White Paper #1: Implementation Introduction and Methods

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The purpose of this series of white papers is to report on the findings of an initial evaluation of Utah’s Care About Childcare program (CAC) using an implementation science framework. Care About Childcare is Utah’s version of the federal Quality Rating and Improvement System (QRIS) for child care providers, but unlike other states’ QRISs, Utah’s QRIS is a Quality Recognition and Information System. CAC was developed by the Utah Office of Child Care (OCC). It is a strengths-based, voluntary program in which providers identify and report the quality that they have achieved beyond the basic licensing requirements.

Implementation science is the study of how to ensure that a well-defined program reaches a target population. The framework used for this white paper was developed by the National Implementation Research Network (NIRN) based at the FPG Child Development Institute at the University of North Carolina. This white paper series will cover the structure of implementation, core implementation components, and the stages of implementation as it pertains to CAC. The first white paper outlines the research methods and participants in this evaluation study.

Structure of implementation

In designing and putting programs into effect, there is often the problem of maintaining fidelity. To ensure that a program reaches a target population in its intended form, a conscious effort is necessary to support all those who deliver the program. The process of implementing a well-defined program includes consideration of the source, the destination of implementation, the means of bringing the source to the destination, and the feedback system (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

Source. The source of a program is the program plan as originally conceived. It is the basic description of components comprising the program plan.

Destination. The destination refers to those practitioners delivering the program. CAC is delivered by the CCR&R staff; thus, they are the destination. From an implementation perspective fidelity occurs when the destination receives sufficient instruction and support to consistently deliver the program as designed.

Communication link. To help practitioners deliver a program with fidelity, the source program (CAC) needs to be communicated effectively to the destination (CCR&R). Extant implementation literature indicates that the most effective communication occurs through trainings, coaching and supervision rather than through memos or handbooks.
**Feedback:** Feedback among all participants and between the source (OCC) and the destination (CCR&Rs) is important to implementation fidelity. A good implementation plan is constructed so as to provide frequent feedback to all participants across all levels.

**Sphere of Influence.** Each program is nested within a broader context of influence. In the case of CAC, the sphere of influence includes providers, parents, children, policymakers, business owners and any other entity relying on or involved with quality child care. The sphere of influence needs to be taken into account when designing a program and assessing its fidelity.

**Implementation drivers**

The notion of implementation drivers was developed by the National Implementation Research Network (NIRN) in response to reviewing qualitative and quantitative implementation data. These “drivers” are groups of behaviors that can build and maintain consistency in program delivery, resulting in reliable program outcomes. The drivers are split into three categories: competency drivers, organizational drivers, and leadership drivers.

**Competency drivers.** Competency drivers ensure staff capability. There are four competency drivers, as follows:

- **Staff selection** or the recruitment and hiring of new staff and the assigning of current staff to be practitioners in a program.
- **Training** or educating employees about their duties in the position to which they are hired or assigned to perform.
- **Coaching** or helping staff learn how to deliver a program.
- **Performance assessment** or an analysis of the fidelity of a program.

**Organization drivers.** Organization drivers support the infrastructure necessary to implement a program. There are three organization drivers as follows:

- **Decision support data systems** or those systems that collect information allowing program leaders to make informed decisions about the program.
- **Facilitative administration** or an administration that is up-to-date on the barriers that staff are encountering and responds quickly to eliminate the barrier (e.g., lessening an onerous paperwork load).
- **Systems intervention** defined as working with external systems to gain support that the program needs to function. For instance, programs often need to gain political support in order to obtain funding. A program may need to gain community support in order for the target population to participate.
Leadership drivers. Leadership drivers are the characteristics of those who successfully manage the program implementation. These drivers are closely connected with facilitative administration. However, facilitative administration is more concerned with direct support of staff while the leadership drivers refer to leaders’ skills in general management.

- **Technical leadership** is good management of a program.
- **Adaptive leadership** means leaders make changes to current protocols, organizational structures, assignments, etc. in order to better support a new program.

In practice, these drivers are integrated, that is, they affect one another. They are also compensatory: a weakness in one can at least be partially compensated by strength in another.

Other measures exist in the Implementation Science literature but for this research project, we will discuss CAC using the frameworks described above. This strategy will highlight strengths as well as areas for improvement and set the stage for future stage-based implementation assessments.

**Methods**

**Procedure.** The research team used the ImpleMapping tool (SISEP, 2010) to structure the research process. As specified by ImpleMapping, two researchers (graduate students) worked together as interviewers. One asked questions and took cursory notes while the other took more detailed, driver-related notes. A third researcher (undergraduate student) was present at most interviews and made notes about process and affect during the interview (e.g., body language, inflection, etc.).

**Participants.** After initial discussion with CCR&R employees, it was determined that the Office of Child Care, CCR&R directors, and CCR&R CAC consultants would best be able to supply the information needed. Due to the large distances involved between CCR&R centers, the research team proposed to visit in person only those sites that were closest, relying on video conferencing technology for the others.

The OCC and two CCR&R centers were visited in person (Bridgerland & Northern). Two CCR&R centers successfully used Skype (Metro & Eastern). One CCR&R (Mountainland) was interviewed via telephone, and one CCR&R (Western) used GoToMeeting without video. For the four CCR&Rs interviewed with some sort of visual communication (Skype or in person), undergraduate researchers were present to take notes on the process. For the two interviews that did not involve in-person or video communication, one was conducted by both graduate student researchers and the other, by one graduate student researcher (this interview took place after the other graduate student was no longer available). For this last interview as there was no other note-taker, the discussion was recorded and the recording deleted shortly thereafter.

**Interview Questions.** Using the ImpleMapping guidelines and the implementation drivers as a guide, the researchers created a list of interview questions. The questions were divided into three sections: interviewees’ position, perceptions of and experiences with CAC, and perceived support. Representative questions from each section are as follows:
• Position
  o How closely does your job description fit your daily schedule and tasks?
  o In your position, what are essential skills you use to meet CAC goals?
  o What are some common barriers you experience in meeting CAC goals?
  o Do you have any part in collecting or using feedback from providers and parents to make changes in the system?

• CAC
  o Can you briefly describe the CAC program like you were going to tell a parent or child care provider about it?
  o Were you involved in any part of creating CAC on the state or local level?
  o Let’s say a leader came to you from another state to ask about using CAC principles. What would you tell them are the three key components they would need to use?
  o After a year, how would you know the other state was using CAC successfully?

• Support
  o Think about how all other CCR&R employees are trained for their position. Who is responsible for ensuring consistent training across sites?
  o What systems are in place to ensure CCR&R referral staff members get the support they need?

The researcher asking the questions also provided time for the note taker to ask unscripted follow-up questions as needed on implementation drivers. This was necessary several times to clarify or expand the information received from the interviewees.

Analysis procedure. One researcher combined and summarized the notes of the research team for each group interviewed. This information was then organized in an Excel document by implementation driver, source program description, problems encountered in implementation, and means of measuring CAC success. The results are summarized in the next three white papers. The second white paper discusses findings with regard to the source (CAC), the destination (CCR&R), communication links, feedback, and spheres of influence. The third paper contains a description of the implementation drivers of CAC as they now stand, using two sets of planning tools developed by SISEP and the NIRN. The fourth gives a summary and recommendations based on the data to date.