

A photograph of a man and a young child sitting together in a grassy field, reading a book. The man is on the right, wearing a red sweater, and the child is on the left, wearing a yellow sweater. They are both smiling and looking at the book. The background shows a field of tall grass and trees under a bright sky.

BUILDING BRIDGES AND BONDS

Study Design Report

OPRE Report 2017-27

APRIL 2017

Building Bridges and Bonds | STUDY DESIGN REPORT

OPRE REPORT 2017-27

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Overview

Introduction

This report describes the Building Bridges and Bonds study, a rigorous evaluation of new program approaches to support low-income fathers in working toward economic stability and improved relationships with their children. The report includes a description of the three new program approaches being added to responsible fatherhood program services and the research design that is being used to evaluate them.

The new program components being evaluated in the study are:

- the **Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment**, which works with fathers with recent involvement in the criminal justice system and aims to help them find and keep better jobs by improving coping skills and encouraging positive thoughts, attitudes, and behaviors;
- the **Just Beginning parenting intervention**, a program that works with fathers and their young children together to improve the quality of father-child interactions; and
- the **DadTime engagement intervention**, a smartphone app that aims to improve fathers' participation in the program by guiding and supporting them in making and following through on plans for attending Just Beginning workshops. It also prompts them to practice skills learned in the parenting intervention.

The evaluation includes a process study and an impact study.

- The process study will describe who participated in services, how services operated, and the challenges staff faced. It will provide lessons for the field on key elements for successful program implementation and barriers to overcome when adding these new program components.
- The impacts of each of the three innovative program components will be rigorously evaluated using an experimental research design. The impact study will address questions about whether the new approaches affect key outcomes of interest, including employment, father-child relationship quality, and program participation.

In all, the Building Bridges and Bonds study is expected to enroll around 2,200 fathers across six fatherhood program sites. The study began enrolling fathers and implementing the new program components in the fall of 2016. The study team plans to release initial findings from the process study in 2018 and impact findings in 2019.

Primary Research Question

- 1 What were the key elements needed to support implementation of the added program component(s) in each program site?
- 2 What were the impacts of the added program components on outcomes of interest, such as employment, earnings, and the quality of the father-child relationship?
- 3 What was the impact of the DadTime intervention on program participation rates?

Purpose

Over recent decades, changes in labor markets and in family structure have created substantial barriers for fathers in maintaining stable employment and stable relationships with their children. These challenges are particularly pressing given that fathers' financial and emotional support for their children provides a critical foundation for child well-being. However, many fathers, particularly low-income fathers, struggle to provide support. Personal and societal barriers get in the way, such as low levels of education, stigma from criminal records, declining wages for low-skilled men, or family instability.

There is great interest in identifying effective strategies that build fathers' capacity to support their children both emotionally and financially. Responsible fatherhood programs use a number of promising models to work with fathers, but prior evaluations of fatherhood interventions have found limited impacts. The Building Bridges and Bonds study is designed to test innovative, evidence-informed programming for fathers, with the goal of building practical evidence that can be used to improve services for low-income fathers. This report describes these new approaches and the research design of the study.

Methods

The Building Bridges and Bonds study includes both a mixed-methods process study and a rigorous impact study. The process study collects qualitative and quantitative data from program staff delivering the usual fatherhood services and new program components, from fathers participating in the study, and from co-parents. Together, these data sources address fundamental questions about what it took to implement the new program components and about the experiences of staff, fathers, and co-parents with the new program components.

The impact study is an experimental evaluation with a six-month follow up. Half of the fathers are randomly assigned to a group offered the new program component in addition to the usual services, and the other half are assigned to a control group offered only the usual services. The difference in outcomes between the randomly assigned groups represents the impact of the new program components. The impact study addresses the central question of what effects the added components have on fathers' parenting, economic stability, and program participation.

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Executive Summary

Recognizing the challenges that low-income fathers often face in maintaining stable employment and stable relationships with their children, the Office of Planning Research and Evaluation, with support from the Office of Family Assistance, funded the Building Bridges and Bonds (B3) study to rigorously test innovative program approaches to support low-income fathers in working toward economic stability and improved relationships with their children. MDRC is partnering with MEF Associates, Abt SRBI, and Mathematica Policy Research to conduct this study. This report describes the three new program approaches that the B3 study is evaluating as well as the B3 study's research design.

Since the 1990s, the federal and state governments have funded “Responsible Fatherhood” programs aimed at encouraging fathers’ involvement with their children, strengthening two-parent families, and increasing fathers’ economic stability. Five of the six fatherhood program sites where the B3 study is being conducted are current recipients of Healthy Marriage and Responsible Fatherhood grants funded by the federal Office of Family Assistance.

The B3 study design adds new program components to the usual services offered by existing Responsible Fatherhood programs, and rigorously estimates the impacts of each added component. The following three new and innovative program components are being implemented and evaluated across six Responsible Fatherhood program sites¹:

- 1** The **Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp)**. The CBI-Emp intervention is designed to improve economic stability by encouraging positive thoughts, attitudes, and behaviors among individuals recently involved with the criminal justice system. The CBI-Emp approach addresses challenges associated with deficits in executive functioning by building skills in impulse control, problem solving, organization, and time management. The B3 study team will conduct an evaluation of this added component in the following three Responsible Fatherhood program sites that focus on serving fathers who were recently involved with the criminal system:

1 The Office of Family Assistance is an office of the Administration for Children and Families in the U.S. Department of Health and Human Services. For more information about the HMRF discretionary grant program, see Office of Family Assistance, “About Healthy Marriage and Responsible Fatherhood,” website: www.acf.hhs.gov/ofa/programs/healthy-marriage/about (2016); Office of Family Assistance, “Responsible Fatherhood,” website: www.acf.hhs.gov/ofa/programs/healthy-marriage/responsible-fatherhood (2016).

- Kanawha Institute for Social Research and Action, Inc. (KISRA), in Dunbar and Beckley, West Virginia
 - Ohio Department of Job and Family Services' Passages Connecting Fathers and Families, Inc., in Cleveland, Ohio
 - The Fortune Society in New York, New York
- 2 The **Just Beginning (JB)** parenting intervention. The JB intervention works with fathers and children together to improve the quality of fathers' interactions with their young children. This program component will be added and evaluated in the following three Responsible Fatherhood program sites:
- Children's Institute, Inc., in Los Angeles, California
 - People for People, Inc., in Philadelphia, Pennsylvania
 - Structured Employment Economic Development Corporation (Seedco) in New York, New York
- 3 The **DadTime** engagement intervention. DadTime is a smartphone app that guides and supports fathers in making and completing plans for attending JB sessions, and provides other digital content to encourage program participation. This intervention will be implemented and evaluated in the three JB sites. Fathers assigned to the JB program group who have smartphones at the time of intake will comprise this intervention's research sample.

The B3 study team will rigorously test each of the three added program components using an experimental research design in which participating fathers are randomly assigned either to a group offered the new program component or to a "services as usual" group that is not offered this new component. In all, the study is expected to enroll around 2,200 fathers:

- The CBI-Emp study will include around 1,100 fathers who were previously involved with the criminal justice system.
- The JB study will include 1,100 fathers with children between 2 months and under 3 years of age.
- DadTime will include up to 400 to 500 fathers, who have smartphones at the time of intake and are offered the JB program component. These same fathers are also included in the JB study program group.

Because prior evaluations of fatherhood interventions have found only weak and limited impacts, there is a pressing need for rigorous evaluations of innovative approaches to promoting economic stability and

strong father-child relationships.² Through the DadTime engagement intervention, the B3 study also seeks to address a fundamental programmatic challenge: sustaining fathers' participation in and engagement with program services.

The B3 study includes a process study and an impact study. The process study will provide lessons for the field on key elements for successful program implementation as well as barriers to be overcome when adding these new program components. The impact study is designed to provide rigorous evidence of what impacts these new program components achieve over a six-month follow-up period when they are added to existing Responsible Fatherhood services. In line with these broad objectives, the B3 study will address the following overarching research questions:

- 1 How were the new program components implemented at each program site? What key elements were needed to support implementation of the added program components? What implementation challenges were encountered?
- 2 What effects did the added CBI-Emp and JB program components have on outcomes of interest, such as employment and earnings and the quality of the father-child relationship?
- 3 What were the standard approaches used to encourage fathers' participation in program services, and what participation rates did they achieve? Compared with these standard approaches on their own, what added effect did the DadTime engagement intervention have on program participation rates?

To answer these questions, the B3 process and impact studies will draw on a variety of data sources. The process study will use data from surveys administered to staff and to fathers, from in-depth interviews with staff, and from focus groups with fathers and with co-parents. The process study will also draw on direct observations of service delivery, document review, DadTime app usage data, and participation data from management information systems used by each local program. The impact study will draw on data from surveys administered at baseline and after six months of follow-up and administrative records on employment and earnings and criminal justice outcomes.

The Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp): A Promising Approach to Encourage Employment Stability

Many fathers served by Responsible Fatherhood programs have had some involvement with the criminal justice system and some programs expressly serve fathers with a criminal history. Individuals returning

2 Sarah Avellar, M. Robin Dion, Andrew Clarkwest, Heather Zaveri, Subuhi Asheer, Kelley Borradaile, Megan Hague Angus, Timothy Novak, Julie Redline, and Marykate Zukiewicz, *Catalog of Research: Programs for Low-Income Fathers*, OPRE Report No. 2011-20 (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2011).

from a period of incarceration face a number of well-documented challenges, including the need for a job and steady income, stable housing, and reestablishing healthy relationships with family and friends. An approach integrating cognitive behavioral and job-readiness services may be a promising direction for improving outcomes for these highly disadvantaged men.

The CBI-Emp program component aims to encourage positive attitudes and behaviors; build interpersonal, problem-solving, and coping skills; and increase employment stability. The University of Cincinnati's Corrections Institute, in collaboration with MDRC, developed the CBI-Emp curriculum. The CBI-Emp program component comprises two core elements: (1) a cognitive behavioral, job-readiness curriculum for fathers covering topics such as recognizing and changing thoughts that can lead to risky behaviors, learning self-control and problem-solving skills, and developing a plan for success at work; and (2) staff training in a curriculum known as "core correctional practices," which imparts the essential skills needed to deliver the cognitive behavioral programming and to apply cognitive behavioral principles across all types of service delivery.

The theory of change for a cognitive behavioral approach is that the intervention will improve how the father assesses the rewards and costs of criminal behavior, encourage positive attitudes and behaviors, and build problem-solving and coping skills, which could then improve the father's ability to find and retain employment. To be eligible for the CBI-Emp program component, a father must be at least 18 years of age, have been involved with the criminal justice system within the past three years, and score at a moderate to high risk of recidivism on a risk assessment.

