

### **Solvability and Control Matrix**

John Moran<sup>1</sup> and Julie Sharp<sup>2</sup>

# **Description:**

Problems and challenges arise every day in our personal and professional lives. Some problems are simple to resolve alone (solvable), while others may require additional resources or the use of a quality improvement (QI) team to assist. The *Solvability and Control Matrix* is a tool that presents a guided process to explore and assess process problems, in order to determine what can be easily solved, and which problems might rise to the level of a QI project. The tool helps an individual explore a problem through two lenses. First, by investigating the solvability of the problem, the individual can determine the level of resources available to resolve the problem on his/her own. The second lens explores the individual's level of control to fix the problem, to determine how the support of others might resolve the problem.

#### When to Use:

The Solvability and Control Matrix can be used when an individual is struggling with a process problem and trying to determine what to do next. For organizations developing a QI culture, program staff can use the Solvability and Control Matrix to determine when to engage with QI staff for problem solving. It can be used to determine if a cross-functional or program-specific QI team should be used to resolve a problem. The Solvability and Control Matrix can also identify when a QI team is not needed, but where program staff can bring an issue directly to the owner of a process instead. By providing training on the use of this tool, performance improvement professionals can guide program staff toward increased use of QI.

### **Construction Steps:**

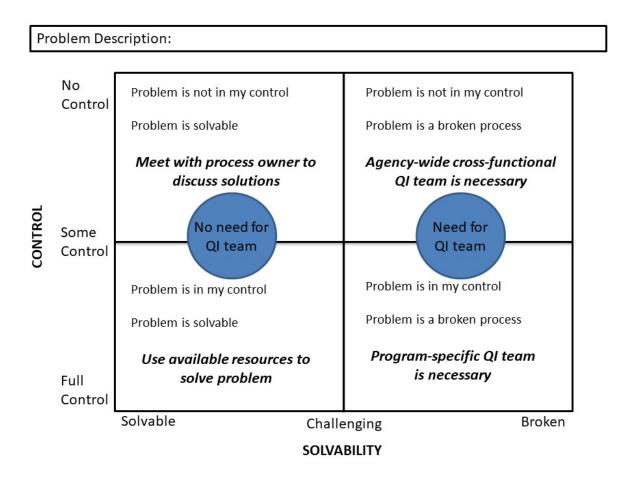
1. Define the problem. Be as descriptive and quantitative as possible, defining the problem as clearly, explicitly, and objectively as possible. Avoid drawing conclusions or making any assumptions. In the Solvability and Control Matrix template, write a problem description. This description should include baseline measurement data, and it should communicate what is going wrong, describe the issue, identify the gap between what is being achieved and what should be achieved, and illustrate the impact to the program or organization.

<sup>&</sup>lt;sup>1</sup> John W. Moran, PhD, is Senior Quality Advisor to the Public Health Foundation and Senior Fellow in the Division of Health Policy and Management at the University of Minnesota, School of Public Health. He is a previous member of PHAB's Evaluation and Quality Improvement Committee and Adjunct Professor at the Arizona State University College of Health Solutions' School for the Science of Health.

<sup>&</sup>lt;sup>2</sup> Julie Sharp, MPH, is a Performance Improvement Specialist for the Public Health Foundation. She is a performance improvement practitioner and former Accreditation Coordinator, working for over a decade at the Kane County Health Department in Illinois.

- 2. On the horizontal axis, identify your perception of the solvability of this problem. Plot perception along a continuum between:
  - a. <u>Solvable</u>: This problem can be corrected with my existing resources, and is relatively simple to solve.
  - b. <u>Broken</u>: This problem requires a process redesign, as the process is not functioning. It will require significant additional resources beyond what the individual can provide.
- 3. On the vertical axis, identify your level of control of the process. Plot control along a continuum between:
  - a. <u>No Control</u>: This problem is someone else's responsibility, and I can neither control nor influence it. Examples may include organization-level policies, such as the hiring process, contracting processes, or process for using agency vehicles.
  - b. <u>Full Control</u>: I own this process and it is my responsibility to fix it. Examples may include customer dissatisfaction with a service provided, or a program policy that is out of date.
- 4. Based on the identified solvability of the problem, and the level of control, identify the quadrant in which the problem falls, and take action:
  - a. Full Control and Solvable: Use available resources to solve the problem.
  - b. <u>No Control and Solvable</u>: Meet with the process owner to discuss potential solutions. Use the Solvability and Control Matrix during this discussion to share information about the problem with the process owner.
  - c. Full (or Some) Control and Broken: Create a program-specific QI team.
  - d. No Control and Broken: Create an agency-wide cross-functional QI team.
- 5. When it is not perfectly clear in which quadrant the problem should fall (e.g., you have only some control over the issue), attempt to make a determination on your own. Consulting with program-specific or agency-wide QI staff may also provide guidance.
- 6. When there is need to form a QI team, the issue should be brought to program-specific or agency-wide staff responsible for QI. The individual should share the Solvability and Control Matrix with QI staff, who will support the formation of one of two types of QI teams:
  - a. <u>Full (or Some Control) and Broken</u>: A program-specific QI team should be created. Add subject matter experts to the team as necessary. This team can also be helpful when willingness to solve the problem is low, as the team can identify and remove any obstacles. The individual who identified the issue should be part of the QI team.
  - **b.** No Control and Broken: Usually, this is an agency-wide problem with multiple owners. Create a cross-functional QI team, including all owners and partial owners of the process. The individual who identified the issue should also be part of the QI team.

## **Solvability and Control Matrix Template**



A clear understanding of the solvability of a process problem, coupled with an identification of the level of control for the individual to solve it, will lead to effective action and support problem solving efforts.

This tool is supported by Cooperative Agreement Number, 5NU38OT000211, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.