation System, this generic version of the QI team documentation journal is intended to be adapted to the context of a specific improvement activity.



USAID
FROM THE AMERICAN PEOPLE

HEALTH CARE
IMPROVEMENT
PROJECT

Standard Format for Documentation of Quality Improvement Interventions

Documentation Journal for QI Teams

Instructions:

This form is a “journal” where teams can document on an on-going basis their tested changes and results. The journal has three parts. Part 1 documents what you are trying to accomplish and why. Part 2 is a worksheet where you list each of the changes you have implemented at your site, including notation of their effectiveness and the dates when they were started or ended (if applicable). Part 3 provides space for you to graph your data or results, and to annotate your run charts with your changes so you can see what impact they are having.

Please be sure to include as much detail as will be helpful *for you* to analyze and document the evolution of your work. This journal provides a detailed record from which you can reflect on your work, prepare for sharing of lessons to others, and contribute to the expansion of the collaborative’s change packet. Please refer to the “synthesis tool” for guidance in summarizing and sharing with others.

Team Leader: _____ **Name of the Site:** _____

Team Members: _____

Start Date for using Journal: _____ **End date:** _____

Part 1: Planning Worksheet – Improvement Objectives: At the start of your improvement efforts, please respond to the following questions:

<p>Improvement Objective: What are you trying to accomplish and why?</p> <p>1. _____ _____ _____ _____</p> <p>2. _____ _____ _____ _____</p> <p>3. _____ _____ _____ _____</p> <p>4. _____ _____ _____ _____</p>	<p>Name of indicator(s) you will use to determine if there is an improvement for each corresponding objective:</p> <p>Indicator(s) for Obj. #1:</p> <p>Indicator(s) for Obj. #2:</p> <p>Indicator(s) for Obj. #3:</p> <p>Indicator(s) for Obj. #4:</p>
---	--

Part 1: *Planning Worksheet* [Continued] – Improvement Objectives:

Description of Problem:

Briefly describe the problem being addressed and gaps between the current situation and your improvement objectives.

Process Analysis:

Which steps in the process of care are currently problematic? What differences are there in the standard of care and current practices? What are some of the challenges with the current situation?

Part 2: Changes Worksheet – Team Activities: The following table lists various types of changes that teams often introduce to improve the quality of care. For each improvement objective, please list all the changes that your team introduced within these categories, regardless of its eventual success or not. You should also note when the change was started, and when it ended (if applicable) to enable you to annotate your results. After the change is implemented, be sure to note whether you think it was effective. Each improvement objective should have its own change worksheet. Label the objective # at the top of the change worksheet.

Improvement Objective # []: _____

<i>I. Applied to Inputs</i>	Tested Changes: In the space below, list all of the changes that you are implementing to address the improvement objective. Use 1-2 sentences to briefly describe the tested change.	Start Date: MM/DD/YY	End Date (if applicable) MM/DD/YY	Effective? (Yes/No) Was the desired effect achieved?	Comments: Note here any evidence that the change took place; and potential reasons why it was or was not effective such as key barriers or important enabling factors.
<i>Human Resources</i> A. Changes to Improve the Availability and Capacity of Health Care Workers (e.g. Training, coaching, supervision, efforts to improve morale or motivation)	A1.				
	A2.				
	A3.				
<i>Supplies</i>	B1.				

B. Changes to ensure the availability of supplies and materials (e.g. medicines, tools, laboratory exams, medical instruments, job aids, forms, etc.)					
	B2.				
	B3.				
C. Other changes (if not easily assigned to above types such as structural changes, etc.)	C1.				
	C2.				

Part 2: Changes Worksheet – Team Activities [Continued]:

II. Applied to the Process of Care	Tested Changes: In the space below, list all of the changes that you are implementing to address the improvement objective. Use 1-2 sentences to briefly describe the tested change.	Start Date: MM/DD/YY	End Date (if applicable) MM/DD/YY	Effective? (Yes/No) Was the desired effect achieved?	Comments: Note here any evidence that the change took place; and potential reasons why it was or was not effective such as key barriers or important enabling factors.
Content D. Changes to the Clinical Content of Care (e.g. Norms, policy, guidelines for service delivery, including use of new inputs, etc.]	D1.				
	D2.				
	D3.				
Organization E. Changes to the organization of	E1.				
	E2.				