Just Beginning (JB): Working with Fathers and Young Children Together to Improve Father-Child Relationships

The JB program uses short, instructional parenting videos, and serves fathers and their young children together over the course of five sessions to enhance the quality of the father-child relationship. Although parenting programs for mothers have often worked with mothers and young children together (for example, home visiting programs), parenting programs for fathers do not typically incorporate young children in program services. The JB program, therefore, represents a new and novel component for most Responsible Fatherhood programs. Each of the five JB program sessions consists of the following three components:

- 1 A father-facilitator one-on-one parent training session, which includes the viewing of a short video featuring some simple parenting approaches, such as following the child's lead and praising the child, that fathers can use to improve the quality of their interactions with their young child
- 2 A father-child play session in which fathers apply the parenting approaches just presented
- 3 A father-facilitator debrief session in which fathers reflect on how the play session went and receive feedback and encouragement from the facilitator

The JB component is designed to have positive impacts on the quality of the father-child relationship over a short-term, six-month follow-up period. Fathers with a child between 2 months and under 3 years of age are the target group for the JB program. Fathers also need to have seen their child at least once in the past 30 days to be eligible for the component and have no reasons (legal or otherwise) that prevent the father from participating with his child.

A fundamental question is whether fatherhood programs can successfully implement an intervention that requires fathers to attend with their child. A substantial proportion of the fathers served by Responsible Fatherhood programs do not live with their child and some may have contentious relationships with their child's mother or guardian. For nonresident fathers, the JB program will require the cooperation of the child's mother or guardian, which represents an important implementation challenge.

DadTime: A Smartphone Intervention to Encourage Program Participation

The DadTime smartphone app is an enhancement to the JB program. While participation in JB does not require a smartphone, DadTime will be offered to fathers who have smartphones at intake and are assigned to the JB program group.

Using a sequential random assignment research design, the study will assess whether DadTime increases JB participation rates. The DadTime engagement study randomly assigns half of the fathers in the JB program group to a “full DadTime” group that receives an engagement intervention via the DadTime app *during* their participation in JB. This group of fathers will experience the following three main points of contact during the JB session period:

- 1 Reminders and planning support the *day before* a session to set an attendance goal and help fathers arrive on time to program sessions
- 2 Check-ins and logs the *day after* a session, to promote reflection on the perceived value of the session content
- 3 Suggestions and reminder prompts for father-child activities *during the weekend*, when they are likely to see their children, to practice the content and skills learned in the sessions

The other half of the fathers in the JB program group will be randomly assigned to the “partial DadTime” group. Fathers in the partial DadTime group will receive no app-driven reminders or reinforcements during their period of participation in JB sessions, but will receive skill reinforcement from the app after participation ends.

The theory of change driving the test is that helping fathers *between sessions* to plan for their attendance and for how they will spend time with their child will boost program engagement. The B3 study aims to create an intervention in which the father is the driving force, enlisting and enhancing his organizational

and planning skills. A fundamental question that the B3 study addresses is whether using a smartphone app can affect participation in a parenting intervention that involves a father and child attending together.

The Process Study: Understanding What It Takes to Implement New Program Approaches

The B3 study tests a set of new program approaches that have not been widely implemented or evaluated in a Responsible Fatherhood program context. The process study will describe how each new program component was embedded in existing program services, what it took to establish and maintain the component, and how it operated over the course of the study period. The process study will also compare and contrast the services received by fathers assigned to the new program component group with those received by fathers assigned to the services as usual group, as the basis for interpreting the impact findings. The study will highlight lessons for the field, including what it takes to engage fathers, the challenges sites face in implementing new program components, and the fathers' own experiences and perspectives on the new program approaches.

The process study relies on a mixed-methods methodology, using both quantitative and qualitative approaches, and combines data from a variety of sources. The study team is collecting data on perspectives of both staff and fathers to better understand key implementation issues.

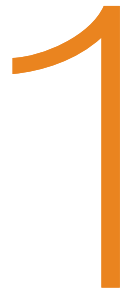
The Impact Study: The Difference That New Program Approaches Make in Fathers' Lives

A rigorous experimental research design will be used to evaluate the impacts of the new program components — CBI-Emp, JB, and DadTime. In each of the tests of these new program components, fathers will be randomly assigned to one of two research groups: a new program component group, which is offered the new program component in addition to any usual program services, or the services as usual control group, which is offered only the usual program services. The impact study will compare the outcomes of fathers in the new component program group with outcomes for fathers in a services as usual group. The difference in outcomes between these two research groups represent the “impacts,” or the difference the new program component makes in the lives of the fathers it serves.

Looking Ahead

The B3 study began enrolling fathers and implementing the new program components starting in the fall of 2016. The research team expects to release early findings from the process study in 2018. Findings from the CBI-Emp, JB, and DadTime interventions are expected to be released in 2019.

Overview of the B3 Study



The Building Bridges and Bonds (B3) study is implementing and evaluating innovative program approaches to support low-income fathers in their employment, parenting, and relationships. The B3 study is motivated by a constellation of challenges that low-income fathers commonly encounter. Low-income fathers often struggle to maintain a consistent and positive relationship with their children and to provide steady financial support. The labor market prospects for men with a high school diploma or less — often the case for men in low-income populations — have been worsening for decades. For some low-income fathers, involvement with the criminal justice system further diminishes their prospects of attaining steady employment and economic stability. Many low-income fathers live apart from their children and some have tenuous relationships with the mothers of their children, which can be barriers to their involvement. Program approaches that successfully address these common challenges facing low-income fathers have the potential to foster fathers' employment stability, to strengthen father-child relationships, and, in turn, to benefit children emotionally, socially, developmentally, and financially.

Since the 1990s, the federal and state governments have funded programs to encourage noncustodial fathers' involvement with their children and to strengthen two-parent families.¹ Since 2005, Congress has provided funding for the federal Healthy Marriage and Responsible Fatherhood (HMRF) grant program. Recipients of grants in 2015 include Responsible Fatherhood programs designed to help fathers strengthen positive father-child engagement, improve employment and economic mobility opportunities, and improve healthy relationships (including couple and coparenting) and marriage. Many Responsible Fatherhood programs also work with child support enforcement agencies, education or training programs, criminal justice systems, and other entities to engage low-income fathers.

The federal Office of Planning Research and Evaluation, with support from the federal Office of Family Assistance, funded the B3 study to identify and rigorously test innovative program approaches that support low-income fathers in achieving economic stability and improved relationships with their children. In conducting this study, MDRC is partnering with MEF Associates, Abt SRBI, Mathematica Policy Research, and the individuals and organizations that helped design the new program components.

The B3 study is being conducted at six Responsible Fatherhood program sites. Five of the six programs are HMRF grantees. Innovative program components are being implemented and tested as added components to the usual program services. Three of the six sites are implementing the following:

¹ Zaveri, Baumgartner, Dion, and Clary (2015).

- **Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp)**, a cognitive-behavioral employment intervention

The other three sites are implementing the following:

- **Just Beginning (JB)**, a one-on-one father-child parenting intervention
- **DadTime**, an engagement intervention delivered using a smartphone app installed on fathers' phones

The B3 study is being conducted within the context of existing and established Responsible Fatherhood programs. The ongoing or “usual” services that these programs offer include a variety of employment, parenting, and relationship-building services. Programs vary in the strategies they use to encourage participation in each of these services, but tend not to use engagement strategies consistently and report that they strive to achieve higher rates of program completion.²

The B3 study design adds a program component to the usual services and carefully estimates the impact of the added component using an experimental research design. The impact study is designed to provide rigorous evidence on the impacts achieved when these innovative program components — CBI-Emp, JB, or DadTime — are added to existing Responsible Fatherhood program services. To date, rigorous evaluations of similar interventions have found only weak and limited impacts.³ Therefore, there is a pressing need for rigorous evaluations of innovative approaches to improving fathers' economic stability and father-child relationships.

The experimental research design for the study involves randomly assigning eligible fathers to one of the two following research groups: an “added program component” group, which is offered the new component in addition to usual services, or a “services as usual” group, which is offered only the usual services. Because of the random assignment study design, the only systematic difference between the added program component group and the services as usual control group will be the added program component. Therefore, any differences between the outcomes of the two randomly assigned groups can be attributed with confidence to the added program component. This research design is considered the gold standard for estimating causal effects of an intervention.

The remainder of this chapter describes the B3 study's overarching objectives and research questions and the process of selecting innovative program components and appropriate Responsible Fatherhood program sites for the study. It then gives an overview of the impact study design and the process study design.

2 Zaveri, Baumgartner, Dion, and Clary (2015).

3 Avellar et al. (2011).

Chapter 2 presents the multiple data sources from which the B3 study team will collect and analyze data for the impact and process study. Chapters 3 through 5 describe the CBI-Emp, JB, and DadTime interventions, respectively, and provide an overview of how the team will study and evaluate them. Finally, Chapter 6 gives a timeline for the study and a preview of what the field can expect to learn from the B3 study's rigorous evaluation of these three new program components.

The B3 Study Objectives and Key Research Questions

The B3 study includes a process study and an impact study. Because each of the new program components being tested is innovative, documenting program implementation will be an important contribution of the study. The process study will provide a roadmap for Responsible Fatherhood programs that describes the main elements for successful program implementation — and barriers to be overcome — when adding these program components. Given that these innovative program components have not been rigorously tested using an experimental design, the impact study will yield novel information for the field on the efficacy of three promising new program approaches.

In line with these broad study objectives, the B3 study will address the following overarching research questions:

- 1 How were the new program components implemented at each site? What key elements were needed to support implementation of the added program components? What implementation challenges were encountered?
- 2 What effects did the added employment or parenting program components have on outcomes of interest, such as employment and earnings and the quality of the father-child relationship?
- 3 What approaches did the program sites use to encourage fathers to participate in their program services? What participation rates did these approaches achieve for fathers in the new program component group and how did they compare with participation rates for fathers in the services as usual group?

Chapters 3, 4, and 5, elaborate on these questions and describe each of the three intervention studies in more depth.

Selecting Innovative Program Components and Fatherhood Program Sites

The first phase of the B3 study involved selecting innovative and promising program components to test as well as Responsible Fatherhood program sites with the capacity to implement these new program components and an interest in participating in the evaluation. Eligible program sites also needed to be offering usual services that were distinct from the new program component, to allow enough service contrast between the research groups to potentially generate program impacts.

The process of selecting program components to test involved soliciting input from experts in the field, taking into account priorities of Office of Family Assistance, which is responsible for funding and monitoring HMRF federal grantees, and assessing what interventions would yield the most valuable information for the field within a short six-month follow-up period. The study team reviewed the evidence base to identify programs appropriate for low-income fathers and contacted them to gauge their interest in the B3 study and their willingness to adapt their programs as needed. MDRC and MEF Associates staff also conducted a series of site visits to determine services that Responsible Fatherhood programs were already offering and assess interest in the B3 study. The study team ultimately selected the following three interventions to test:

- 1** The **Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp)**, is a cognitive behavioral employment intervention, developed by the University of Cincinnati's Corrections Institute in collaboration with MDRC. This new component will be offered to fathers who have recently spent time in jail or prison, who score above a designated threshold on a risk of recidivism assessment, and who are randomly assigned to CBI-Emp program group. Fathers in the CBI-Emp program group will participate in a workshop series designed to encourage positive attitudes and behaviors, build problem-solving and coping skills, and help secure sustained employment. They will also work with staff trained in cognitive behavioral techniques. The CBI-Emp approach addresses challenges associated with deficits in executive functioning by building skills in impulse control, problem solving, organization, and time management. The CBI-Emp program component builds on an evidence base that cognitive behavioral approaches have positive influences on thoughts and behaviors.⁴
- 2** **Just Beginning (JB)** is a one-on-one father-child parenting intervention developed by psychologist Rachel Barr at Georgetown University and Carole Shauffer, a lawyer and director of the Youth Law Center. The JB component will be offered to fathers with a child between 2 months and under 3 years of age who are randomly assigned to the

⁴ Andrews et al. (1990); Butler, Chapman, Forman, and Beck (2006).

