



Synthesis Matrix

Road testing is a method for piloting an improvement strategy so that you can learn about the strategy's promise and improve its implementation before committing to it. Grantees are encouraged to develop learning questions in section D3 of the [HMRF CQI plan template](#) to be clear on what they need to find out about their improvement strategy during the road test. Learning questions also help to identify the information that a team needs to collect during a road test. Ultimately, when assessing a new strategy, a team might end up with feedback and information from multiple sources, including interviews, focus groups, observations, design activities with staff or clients, pulse surveys or exit tickets after workshop sessions, and performance data from nFORM.

Collecting and analyzing information from multiple sources can enrich your learning as it allows your team to capture multiple perspectives in understanding implementation and perceived promise. However, making sense of information from multiple sources can feel overwhelming as it requires consolidating insights across different sources. A synthesis matrix can help your team organize information and consolidate insights by key learning questions for your road test. You can use your completed synthesis matrix to answer the reflection questions in section D4 of the HMRF CQI template and inform next steps related to your strategy. While the data you collect for a road test can help inform next steps, it is suggestive and not intended to prove that the strategy is working.

Directions

1. The table below provides an example of a synthesis matrix. Create your own matrix to help think through each of your learning questions and document related insights from each data source. To help identify insights, run frequencies on your quantitative sources and pull themes from qualitative sources. You can find resources on the [HMRF Grantee Resources site](#) to support your analyses. For example, use the template in the [focus group tip sheet](#) to distill key themes and insights. Consider facilitating a [sensemaking meeting](#) with your CQI team or others to deepen your understanding of the data from each source and distill key takeaways to complete your matrix.

In your synthesis matrix, enter your learning questions in the rows in the far-left column and your information collection activities in the column headers. (If you have more data sources than learning questions, you can put data sources in the rows and learning questions in the column headers instead). Then, write key insights inside each cell for the corresponding data source and learning question. You can use the template at the end of this tip sheet to develop your own matrix.

Strategy: To promote attendance in our workshop, we will offer attendance incentives at the first class, halfway point, and final class.*

Learning questions	Staff pulse survey	Client focus group	Client attendance data (nFORM, Series Session Attendance report)	Cross-source takeaways
How do staff share information about the incentives with clients?	-Most staff (90 percent) shared information about the incentives at program orientation with clients. -Eighty percent of staff provided reminders about the incentives in class or via text messages to clients.	Clients shared that they learned about incentives at program orientation. Staff then provided reminders throughout the class.	N/A	Clients learned about the incentives early on and throughout the series of classes.
Do clients see the incentives as motivating, considering the amounts and timing of incentives?	Ninety percent of staff strongly agreed that clients found the incentives motivating. Two staff suggested the incentives should be provided at different time points to put a stronger emphasis on where they matter most, rather than the current approach of providing equal amounts at the start, halfway point, and end of a session series.	Clients said knowing upfront when they would receive the incentives strengthened their commitment to the class and encouraged them to be proactive in working with case managers to address barriers to attendance (for example, child care).	Attendance remained consistently high throughout each session (an average of 93 percent attended each session) and was similar at classes when clients received an incentive and at classes when they did not.	The incentives were motivating, but the team could consider adjusting how incentives are allocated across sessions.

*This example is illustrative to demonstrate the synthesis matrix. Grantees should discuss all incentive plans with their FPS.

2. Once you collect insights from each source, review across sources to reflect on what you learned from the road test, determine next steps after the road test, and note any new questions. Use your learning to:

- **Reflect on questions in section D4 of the CQI plan template.** Discuss the synthesis matrix with your CQI team as you review reflection questions in section D4 of the CQI plan template. In reviewing the matrix, consider what was surprising or unexpected, how to build on what went well, and/or how to address challenges.
- **Indicate your next steps.** Based on your reflections in section D4, will you maintain, adapt and retest, or abandon the strategy?
- **Note new questions.** Did any new questions emerge from your road test? New questions are good to document to help guide future testing of your improvement strategy or additional improvement efforts.

For the example presented in the above table, key takeaways could include the following:

- **Reflect on questions in section D4, for example:**
 - D4a. What seems to have worked *consistently* well and not so well? What was *inconsistent*?
 - The process that staff used to describe the incentives during orientation and offer reminders throughout the class generally worked well. Ideally, we would like 100% of staff to introduce the incentives at orientation.

- Clients felt the incentives made them more committed to attending all classes and working with case managers on a plan to address barriers early. Attendance data supports this takeaway, as attendance remained strong throughout the series of classes, whether or not incentives were given at a particular class.
- How might we address or resolve the challenges that arose (aspects that have not worked well)?
 - It might help to vary incentive amounts, as clients viewed the incentives as a strong motivating factor at the start but less needed as they got connected to the class. We will determine what is allowable with our FPS.

Indicate your next steps. Because the promise of incentives seems to help increase commitment, we will continue to offer incentives at different points throughout the class series. However, as incentives seem to be most motivating at the start, before clients see the value of the class, we will reallocate the total incentive for each client to provide a higher incentive for attending the first session, a smaller incentive halfway through, and a higher incentive at the end as a reward for completion. We will discuss this plan with our FPS before implementing it. We will also reinforce with staff that incentives should be introduced at program orientation.

- **Note new questions.** How, if at all, does having a smaller incentive at the halfway point appear to influence client attendance?

Template

Create your own synthesis matrix based on the template below. You can recreate the matrix in Word or a spreadsheet program, like Excel.

Strategy:				
Learning questions	Data source # 1	Data source # 2	Data source # 3	Cross-source takeaways
Learning question #1				
Learning question #2				
Learning question #3				

This tool was prepared by Annie Buonaspina, Allon Kalisher, and Scott Richman of Mathematica, Washington, DC, (2021) under contract with Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services (HHSP2332015000351/75P00120F37054). OPRE Project Officers: Katie Pahigiannis, Pooja Gupta Curtin, Harmanpreet Bhatti, and Rebecca Hjelm. Mathematica Project Director: Grace Roemer.