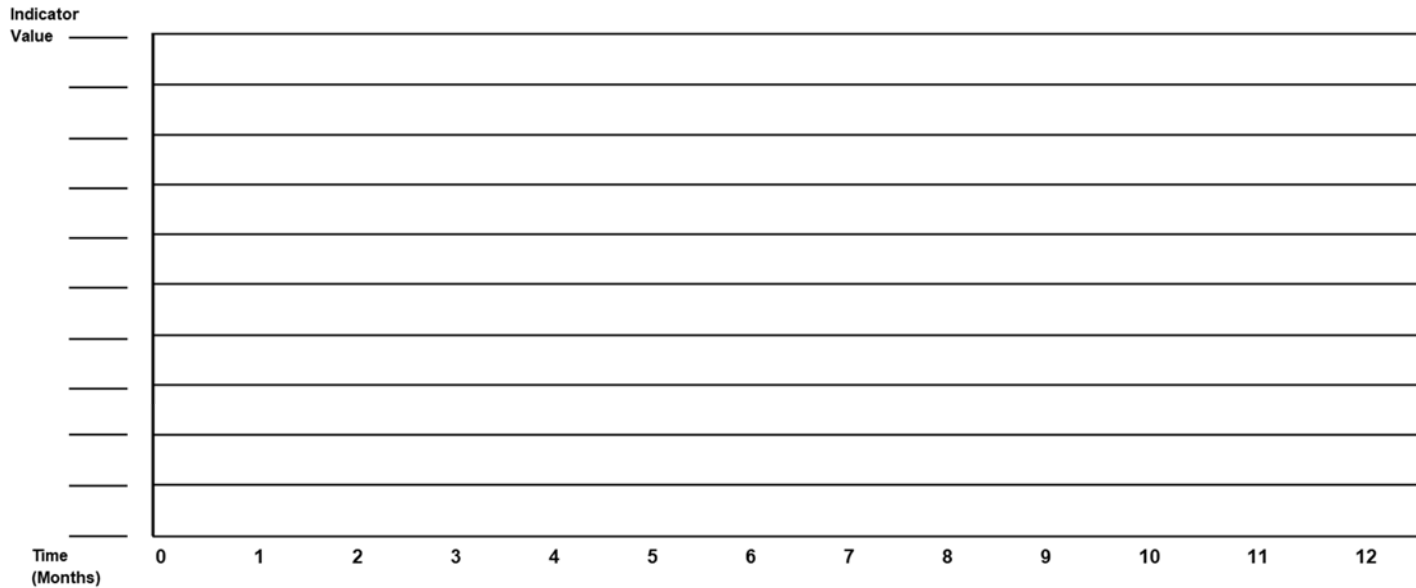
care or health services (e.g. Work flow, patient flow, organization of care, timing, elimination of waste, etc.)					
	E3.				
	E4.				
F. Other changes (if not easily assigned to above types)	F1.				
	F2.				

Part 3: Graph Template – Annotated Results: For each improvement objective, use the graph template below to document the impact of tested changes over time. Be sure to describe the indicator(s) you have used, including the value of the numerator and denominator. Annotate your graph based on the time the change was introduced or ended. You may use the change's number (e.g., B1, C3, A2, D4) to annotate. This graph includes indicator(s) for **Improvement Objective # []**.

Name of the indicator # 1: _____ **Name of the indicator # 2:** _____

Definition of the numerator: _____ **Definition of the numerator:** _____

Definition of the denominator: _____ **Definition of the denominator:** _____



Indicator #1:

Numerator														
Denominator														
%														

Indicator #2:

Numerator														
Denominator														
%														

Journal Comments – Notes on Selected Indicators: Please note here any additional comments you would like to make regarding your changes or results, such as any *alternative explanations* for the change in the value of the indicator, changes in measurement / data collection, or other information from the changes worksheet or graph template.

Journal Comments – Notes on Other Observed Effects: Please note here what other effects (positive or negative) you are *currently* observing as a result of the quality improvement effort such as comments from patients, changes in your performance or motivation, improved efficiency or the survival story of a sick patient. You may use your notes to tell the complete story at the next learning session(s).

**USAID APPLYING SCIENCE TO STRENGTHEN
AND IMPROVE SYSTEMS PROJECT**

University Research Co., LLC
5404 Wisconsin Avenue, Suite 800
Chevy Chase, MD 20815

Tel: (301) 654-8338

Fax: (301) 941-8427

www.usaidassist.org