JB program group. Fathers in the JB program group will first participate in parenting training with a facilitator, then practice parenting techniques in a play session with their child, and lastly attend a debriefing session with the facilitator. This new component is designed to improve the quality of fathers' interactions with their young children. The inclusion of young children in the intervention is a novel feature since most Responsible Fatherhood programs focus on working with fathers without children present.

- 3 DadTime** is an engagement intervention, delivered using a mobile device app installed on fathers' cell phones. The study team developed the app with content partners from the University of Michigan and University of Wisconsin and with CauseLabs, a mobile app developer. Half of the fathers in the JB program group will be randomly assigned to receive encouragement and support in attending JB sessions from the DadTime app. The attendance support from DadTime is designed to boost program participation, and the evaluation will explore whether the DadTime attendance support improved program participation rates. In addition, about eight weeks after enrolling in JB, all fathers in the JB group will have access to the DadTime app to reinforce JB program content after the JB sessions have ended.

SITE SELECTION

In selecting potential B3 study sites, the study team looked for Responsible Fatherhood programs with considerable organizational and operational experience that operate in a local service area and were interested in participating in B3. The team also looked for programs in which the usual program services represented a stark service contrast to the new program components being added and evaluated in the B3 study. The team also sought a set of program sites that when pooled would allow the study to meet its sample size objectives of 1,100 eligible fathers across CBI-Emp program sites and 1,100 eligible father across JB program sites. The study will assess program impacts after a relatively short six-month follow-up, therefore sample sizes of this magnitude are needed to provide the statistical power to detect program impacts. For the CBI-Emp intervention, the study team looked for program sites that worked with a significant number of fathers who are returning from a recent period of incarceration (within three years of study entry). For the JB parenting intervention, the study team looked for programs that serve a large number of fathers with children under 3 years of age, the target group for the JB program component.

The steps in the B3 study site selection process included a review of Office of Family Assistance HMRF grant applications, phone calls with potential sites, and site visits. After the study team selected the sites, the terms of their participation in the B3 study were formalized with memoranda of understanding (MOU). Chapters 3 and 4 respectively describe the three sites chosen for the CBI-Emp evaluation and the three sites chosen for the JB evaluation.

The CBI-Emp program component will be added and evaluated in the following three sites:

- Kanawha Institute for Social Research and Action, Inc. (KISRA), in Dunbar and Beckley, West Virginia
- Passages Connecting Fathers and Families, Inc., in Cleveland, Ohio⁵
- The Fortune Society in New York, New York

The JB and DadTime program components will be added and evaluated in the following three sites:

- Children’s Institute, Inc., in Los Angeles, California
- People For People, Inc., in Philadelphia, Pennsylvania
- Structured Employment Economic Development Corporation (Seedco) in New York, New York

Overview of Research Design and Impact Study

The impact study will evaluate the added effects of the new program components compared with the usual services on their own. Figure 1.1 provides an overview of the research design and impact study. The diagram shows the three separate interventions that will be tested.

CBI-EMP

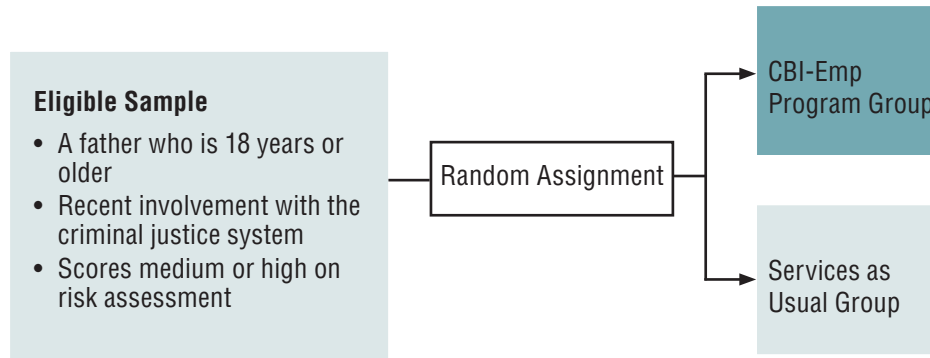
In the sites that are testing CBI-Emp, staff will screen fathers seeking Responsible Fatherhood program services for eligibility for the CBI-Emp component using a risk-needs assessment, which assigns a score indicating a father’s risk of recidivism. Those fathers who are 18 years or older, who were involved with the criminal justice involvement in the three years before study entry, and who score medium to high on the risk assessment will be randomly assigned to CBI-Emp program group or to a services as usual control group. Both research groups will have access to the usual program services, but only the CBI-Emp program group will have access to the new CBI-Emp curriculum and to staff trained in cognitive behavioral techniques.

⁵ Passages, Inc., is one of the locations that comprise the larger Ohio Department of Job and Family Services, a HMRF federal grantee.

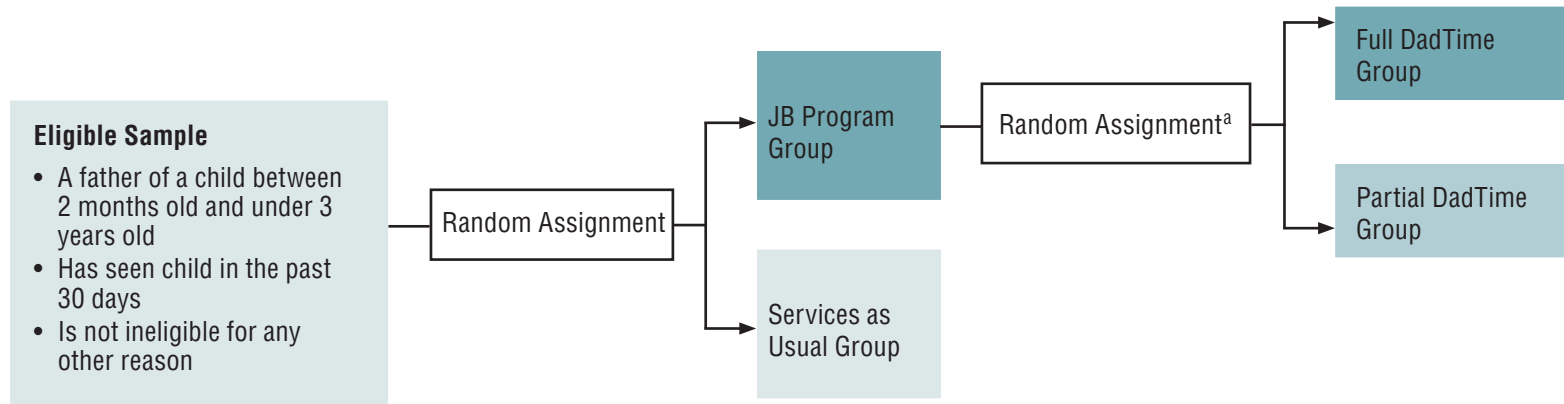
FIGURE 1.1

OVERVIEW OF RESEARCH DESIGN FOR THE THREE INTERVENTIONS

CBI-EMP INTERVENTION



JB INTERVENTION AND DADTIME INTERVENTION



NOTE: ^aFathers who do not have a smartphone at intake will not be included in the DadTime research sample but will be randomly assigned. If a father gets a smartphone after random assignment, staff can install DadTime but he will not be part of the research sample.

JB

In the sites that are testing the JB intervention, fathers are eligible for the JB program component if they have a child who is between 2 months and under 3 years of age, report to have had recent in-person contact with that child, and are not prohibited from participating with their child because of a legal restriction or other extenuating circumstance. Eligible fathers will be randomly assigned to a JB program group, which is offered the new JB program component in addition to the usual services at the fatherhood program, or to a services as usual group, which does not have access to the new JB program component.

DADTIME

In the same three sites testing the JB intervention, the B3 study is also testing a new smartphone app, called DadTime, to encourage fathers' engagement in the program. DadTime will be installed on smartphones of fathers in the JB program group upon enrollment.

For the DadTime engagement test, fathers who are in the JB program group will go through a second stage of random assignment to a "full DadTime" group or a "partial DadTime" group. The study sample will include only fathers with a smartphone. The full DadTime group will be offered access to the DadTime app content from the time of intake onward, and can use the app both during and after their period of participation in JB sessions. The full DadTime group will receive both of the two main DadTime components: 1) *reminders and attendance support*, including pop-up reminders about JB session times and short questions and suggestions to help fathers plan their attendance at the sessions; and 2) *activity suggestions*, including short questions and suggestions to help fathers plan when they will see their children and activities they can do together; the app will tailor questions and suggestions based on the child's age and how frequently the father sees his child.

In contrast, the partial DadTime group will not have access to DadTime during their period of JB participation, and will not receive reminders or attendance support. The partial DadTime group will, however, receive the same activity suggestions as the full DadTime group starting about eight weeks after enrolling in the B3 study, which is expected to be after the father has completed his participation in the JB sessions.

After eight weeks, the DadTime app suggests ways for fathers to play with their children that are designed to help fathers practice the skills they learned in the JB component. The study team selected the eight-week interval as a likely time when both the full and partial DadTime groups will have completed their JB sessions. Fathers in the services as usual group will not be eligible for the app because the app is designed to reinforce the skills learned in the JB component.

An exploratory impact study will compare the program participation rates of fathers in the full DadTime group with those of fathers in the partial DadTime group. The key question is whether access to the Dad-

Time reminders and attendance support during the period of participation in JB sessions increases program participation.

Impact Analysis

The impact study will use an “intent to treat” analysis in which outcomes for fathers assigned to the added program component group are compared with outcomes for fathers assigned to the services as usual group. This analytic approach preserves and capitalizes on the strengths of the experimental research design in that differences between these two groups can be attributed with confidence to the added program components — CBI-Emp, JB, or DadTime. Detecting program impacts, if the program is effective, will therefore require that a sizeable proportion of fathers assigned to the added component program group actually participate in the added program component. In the cases of CBI-Emp and JB, incentives and other supports to encourage participation are part of the added components and designed to maximize participation rates. For the full DadTime group, the DadTime app further augments the supports to encourage participation in the JB sessions.

To preserve the experimental research design, members of the services as usual and partial DadTime groups must not gain access to program services that are reserved for the CBI-Emp, JB, or the full DadTime program groups. To meet this condition, the study team will monitor program participation for fathers in the services as usual groups using management information system data and through site visits and staff training. The study team will monitor DadTime app usage for fathers in the partial DadTime group and limit their usage to the period starting eight weeks after enrollment.

To estimate program impacts, the study team will compare outcomes for the CBI-Emp or JB program group with those for the respective services as usual group, and compare outcomes for the full DadTime group with outcomes for the partial DadTime group. Differences between the groups are the impacts of the added program component. With the planned sample sizes, the B3 study is not powered to estimate impacts within single program sites. Instead, the study team will estimate impacts for pooled samples across the three CBI-Emp program sites and across the three JB and DadTime program sites.

