

Project Design & Evaluation Guide Rapid-Cycle Evaluation for Improvement Leaders Developed by S. Cohen, A. Reid, and G. Parry

| Project Overview | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Project Name | | | | | | | | |
| Brief description (3-5 sentence 'elevator pitch' of project). | | | | | | | | |
| 1) Goals – What are we trying to accomplish? | | | | | | | | |
| What is your project's | aim statement (numeric target, timeframe, boundaries)? | | | | | | | |
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| Use this table to list project's specific improvement goals, with the Kirkpatrick framework as a guide. | | | | | | | | |
| Kirkpatrick Level | Improvement Goals | | | | | | | |
| L4 – Outcomes | | | | | | | | |
| L3 – Process | | | | | | | | |
| L2 – Learning | | | | | | | | |
| L1 – Experience | | | | | | | | |

Institute for Healthcare Improvement

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organizational performance or patient outcomes (KL 4). What high-level change concepts do you believe are critical for improved results? What is your degree of belief that these change concepts will lead to improvement? Based on your degree of belief in the change concepts, is your project at the innovation, testing, or spread & scale-up phase? Why? A content theory can be depicted with a **driver diagram**. Using the template provided below (Appendix A), test applying a driver diagram to your sample improvement project. 3) Execution Theory – The rationale for how a program's design will enable improvement teams to achieve desired changes. Describe the high-level execution theory for how the program design (e.g. inputs, activities, outputs) will bring about the desired changes that, in turn, will drive improvement.

2) Content Theory – The rationale for how changes in processes (Kirkpatrick Level 3) will improve

We recommend using a **logic model** to outline your execution theory. Using the template provided (Appendix B), outline the project's inputs, activities, and outputs, and connect them to predicted results.



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4) Measurement & Evaluation Plan - How will we know that a change is an improvement?

Revisiting the improvement goals outlined earlier, now identify what measures will be collected

| Kirkpatrick Level | Improvement Goals | Measures | | | | | |
|---|--|--|--|--|--|--|--|
| L4 – Outcomes | | | | | | | |
| L3 – Process | | | | | | | |
| L2 – Learning | | | | | | | |
| L1 – Experience | | | | | | | |
| Quantitative o | data: When and how will you collect quantita | ative data? How will you analyze them? | | | | | |
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| What qualitative data will you collect to better understand where and why you see certain results across contexts? Where will you seek to collect qualitative data? How will you collect, store, and analyze them? | | | | | | | |
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| professional community? | | | | | | |
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| What results, learning, and stories from this project will be valuable to share? | | | | | | |
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| Who is the target audience (internally and externally)? | | | | | | |
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| What products (e.g. publications, presentations, blogs, multimedia) will most effectively share your findings with the right people, at the right scale, at the right time? | | | | | | |
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| What resources are needed to develop these products? Who will lead development of each? | | | | | | |
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| What are the ideal sequence and timeline for developing these communications? | | | | | | |
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5) Dissemination Plan - How will we share results and learning with our organization and the



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6) Outline Plan for Rapid-Cycle Evaluation

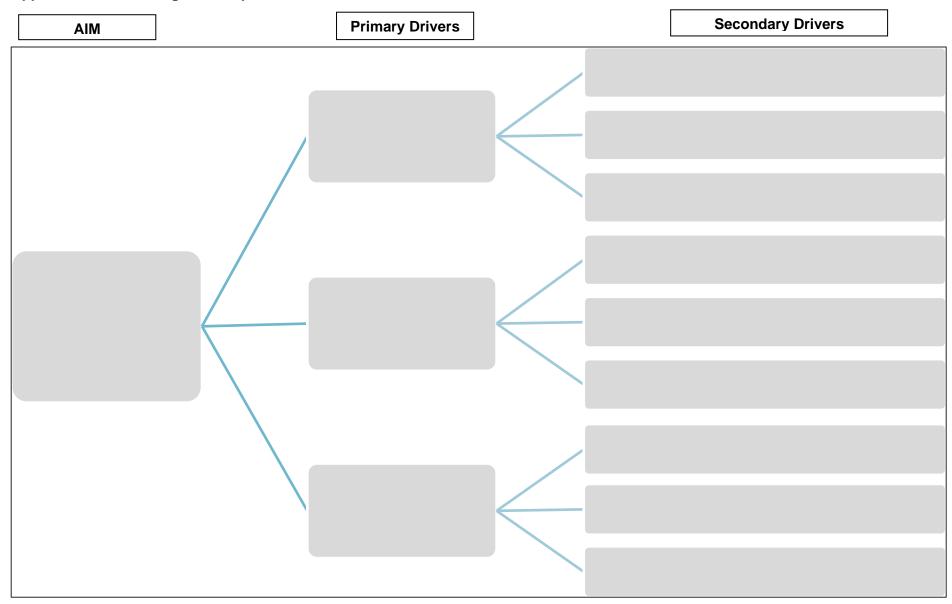
Summarize your overall plan to apply rapid-cycle, formative evaluation throughout your improvement project. For instance, when and how do you plan to:

- Pause for a 'milestone' review to assess progress, analyze results, and make necessary amendments to the content or execution?
- Feedback results, learning, and course corrections to the project participant(s)?
- Share lessons learned on what it takes to bring about improvement with others in your organization?

| • | Disseminate summative findings and revised program theory to the field? | | | | | | | |
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Appendix A: Driver Diagram Template





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Appendix B: Logic Model Template

| Inputs: What resources will be used to support the project? | Activities: What are the main things the project will do/provide? | Outputs: What are the main things the project will do/provide? | Short-Term Outcomes: What will occur as a direct result of the activities & outputs? (Changes in knowledge, skills, attitudes – KL 2) | Mid-Term Outcomes: What results should follow from the short- term outcomes? (Changes in behavior, processes – KL 3) | Impact (Long-term outcomes): What outcomes will be impacted by this work? (Changes in patient, org outcomes – KL 4) |
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The Kirkpatrick Framework

A Framework for Programmatic Evaluation and Design

Background: The Model

Developed by Donald Kirkpatrick in the 1950's, and widely publicized in a series of articles published in subsequent decades, the Kirkpatrick Model has become a standard tool in the evaluator's toolbox for discerning a program's effectiveness, strengths, and weaknesses in producing outcomes. Initially developed to evaluate training programs, the model delineates four distinct "levels" in the process of moving people learn, change, and improve:

- **1. Reaction:** What was the participant's experience? Did the participants have an excellent experience working on the improvement project?
- 2. Learning: What did participants learn? Did they learn improvement methods and begin testing?
- **3. Behavior:** Did participants modify their behavior? Did they work differently and see change in their process measures?
- **4. Results:** Did the organization improve its performance (via outcome measures)?

Each of the four levels can be viewed as subsequent steps on a participant's journey through a training (or improvement) program to the application of new skills in the work environment. A positive *reaction* (or *experience*) increases a participant's receptivity to the training. The skills or knowledge being taught need to be *learned* for use outside of a training environment. This learning must then translate into personal or broader *behavioral* change. Finally, the anticipated performance *outcomes* are measured to determine if a behavioral change had the desired effect on patient or organizational outcomes.

The Model in Practice

At IHI, the Kirkpatrick Model serves as a useful template for several aspects of a quality improvement program's design and execution. The levels are useful guides for designing measurement systems to understand if our program is having the desired effect. If a project aims to increase knowledge, IHI may use Kirkpatrick Level 2 (KP2) measures, e.g., How has QI knowledge changed? How many teams have begun testing? If a project aims to achieve observable improvements in patient or organizational outcomes, Kirkpatrick Level 4 (KP4) measures will be used, e.g., Have surgical site infections decreased?

IHI also "designs-backwards" using the Kirkpatrick Model. During a program's design, IHI considers the end results (KP4) and then designs the program from Level 4 down; "If we want X results, we will need to change Y behaviors. Y behaviors will require Z skills, etc." The result of this exercise is a comprehensive content theory and logic model, detailing the outputs of each activity by Kirkpatrick level. This approach allows greater visibility over the continuum of a project's implementation, and supports program designers in considering all levels of participant engagement, learning, and change.