The impact analyses will focus on a select set of primary outcomes that a written analysis plan will pre-specify before data analysis begins. This analysis plan will also discuss the approach for designating secondary outcomes and adjusting for multiple comparisons. To minimize the risk of finding statistically significant impacts by chance, the study team will designate primary outcomes selectively. In selecting primary outcomes, the team will choose outcomes that are most directly related and proximal to the CBI-Emp, JB, or DadTime components and most likely to be affected by these interventions. Other general criteria for selecting primary outcomes are the policy relevance and importance of each outcome for judging the success of the intervention.

The study team will also identify a set of secondary outcomes, which are more exploratory in nature. Secondary outcomes include more fine-grained and nuanced measures of primary outcomes as well as outcomes that are more distal to the interventions and less likely to be affected by them. The impacts of the added program components on secondary outcomes will be interpreted with caution but will be considered more credible when the program has a significant impact on a related primary outcome.

Overview of the B3 Process Study

The process study priorities follow from the overall goals of the B3 study, namely to evaluate the usual Responsible Fatherhood program services and compare them with those same services combined with a new service component. In particular, the process study's three primary goals are the following:

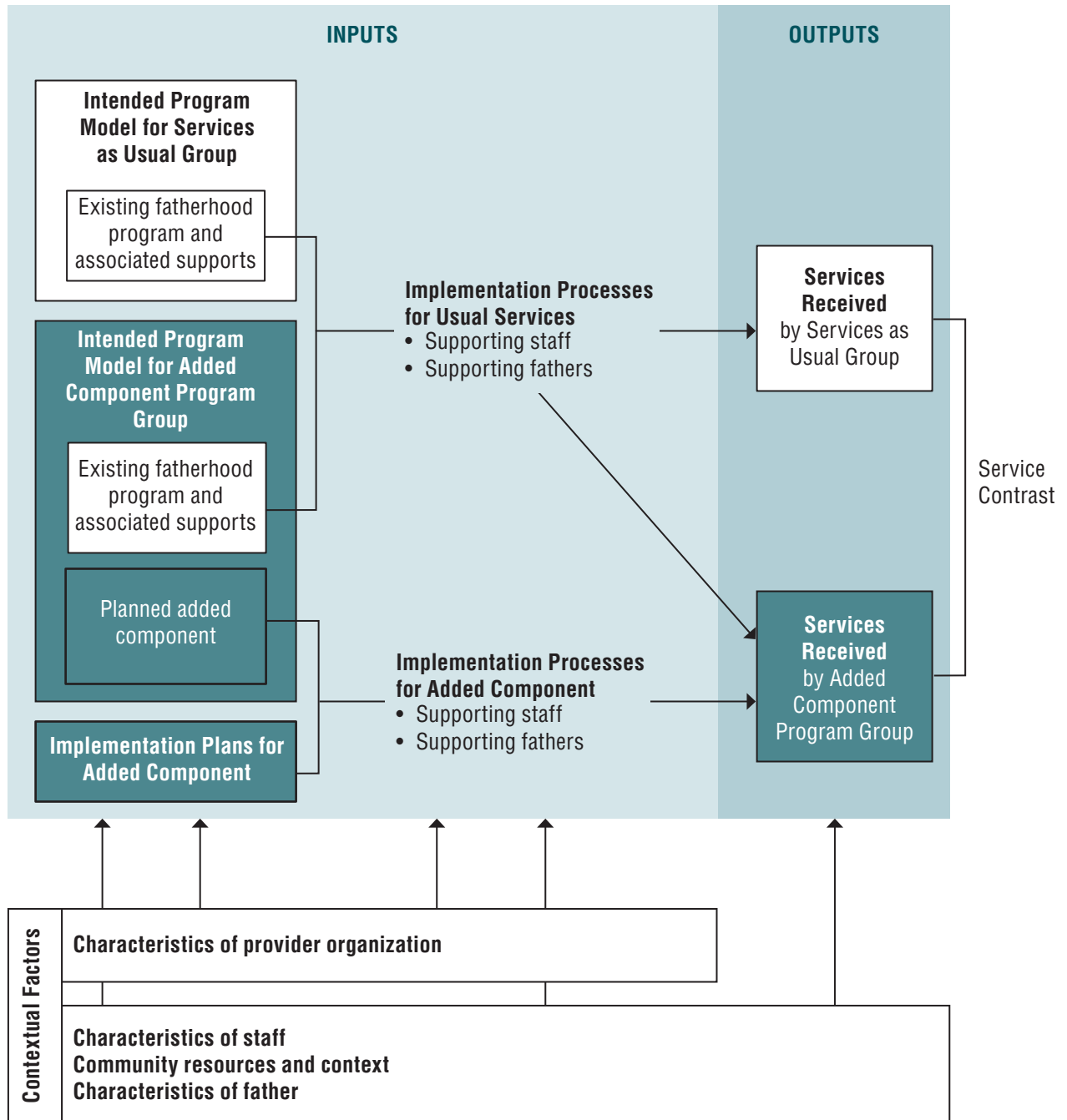
- 1 To document the usual Responsible Fatherhood program services in each program site
- 2 To document each new component, what it took to establish it, and how it operates in each program site
- 3 To provide insight into the differences in the services received by each of the randomly assigned study groups as context for interpreting the impact study findings

Figure 1.2 depicts the conceptual framework for the process study. “Inputs” influence how services are provided to fathers in both research groups. In the services as usual group, they include the intended existing employment and parenting services and associated supports such as engagement strategies. For the added component program group, they include the planned new components (CBI-Emp, JB, or DadTime), the plan for implementing them as a supplement to the existing Responsible Fatherhood services, the content or curriculum, and hiring and training of staff. Subsequent chapters describe in more detail the inputs associated with each program group (represented by the shaded boxes and associated arrows in this figure).

The “implementation processes” support the implementation of the added component as well as the usual services. These processes include supports for staff to implement services, such as supervision or coaching, and supports for fathers to maintain engagement, such as incentives or case management. Describing all the inputs will fulfill the first and second abovementioned goals: to document the usual Responsible Fatherhood program services as well as each new component, what it took to establish it, and how it operates in each program site.

“Outputs” represent the actual services that fathers received. The third process study goal is to understand the differences in services between the two research groups, or the “service contrast.” Fathers in both the added component program groups and the services as usual groups are offered a common set of employ-

FIGURE 1.2
CONCEPTUAL FRAMEWORK FOR THE B3 PROCESS STUDY



NOTE: The shaded boxes indicate framework elements related to the added components.

ment, parenting, and healthy relationship services. In addition, fathers in the program group are offered the new component. To maximize the service contrast and ensure these early efficacy tests give as true an assessment as possible of the components' effects, the study team is working with staff at some of the program sites to alter the usual services offered to both research groups. The process study will document those changes.

“Contextual factors” (represented by the boxes along the bottom of Figure 1.2) influence the inputs and outputs. The top box denotes characteristics of the organization that are hypothesized to affect many facets of program implementation and therefore spans only the length of the inputs. Multiple and varied organizational characteristics will influence how each Responsible Fatherhood program plans and implements the new components, as no two program sites will operate the same intervention identically. These characteristics could include the organization's size, structure, administrative procedures, funders, and other services. The bottom box represents contextual factors that are typically hypothesized to affect every aspect of the program process — from planning and implementation to the services fathers receive — and therefore spans the length of the entire figure. These factors include the characteristics of participating fathers and program staff and the community context and resources. Characteristics of staff, such as background, previous work experience, adeptness of service delivery, and alignment with service approaches likely influence how services are planned and the content, quality, and quantity of those services. Community context and resources likely influence what services each program site offers and how fathers can access these services. Finally, characteristics of fathers, such as prior service receipt, stated interest in fatherhood services, and barriers to participation, likely influence what services they need and access.

The later chapters of this report map the specific process study research questions, key measures, and data sources back to the conceptual framework.

Data Sources

2

The Building Bridges and Bonds (B3) process and impact studies will draw on a variety of data sources. The process study will collect data from surveys administered to fathers and staff, from in-depth interviews with staff, and from focus groups with fathers and co-parents. The process study will also draw on direct observations of service delivery, document review, DadTime usage data, and participation data from each local program's management information system (MIS). The impact study will draw on baseline and follow-up data from surveys administered to fathers, administrative records data, and MIS data on program participation. These data sources are described below. Subsequent chapters will provide information about the ways in which the study team will use these data to answer each of the study's central research questions.

Impact Study Data Sources

SURVEY IMPACT STUDY DATA

A baseline survey is administered to each father at the time he enrolls in the study, as part of the program intake process. It is conducted before random assignment so that the father provides information about his attitudes and characteristics before he knows the research group to which he will be assigned. The study team will use the baseline survey data in the following ways:

- To describe the characteristics of fathers in the study
- To assess the balance in the characteristics of fathers assigned to the new program component group and the services as usual group
- To provide baseline measures of outcomes, which when included in the impact analysis, improves the precision of the estimate of program impacts
- To define subgroups of interest for impact analyses

The baseline surveys will be self-administered, meaning fathers will take the survey without the help of an interviewer. Fathers will complete baseline surveys using an audio, computer-assisted survey instrument on tablets or computers. To address literacy issues, fathers will have the option to listen to an audio recording of the survey questions. Fathers also have the option to decline the audio recording and to read the survey questions themselves. Separate surveys are administered in program sites testing the Cognitive

Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp) program component and the program sites testing the Just Beginning (JB) program component, and survey questions are tailored to the expected outcomes of each intervention.

Table 2.1 provides an overview of the baseline and follow-up survey data. Separate surveys are used to collect data for the CBI-Emp and JB interventions, though their content overlaps when appropriate. For both the CBI-Emp and JB versions of the survey, the baseline surveys collect baseline measures for each outcome of interest included in the six-month follow-up survey.

Baseline and six-month follow-up surveys for CBI-Emp. The baseline and six-month follow-up surveys administered in program sites testing the CBI-Emp intervention collect data on service receipt, employment, cognitive behavioral measures, income and economic well-being, child support, criminal justice involvement, father-child contact, father-child relationship quality, and the quality of father's relationship with the co-parent.

Baseline and six-month follow-up surveys for JB. The baseline and six-month follow-up surveys administered in program sites testing the JB intervention collect data on service receipt; household and family structure; father-child contact; father's engagement in particular caregiving, learning, or recreational activities with child; father-child relationship quality; father's commitment to child; parenting efficacy; discipline practices; quality of father's relationship with the co-parent; child support; employment; and perceived stress.

Follow-up surveys are conducted six months after enrollment to measure outcomes for both research groups. The follow-up survey is one of the primary sources of data with which to estimate program impacts. The follow-up survey is conducted using a computer-assisted personal interviewing survey, which is a type of survey in which an interviewer is guided through the survey questions by the computer and the interviewer reads questions out loud to the father and records his responses. Interviewers will first attempt to reach the fathers by phone. They will then attempt to do in-person tracking for those fathers who cannot be reached by phone.

ADMINISTRATIVE RECORDS IMPACT STUDY DATA

To supplement the data collected in the baseline and follow-up surveys, the study team will access administrative records data for the sample. These data will be used to estimate impacts on employment and earnings and, for the CBI-Emp sites, on arrests and convictions. A benefit of the administrative records data is that they are typically available for the vast majority of the full sample, whereas there is some nonresponse in the survey data. Table 2.2 provides an overview of the administrative records data.

National Directory of New Hires. National Directory of New Hires is a national database of wage and employment information and was established by the Personal Responsibility and Work Opportunity Rec-

TABLE 2.1**BASELINE AND SIX-MONTH FOLLOW-UP SURVEY MEASURES FOR IMPACT ANALYSIS**

DOMAIN	CONTENT	CBI-EMP	JB	DADTIME
Service receipt and participation	Past services received and interest in receiving services	✓	✓	✓
Father-child contact	Frequency of contact with child	✓	✓	✓
Father-child relationship quality	Feelings about the child and feelings about being a parent	✓	✓	
Father's commitment to child	How committed the father is to his role as a parent and to prioritizing that role	✓	✓	
Co-parenting relationship quality	Overall relationship with co-parent	✓	✓	
Child support	Amount of child support and other financial assistance paid and types of informal support provided	✓	✓	
Cognitive behavioral ^a	Perceived stress, problem-solving skills, decision-making confidence, substance abuse, how a father deals with stress and self-control	✓	✓	
Father engagement	Frequency of various caregiving and nurturing activities completed with child		✓	✓
Discipline	Use of physical discipline on child, nonaggressive discipline, and positive parenting practices		✓	
Parenting efficacy	Self-evaluation of parenting quality		✓	
Employment	Employment and earnings history (formal and informal)	✓	✓	
Income and well-being ^a	Income volatility, total income, health insurance, housing, and education	✓	✓	
Criminal justice ^b	Past convictions, incarceration history, and parole status	✓	✓	
Household and family structure ^c	Lives with child or children, number of children, and age of child or children	✓	✓	

NOTES: ^aAll content listed will be collected in CBI-Emp sites, and a subset of the content will be collected in JB sites.

^bAll content listed will be collected in CBI-Emp sites at baseline and during follow-up. In JB sites, criminal justice content is limited to arrest and incarceration history collected at baseline.

^cHousehold and family structure may be used to define subgroups but will not be used as outcomes in the impact analysis.

TABLE 2.2**DATA SOURCES FOR IMPACT ANALYSIS: ADMINISTRATIVE RECORDS DATA**

ADMINISTRATIVE RECORD	CONTENT	CBI-EMP	JB
State criminal justice records	Arrest and disposition dates; arrest and conviction charge information	✓	
National Directory of New Hires	Quarterly employment and earnings data for all jobs covered by unemployment insurance	✓	✓

conciliation Act of 1996. The database contains information on new hires, quarterly wages, and unemployment insurance. For the B3 study, the study team requested access to the new hire and quarterly wage information.

State Criminal Record Depositories and State Police or Department of Public Safety administrative records. In CBI-Emp sites, the study team will draw on administrative data from the New York State Division of Criminal Justice Services, the Bureau of Criminal Investigation in Ohio, and a state or local agency in West Virginia. These administrative records data will provide information on arrests and convictions only for fathers in the three program sites testing the CBI-Emp intervention, since the JB intervention is not expected to affect criminal justice outcomes.

MANAGEMENT INFORMATION SYSTEM (MIS) IMPACT STUDY DATA

The B3 study will use participation data tracked in an MIS called nFORM (Information, Family Outcomes, Reporting, and Management) that was developed for Healthy Marriage and Responsible Fatherhood (HMRF) federal grantees as a way for them to report performance to the federal government. All HMRF federal grantees are required to use nFORM to track various performance measures. Staff at each program site will use the MIS data to track participation in every type of program service for each father in the study. Although one site in the B3 study, The Fortune Society, is not currently a federal grantee, it will also use nFORM to capture program participation data.

The MIS data will include information on the different types of services that are offered both individually and in group settings. Staff will record the type of service each father received, the other individuals who received a service with the father, and some information about the content of the services, for instance, whether a JB session included training, child interaction, and debriefing components. These data will provide information on the dosage and content of services received by fathers in both research groups.

For the CBI-Emp and JB impact studies, the study team will use MIS data along with survey data to estimate program impacts on participation in the CBI-Emp and JB added components as well as other program services. For the DadTime exploratory impact study, the MIS data will be the main data source, given that the primary objective of the Full DadTime intervention is to increase fathers' participation in JB program services.

Process Study Data Sources

The process study relies on a variety of data sources, both quantitative and qualitative, to address its three primary goals: to document fatherhood services as usual in each program site, to document how the program sites implemented each new program component, and to provide insight into the service contrast between research groups as context for interpreting the impact study findings. Table 2.3 describes the process study's multiple data sources, with information about the sample, the timing of data collection, and the applicable intervention. In addition, the process study uses some supplemental quantitative data from the baseline survey and six-month follow-up survey, but they are not included in this table. Subsequent chapters explain in more detail how these data will be used to answer the process study research questions.

The process study data sources can be classified into two groups: qualitative and quantitative data. The study team will use many of the same data sources to understand the operations of each of the three interventions: CBI-Emp, JB, and the DadTime engagement app.

QUALITATIVE PROCESS STUDY DATA SOURCES

The study team will collect qualitative data during site visits conducted approximately 6 months and 18 months after the start of random assignment. The team will interview staff one-on-one about how each intervention is implemented, including successes and challenges and the necessary resources for each. A subset of fathers in the study will participate in focus group discussions in which they will give their perspectives on the program, staff, and services. The team will also gather staff and participant perspectives about the added program components and about the innovative data collection strategies such as text message surveys. The team will then use these data to address, for example, whether staff like the way mobile technology supported their work and how fathers react to being contacted by text message.

To corroborate these reports from staff and fathers, the study team will directly observe CBI-Emp and JB sessions as well as usual program services. Additionally, the team will review documents associated with each new component, such as curriculum and recruitment materials, quarterly reports, and other materials produced by the sites, and speak to the individuals involved with developing program curricula and in program start-up and technical assistance. As an added qualitative data source in JB sites, the study team will conduct focus groups with mothers of the children participating in the JB component with their fathers.

TABLE 2.3
DATA SOURCES FOR PROCESS STUDY

DATA SOURCES	SAMPLE	TIMING	INTERVENTION		
			CBI-Emp	JB	DadTime
Qualitative					
Semi-structured interviews with staff	Staff who worked with services as usual and added component groups	During site visit about 6 and 18 months after program launch	✓	✓	✓
Focus groups with fathers	Eight added component program group members in each site	During site visit about 6 and 18 months after program launch	✓	✓	✓
Observations	Added component program group sessions either in person or using video recordings from curriculum developers; services as usual group sessions in person	During site visit about 6 and 18 months after program launch	✓	✓	
Document review	From sites, program developers, B3 technical assistance and support staff	Ongoing throughout study period	✓	✓	✓
Focus groups with co-parents	20 mothers of children participating in JB intervention	During site visit about 6 and 18 months after program launch		✓	
Quantitative					
Mobile phone survey	Fathers in the added component program and services as usual groups with cell phones	Up to five times per father during program engagement period	✓	✓	✓
Staff surveys	Staff who worked with services as usual and added component program groups	One time in 2017	✓	✓	✓
Staff quality and fidelity rating	Individual staff members' scores from program developers curriculum	At least quarterly	✓	✓	
Staff coaching tracker	Program developers contact with facilitators for the added component program group	Throughout study period	✓	✓	
DadTime usage data	Fathers in the full and partial DadTime groups	Throughout study period			✓
nFORM	Fathers in the added component program and services as usual groups	Throughout study period	✓	✓	✓
Expenditures	CBI-Emp and JB sites	One time in 2018	✓	✓	
Administrative records for community context	Based on geographic location of each site	One time in 2018	✓	✓	

NOTE: nFORM = the B3 study's management information system.

The team will compile and analyze all data gathered after each site visit using a qualitative software package that facilitates identification of central themes and trends.

QUANTITATIVE PROCESS STUDY DATA SOURCES

To complement the qualitative data sources described above, the study team will collect quantitative data from study participants and program staff. Data will also be collected from the CBI-Emp and JB curriculum developers, who will be monitoring the implementation of each intervention in collaboration with MDRC researchers.

The B3 study will use an innovative data collection method to gather fathers' perspectives about the services they receive in real time. Short mobile phone surveys, delivered by text to fathers in both the new component program and services as usual groups, will collect fathers' perspectives about the programs, their challenges, and the supports they received while engaging in them. Actively participating fathers could receive up to five short surveys, of up to eight questions each, over the first five to six weeks of participation.

In late 2017, a web-based survey will also be sent to all staff working with fathers in the study. This survey will gather information about staff members' professional backgrounds, their perspectives on the work they do with fathers, and their roles in implementing the program. The study team will use these data to address research questions, such as do staff with different professional backgrounds have a harder or easier time implementing the intervention. The survey will also gather information about how staff spend their time on a variety of tasks associated with program operations.

Throughout the study period, the CBI-Emp and JB curriculum developers will be closely monitoring how program staff are implementing each new intervention, including via in-person or recorded observations of service delivery. The curriculum developers will document pre-specified information about the quality of service delivery and fidelity to the model that staff demonstrate in each observation and share these ratings with the study team. They will also document all coaching they provide to program staff and share this information with the study team.

The study team will also gather quantitative data from participants in the DadTime intervention. The DadTime mobile app captures fathers' usage patterns, such as when they access the app and how often they use it.

The abovementioned MIS data that the impact study will use are also important for the process study. The study team will gather participation records from the MIS data to determine the extent to which the new components were implemented as planned as well as how the services offered to the two research groups differed in each program site. This difference in the services offered, or service contrast, is important for interpreting the results from the impact study.

The study team will collect expenditure data during the process study to assess the costs of each intervention. The team will also use administrative records, such as U.S. Census Bureau, Department of Labor statistics, or local criminal justice and child support data, to develop a broad-based understanding of the sociodemographic and economic contexts for each of the B3 study sites.

VIDEO OBSERVATIONS OF FATHER-CHILD INTERACTIONS

As a supplement to the impact and process study data sources described above, in one or two JB program sites, father-child JB play sessions will be video recorded. These video observations will then be coded using a parent-child interaction coding scheme. The coded father-child interactions will be used for descriptive purposes and also to assess whether fathers are applying the parenting techniques taught in the JB curriculum when they interact with their child. The video observations are described further in Chapter 4, which contains details on the JB intervention and research design.

Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp)

3

The Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp) is an employment intervention informed by cognitive behavioral approaches. Over the past several decades, macroeconomic changes have led to diminished economic prospects for men without a postsecondary education, and mass incarceration has left many low-income fathers with the mark of a criminal record, further impairing their employment opportunities. The CBI-Emp intervention seeks to build fathers' skills for coping with this challenging landscape and for handling interpersonal and other challenges as they arise on the job and throughout life.

The CBI-Emp intervention aims to enhance individuals' cognitive behavioral functioning — such as self-control, perseverance, self-efficacy, problem solving, and confidence in decision making — to improve job readiness and provide a strong foundation for employment stability. The CBI-Emp component represents a new and innovative approach to addressing attitudes and behaviors that could be impediments to sustained employment. In the Building Bridges and Bonds (B3) study, low-income fathers with a history of involvement with the criminal justice system will be offered this component. CBI-Emp is designed to guide participants through the development of new patterns of thought, attitudes, and behaviors within the context of job readiness and employment.

In recent years, a growing number of employment programs have been adopting cognitive behavioral approaches to service delivery in an effort to remove behavioral barriers to socioeconomic stability, such as criminality, substance abuse, and mental health issues. The guiding principle of cognitive behavioral interventions is that troubled behavior can be traced back to patterns of thought and perceptions that have the potential to change.¹

¹ Latessa (2012).

New thinking in the field suggests that an intervention that combines cognitive behavioral skills development with employment services could produce “a whole that is greater than the sum of its parts” for fathers with barriers to employment.² Cognitive behavioral strategies may enhance the effectiveness of employment programming by addressing the thought patterns that make it difficult for many fathers to hold a steady job. Combining a cognitive behavioral component with employment services may serve as an engagement strategy on a practical level: fathers may be more likely to attend a cognitive behavioral skill-building workshop that uses employment-related scenarios and is delivered in the context of a program that provides meaningful assistance with finding work.³

Many fathers served in Responsible Fatherhood programs have had some involvement with the criminal justice system and some of these programs expressly serve fathers with a criminal history.⁴ Individuals returning from a period of incarceration face a number of well-documented challenges, including the need for a job, for immediate income, for stable housing, and to reestablish healthy relationships with family and friends.⁵ Integrating cognitive behavioral and economic security services may be a promising direction for improving outcomes for these highly disadvantaged men.

The B₃ study will add to the evidence base on how employment programs that use cognitive behavioral strategies affect fathers’ cognitive behavioral functioning, employment, criminal justice involvement, relationships, and other outcomes. The CBI-Emp portion of the study will address three sets of research questions:

- 1 What strategies did program sites use to engage fathers in CBI-Emp? What program participation and completion rates did they achieve? How were services that the CBI-Emp program group received different from usual services?
- 2 What implementation supports were needed to operate CBI-Emp and how did they differ from supports for usual services?
- 3 When added to usual program services, does CBI-Emp increase fathers’ employment and earnings? Does the program reduce arrests and incarceration? Does the program reduce conflict with the father’s co-parent? Does the program improve other more distal outcomes, such as child support payment and father-child relationships?

2 Latessa (2012).

3 Latessa (2012).

4 Zaveri, Baumgartner, Dion, and Clary (2015).

5 Travis (2005).

This chapter describes the CBI-Emp program component, the theory of change motivating the CBI-Emp intervention, and outlines its evidence base. It then presents the three Responsible Fatherhood programs within which the B₃ study is testing the CBI-Emp component and gives an overview of the design of the process and impact studies.

CBI-Emp Logic Model

The University of Cincinnati's Corrections Institute, in collaboration with MDRC, developed the CBI-Emp curriculum. In conjunction with this curriculum, program staff receive an intensive, two-day training called "core correctional practices," which provides a foundation for delivering services using a cognitive behavioral approach. The theory of change for CBI-Emp is that the intervention will encourage participants' positive attitudes and behaviors, which, when applied to employment services, could improve participants' ability to find and retain employment. Figure 3.1 presents the logic model, which illustrates how CBI-Emp might lead to these impacts. The logic model expands on the conceptual framework for the process study, presented in Figure 1.2, to show how inputs and outputs lead to short- and long-term outcomes.

CBI-EMP INPUTS

The intended CBI-Emp program model is designed for individuals who have been involved with the criminal justice system within the previous three years and who score moderate or high on a risk assessment of recidivism.

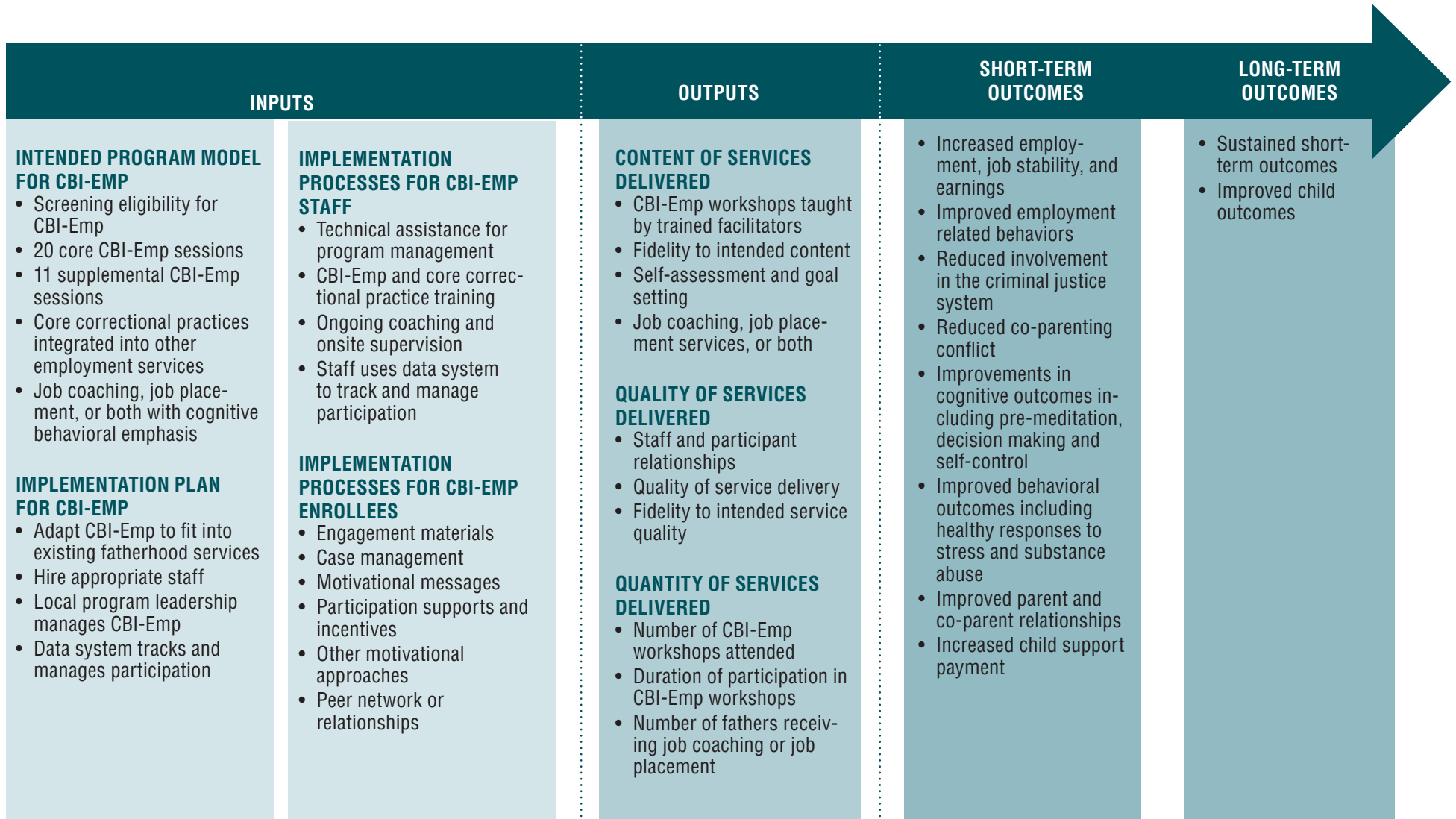
CBI-Emp is grounded in a cognitive behavioral job-readiness curriculum,⁶ which the B₃ study will deliver in a series of group and individual sessions. The curriculum covers five broad topics: motivational engagement, cognitive restructuring, managing feelings and actions in the workplace, problem solving, and success planning. Box 3.1 provides more detail on the 20 sessions from the curriculum that all fathers in the CBI-Emp program group will be offered. Activities such as role playing and collaborative problem solving give fathers an opportunity to practice and reinforce the skills they are learning. The CBI-Emp intervention is designed to help fathers understand their own thought processes, develop positive attitudes, and appropriately manage challenging employment-related and interpersonal situations.

The core correctional practices training — the backbone of CBI-Emp intervention — helps any staff working with fathers in the CBI-Emp program group develop the essential skills they need when applying a cognitive behavioral approach to service delivery.⁷ The training comprises eight elements: relationships skills,

⁶ University of Cincinnati Corrections Institute (2016a).

⁷ University of Cincinnati Corrections Institute (2016b). Not all staff at the B₃ study provider sites, for instance those working with fathers in the services as usual group, will receive training in core correctional practices.

FIGURE 3.1
CBI-EMP LOGIC MODEL



BOX 3.1

CBI-EMP CURRICULUM MODULES: SUBSET OF 20 SESSIONS PRIORITIZED FOR THE B3 STUDY

- 1 GETTING READY FOR WORK**
 - Introducing Cognitive Behavioral Interventions for Obtaining and Maintaining Employment
 - Weighing the Costs and Benefits
- 2 THINKING RIGHT ABOUT WORK**
 - Behavior is a Choice
 - Recognizing Risky Thinking
 - Changing Risky Thinking
 - Replacing Risky Thinking
- 3 MANAGING HOW WE FEEL AND ACT AT WORK**
 - Learning Self-Control
 - Using Self-Control
 - Dealing with Rejection or Failure
 - Dealing with an Accusation
- 4 WORKING THROUGH CHALLENGES AT WORK**
 - Introduction to Problem Solving
 - Identifying Your Problem and Goal
 - Brainstorming Options
 - Planning and Trying Your Solution
- 5 BEING SUCCESSFUL AT WORK**
 - Developing a Plan
 - Getting to the Source
 - Reinventing My Life
 - Staying on Track
 - Responding to a Roadblock
 - Presenting My Plan

effective use of reinforcement, effective use of disapproval, effective use of authority, prosocial modeling, cognitive restructuring, structured learning or skills building, and problem solving skills.⁸

The tenets of cognitive behavioral programming can be applied across a broad range of services offered to the fathers in the CBI-Emp group, including the usual employment service offerings. For example, for staff working with fathers who lack motivation to attend a job interview, a cognitive behavioral technique they might use would be to walk a father through a cost-benefit analysis to identify the costs of not attending the

⁸ Gendreau and Andrews (2000).

interview and the benefits of changing his behavior to attend an interview and secure employment. Similarly, through job coaching, staff can support working fathers who may have confrontations with coworkers or supervisors and help them to effectively use coping strategies to manage their responses and retain employment. Cognitive behavioral techniques in this context might include helping the father think about potential confrontations, brainstorming ways to respond, and ultimately identifying and encouraging the father to use an approach that minimizes negative consequences.

The implementation plan for the CBI-Emp intervention involves adapting the CBI-Emp curriculum to fit within the existing menu of fatherhood services at each site. Staff members at each of the three local Responsible Fatherhood programs will deliver the curriculum. The CBI-Emp workshop sessions will be offered to groups of around 8 to 10 fathers and led by a facilitator. Each session typically lasts about 60 to 90 minutes. The entire CBI-Emp curriculum was designed with five modules and up to 31 sessions. For the B3 study, 20 of the 31 sessions were identified for the group workshop. Program staff have latitude in deciding which of the remaining 11 supplemental sessions to offer given the needs of the fathers in the group. These extra sessions and make-up sessions are expected to be delivered on an individual basis. Program staff will deliver CBI-Emp over a four- to eight-week period. The implementation plans also call for hiring appropriate staff and developing data systems for tracking participation.

The implementation processes for staff include a total of five days of training that cover the CBI-Emp workshop curriculum and core correctional practices for staff working with fathers assigned to the CBI-Emp program component as well as program managers. These staff members include workshop facilitators, case managers, and employment services staff, since any of them may deliver portions of the curriculum. The first two days of training focus on building a foundation of the essential skills needed to support cognitive behavioral programming (core correctional practices). In the last three days, staff members participate in demonstrations led by a trainer from the University of Cincinnati Corrections Institute (UCCI), the curriculum developer, and engage in role playing exercises to practice delivering a session. Staff also receive feedback from peers and from the UCCI trainer. Ongoing support is also available to staff. A UCCI trainer will visit the program sites regularly to observe workshops and offer specific feedback to individual staff about how they are delivering the new component. UCCI will also regularly engage with the B3 study team and staff at each of the three program sites to discuss challenges and recommendations for improvement. This support is in addition to on-site supervision of program managers at each program site.

The implementation processes for enrollees refer to the supports offered to fathers to maintain engagement in CBI-Emp, including financial incentives to encourage program participation. These incentives are offered at multiple points in time to encourage sustained participation and help reach participation milestones. The incentive structure excuses a small number of absences, and fathers can generally earn incentives when they attend at least 80 percent of scheduled sessions. For example, fathers in the CBI-Emp program group may be offered a \$25 gift card after completing 6 of the first 7 scheduled CBI-Emp workshop sessions, \$50 after completing 12 of 14 sessions, and an additional \$50 for completing 80 percent of all scheduled sessions.

Other supports, such as providing fathers with bus or transit passes or payment for gas expenses to defray the transportation costs of attending workshops, business clothing, meals, or tickets to community events, also encourage program engagement. Nonmonetary supports include case management, peer networks, and motivational messages.

CBI-EMP OUTPUTS

The combination of inputs is expected to lead to “outputs,” or the actual CBI-Emp services that fathers receive. Figure 3.1 lists some of these outputs, which are organized by content (what services were delivered), quality (with what level of mastery did staff deliver these services), and quantity (how much of each service did a father receive). This chapter will later explain how these outputs are measured.

CBI-EMP OUTCOMES

The CBI-Emp curriculum is designed to have a range of beneficial impacts in the short term. First, by participating in the program components, fathers are expected to achieve greater self-control, perseverance, and self-efficacy and improved problem-solving skills. These skills would allow fathers to respond more constructively and effectively when faced with challenges. These techniques would also equip fathers with better strategies to use when interacting with employers and colleagues in a work environment, which could lead to increased employment and earnings. Improvements in thinking and positive behavioral change could lead to reductions in involvement with the criminal justice system. Fathers may also experience improved interpersonal relationships. In the longer term, the hope is that these positive impacts will be sustained and self-reinforcing and lead to better longer-term economic prospects for the father and future outcomes of the children. Although long-term outcomes are hypothesized, the current B3 study plan only includes an analysis of short-term outcomes and does not incorporate long-term follow-up.

Evidence Base

Cognitive behavioral therapy has long been a dominant approach in mental health services.⁹ Cognitive behavioral approaches are designed to make individuals more aware of the thought processes that shape their behavior, positively affect these thought processes, and curtail problematic behaviors.¹⁰

The CBI-Emp component draws on a large evidence base of studies that have found that addressing dynamic risk factors — such as impulsiveness and poor coping and problem-solving skills — significantly reduces

9 Dobson and Khatri (2000).

10 Dobson and Khatri (2000).

recidivism among individuals who were formerly in jail or prison.¹¹ Among the ways to tackle dynamic risk factors, the most promising ones involve developing more positive attitudes, improving self-control, and rethinking the rewards and costs of criminal and noncriminal behaviors.¹² The CBI-Emp program approach similarly addresses these risk factors with an aim of encouraging employment stability.

A wide range of studies have found cognitive behavioral programs offered in prisons to be effective in reducing recidivism.¹³ Meta-analyses have shown that a variety of cognitive behavioral approaches, delivered in prison, can lead to significant reductions in recidivism among both young people and adults after reentry.¹⁴ Prior research has found cognitive behavioral interventions to be most effective for fathers who score moderate or high on an assessment that estimates the risk of future involvement in the criminal justice system.¹⁵

Although there is strong evidence that cognitive behavioral approaches are effective among individuals with mental health issues and among those who are incarcerated or on parole,¹⁶ these approaches have not yet been proven to be effective for low-income fathers when delivered through a Responsible Fatherhood program.

Recently, the CBI-Emp program component was piloted on a small scale at the Center for Employment Opportunities (CEO), a social service organization operating in New York City. The pilot study enrolled 62 fathers and used a quasi-experimental design — comparing a cohort of participants that was not offered the CBI-Emp program (the control group) with a subsequent cohort that was offered the CBI-Emp program component (the program group). The pilot was designed largely to assess the feasibility of implementing the program component and to provide lessons for future larger-scale evaluations of this program approach, such as the one that the B3 study is undertaking. The pilot study found that, with participation incentives similar to those offered in the B3 study, 38 percent of fathers in the program group completed a 31-session curriculum.¹⁷

The B3 evaluation of CBI-Emp builds upon the strong evidence base for the effectiveness of prison-based cognitive behavioral interventions, and draws on lessons from the CEO pilot study, to adapt the cognitive behavioral approach to a Responsible Fatherhood program setting. A key question and challenge for the

11 McGuire (2002).

12 Andrews et al. (1990).

13 Wilson, Bouffard, and MacKenzie (2005).

14 Landenberger and Lipsey (2005).

15 Bonta, Wallace-Capretta, and Rooney (2000); Lowenkamp and Latessa (2002).

16 Butler, Chapman, Forman, and Beck (2006); Landenberger and Lipsey (2005).

17 Chowdhury, Muller-Ravett, and Barden (2015).

B3 study is whether fathers can be encouraged to attend and complete the CBI-Emp workshop curriculum when they are not incarcerated and likely face some logistical and scheduling barriers to attending.

Fatherhood Program Context for CBI-Emp Test

Fathers assigned to the CBI-Emp program group are offered the CBI-Emp program component in addition to whatever usual services the Responsible Fatherhood program offers as a matter of course. At each of the three Responsible Fatherhood program sites selected for the CBI-Emp evaluation, the B3 study team are working with program staff to ensure that the services as usual do not incorporate cognitive behavioral approaches in order to achieve a strong service contrast between the CBI-Emp program group and the services as usual control group.

All of the program sites offer employment services in group workshops as well as a range of individualized employment services. To integrate CBI-Emp component in with usual program services, sites have slightly modified their usual programming, and they may still make some further adjustments. This report describes the sites' usual programs services as they were at the beginning of the study. The forthcoming process and impact study reports will describe any modifications to the services offered.

Kanawha Institute for Social Research and Action, Inc. (KISRA), operates in four counties in West Virginia and serves residents of those and surrounding counties. KISRA has been a Healthy Marriage and Responsible Fatherhood (HMRF) federal grantee since 2006. Their Responsible Fatherhood services, known as WV ReFORM, target incarcerated fathers and fathers recently released from incarceration who are low income; have been tried and convicted of a nonviolent, nonsexual crime; and have a dependent child 24 years of age or younger. KISRA's usual services require fathers to attend a 10-session parenting workshop and a 10-session work-readiness workshop in order to be eligible for KISRA's transitional work services. KISRA offers workshop sessions in multiple locations, two of which are part of the B3 study. KISRA also offers a number of other services such as microloans, credit counseling, housing assistance, child care, and mentoring programs. CBI-Emp program group members will be offered the CBI-Emp component in addition to the usual services. They will begin the CBI-Emp program component in cohorts, expected to start every four weeks in both locations, and will participate in a number of other workshops, some of which may include individuals who are not participating in the B3 study.

Passages Connecting Fathers and Families, Inc. (Passages), in Cleveland, Ohio, has been operating since 2000, with a mix of state and local financial support. Ohio Department of Job and Family Services (ODJFS) was awarded the HMRF federal grant in 2015. Under this grant, ODJFS selected Passages and three other organizations to implement the federally funded New Beginnings for New Fathers program. While Passages serves all fathers, many of them have been involved with the criminal justice system. Additionally, as part of New Beginnings for New Fathers, Passages has a particular emphasis on serving young fathers, ex-

pectant fathers, or fathers with infants. Passages' usual services operate on a four-week cycle and include a series of workshops that integrate employment, parenting, and healthy relationship topics. Fathers interact with workshop facilitators, a job coach, and a case manager four days per week to assess and develop skills, address barriers, and ultimately be matched with a potential job. Passages also provides services at two other locations in northern Ohio and offers a culinary training program, father-child camp, "baby-daddy boot camp," and other supplemental activities. CBI-Emp program group members will be offered the new CBI-Emp component in addition to usual services. Staff trained in CBI-Emp and the other curriculums will provide employment and case management services. Only fathers assigned to the program group will be offered CBI-Emp.

The Fortune Society was founded in 1967 as a multiservice organization serving individuals involved with the criminal justice system in the New York City area. The Fortune Society is the one site in the B3 study that is not currently a HMRF federal grantee. However, it continues to run the Responsible Fatherhood program for which it received the HMRF federal grant from 2011 to 2015. The Fortune Society's standard employment services begin with a two week cohort-based job-readiness workshop about networking, interviewing, and applying for jobs. Subsequently, participants can access an array of other employment services depending on their needs, including individualized career counseling, job placement or transitional job assistance, and additional skills training. They may also receive referrals to other types of services, such as parenting and relationship workshops and housing assistance. Participants are encouraged to remain in contact after finding employment should they need rapid reemployment or job retention assistance. CBI-Emp program group members are expected to receive the usual services in addition to the CBI-Emp component. For them, the CBI-Emp sessions will be integrated throughout all the stages of the usual employment services — starting with the job-readiness workshop and continuing into post-workshop services, such as transitional work or more individualized job assistance. Those not assigned to the CBI-Emp program group will be offered a similar set of usual services from staff not trained in the CBI-Emp curriculum.

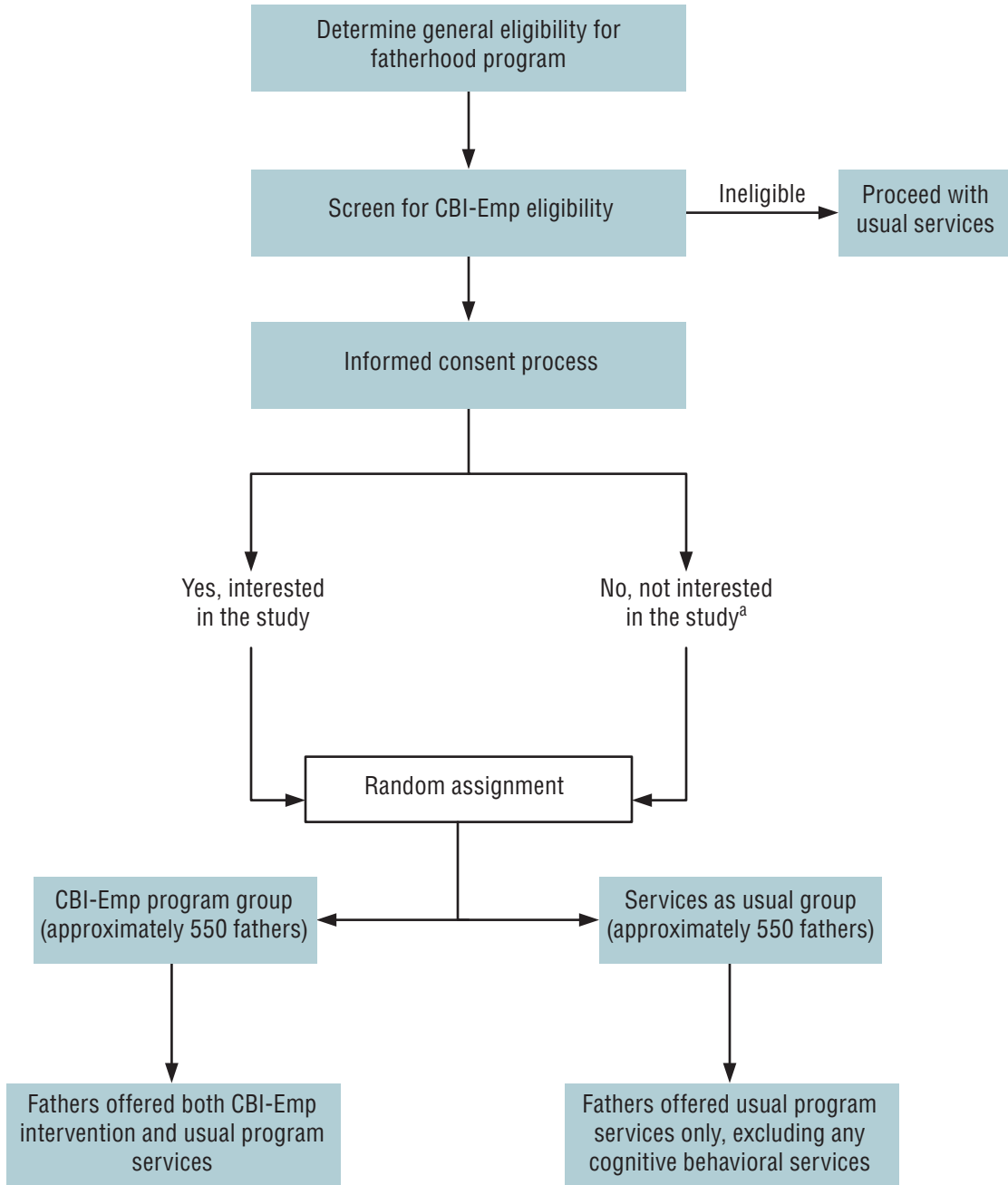
Overview of CBI-Emp Random Assignment Evaluation Design

Figure 3.2 depicts the B3 study design's intake and random assignment process.

Provider staff will screen fathers seeking Responsible Fatherhood program services for eligibility for the CBI-Emp program component. The target sample for the CBI-Emp study consists of fathers 18 years of age or older who have children under 24 years of age and who satisfy two additional eligibility criteria: (1) they have been convicted of a crime or incarcerated within the last three years or are on probation or parole, and (2) they score medium to high on a risk of recidivism assessment administered at intake. Ineligible fathers will be offered services as usual and will not be included in the B3 study.

FIGURE 3.2

CBI-EMP RANDOM ASSIGNMENT FLOW



NOTE: ^aEligible fathers who do not consent to participate in the study will still be randomly assigned and offered program services. These fathers will not be considered research participants and will not be included in the study sample.

Eligible fathers will go through an informed consent process with a staff member, who explains the study requirements, risks, and benefits. Fathers who consent to participate in the study will complete a 15-minute applicant characteristics survey, which provides background information for the B3 study and for the Fatherhood and Marriage Local Evaluation (FaMLE) and Cross-Site project, a separate project that is collecting performance measures data on HMRF federal program sites. Fathers will then complete a separate 30-minute baseline survey that collects data on parenting, employment, criminal history, child support, and the father's cognitive behavioral profile. Fathers that do not consent but are eligible will still be randomly assigned and offered services, though they will not be considered B3 study participants.

Next, fathers will be randomly assigned to one of two research groups: the CBI-Emp program group, which is offered the CBI-Emp program services in addition to any usual program services, or the services as usual group, which is offered usual program services only. The six-month follow-up survey and administrative records will capture the difference in outcomes between these two research groups and will be the basis of the experimental impact evaluation.

CBI-Emp Process Study Research Questions, Data Collection, and Analysis

The B3 study is a demonstration testing a new intervention that has not been implemented or evaluated in a Responsible Fatherhood program context. The CBI-Emp process study will document the new component embedded in three existing Responsible Fatherhood programs, what it took to establish and maintain the component, and how it operated over the course of the study period. The process study will also determine the service contrast between the CBI-Emp program and services as usual research groups as context for interpreting the impact findings. The study report will highlight lessons for the field, including what it takes to engage participants, the challenges sites face in implementing the CBI-Emp component, and the participants' own experiences and perspectives on the CBI-Emp program component.

Building on the conceptual framework of the process study presented in Chapter 1 and the CBI-Emp logic model, the process study will be guided by and attempt to answer the following research questions:

- 1 Intended program models.** What are the usual employment services available to fathers at each Responsible Fatherhood program site? What is the CBI-Emp model? In what ways does the CBI-Emp component differ from usual services at each site?
- 2 Contextual factors.** What are the contextual factors associated with each CBI-Emp program site that might influence how the program operates? Do staff and participant characteristics differ between CBI-Emp program and services as usual groups?

- 3 **Implementation processes.** What does it take to implement CBI-Emp? What processes are in place to support the implementation of CBI-Emp? What engagement strategies were used to engage CBI-Emp program group members? In what ways are these processes and strategies different from those in place to implement the usual services?
- 4 **Outputs.** What were the content, quality, quantity, and order of services delivered to the CBI-Emp program group? How did they differ from the content, quality, quantity, and order of services delivered to the services as usual group? To what degree was there fidelity to the CBI-Emp model? To what extent was CBI-Emp intentionally adapted to each Responsible Fatherhood program during implementation?

These process study research questions identify the main challenges encountered and lessons learned from implementing the CBI-Emp model, which will inform the community of Responsible Fatherhood service providers and others interested in integrating cognitive behavioral approaches into employment services.

The process study relies on a mixed-methods methodology, using both quantitative and qualitative approaches and combining data from a variety of sources to address each research question. Data are collected from both staff and participant perspectives to provide a better understanding of key implementation issues associated with CBI-Emp. Chapter 2 describes these multiple data sources.

The process study research questions follow from the conceptual framework depicted in Figure 1.2. The first three questions address the three sets of inputs shown in Figure 1.2: new program component and usual services, contextual factors influencing inputs, and implementation processes. The fourth research question relates to the outputs and subsequent service contrast. The research questions will be informed by the analysis of a number of measures, listed along with the associated data sources in Table 3.1.

First, the process study will document the intended program models for the CBI-Emp program group and the services as usual group according to the expected content, quality, and quantity of the services delivered, and the expected implementation processes (what supports are planned to maintain program implementation) associated with these services. The process study will describe how CBI-Emp sessions are woven together with usual services for the CBI-Emp program group. It will also document the differences between the CBI-Emp component and usual services, including differences in the substance and structure of service delivery, minimum participation requirements, supports provided to staff to help them implement the services, and supports provided to fathers to encourage them to participate in the services offered. The intended program models will be captured largely by qualitative sources: document review, interviews with program staff, and information from the curriculum developers.

Second, the process study will describe the contextual factors that could influence program operations. These factors include the community's sociodemographic and economic characteristics, local criminal jus-

TABLE 3.1

PROCESS STUDY RESEARCH QUESTIONS, MEASURES, AND DATA SOURCES FOR THE CBI-EMP INTERVENTION

RESEARCH QUESTIONS	MEASURES	DATA SOURCES
<p>Intended program models What were the usual employment services and what was the CBI-Emp model?</p>	<ul style="list-style-type: none"> • Expected content • Expected quality • Expected quantity • Expected implementation process 	<ul style="list-style-type: none"> • Staff interviews • TA/curriculum developer interviews • Document review
<p>Contextual factors What were the contextual factors associated with each CBI-Emp site that might influence how the program operates?</p>	<ul style="list-style-type: none"> • Community resources and context • Characteristics of implementing organization • Organizational climate and culture • Staff characteristics • Participant characteristics 	<ul style="list-style-type: none"> • Baseline/intake survey • Staff survey • nFORM • Father focus groups • Staff interviews • Document review
<p>Implementation processes What did it take to implement CBI-Emp?</p>	<ul style="list-style-type: none"> • Curriculum training • Curriculum TA support/coaching • Onsite supervision/other staff development and feedback • Staffing • Engagement strategies 	<ul style="list-style-type: none"> • Staff survey • Staff coaching log • Mobile phone survey • Father focus groups • Staff interviews • TA/curriculum developer interviews • Document review
<p>Outputs What were the content, quality, quantity, and pattern of services delivered to the CBI-Emp program group? What were the differences between services delivered to the CBI-Emp program group and the services as usual group?</p>	<ul style="list-style-type: none"> • Content • Program flow • Quality • Quantity • Component fidelity • Adaptation 	<ul style="list-style-type: none"> • Six-month follow-up survey • Staff survey • Staff quality and fidelity rating • Mobile device survey • nFORM • Father focus groups • Staff interviews • Observation • TA/curriculum developer interviews

Notes: TA = technical assistance; nFORM = the B3 study’s management information system.

tice and child support context, and other fatherhood services offered in the community outside of the B3 study site. The study team will use multiple data sources to measure the provider organization's characteristics, such as its size, structure, administrative procedures, funders, and other services. Because the same Responsible Fatherhood program in each community will serve both the CBI-Emp program group and the services as usual group, many organizational characteristics will apply to both groups, though the study team will document any exceptions. The study team will collect information to accurately understand each provider's organizational climate and culture, such as information related to its mission, resources, level of trust and cooperation among staff members, and the latitude staff members have in their jobs. Organizational culture and climate may influence a provider's ability to carry out a program's implementation plan and deliver services, which could ultimately influence a program's effectiveness.

The characteristics of program staff at each site, such as their work experience and educational backgrounds, could play a role in how they implement both the usual services and the CBI-Emp component. In particular, staff with a specific set of credentials or work histories might appear to have an easier time learning how to facilitate the CBI-Emp curriculum or apply the core correctional practices. Or, a wide range of staff might learn these new skills and implement them equally well. For further context, the process study will also examine fathers' characteristics, including their prior service receipt, their stated interest in fatherhood services, and the barriers to participation they face.

Third, the process study will explore the implementation processes — support for program staff and support for fathers — for the CBI-Emp component using a number of measures drawn from qualitative and quantitative data sources. Implementation processes include what it takes to implement the CBI-Emp component and how it differs from what is needed to implement the usual services. Contextual factors, such as characteristics of the local community or provider organization, can influence these processes. Measures associated with support for program staff include the content, quality, and quantity of the CBI-Emp curriculum and core correctional practices training and technical assistance support provided throughout the study period; onsite supervision of staff delivering CBI-Emp and other staff development opportunities; the extent to which management is data driven; and staffing structure, staff roles, and how staff spend their time including the time it takes to prepare for each CBI-Emp workshop. Measures associated with support for fathers include incentives, case management, and motivational messaging to encourage fathers to participate in employment services.

Finally, the process study will assess outputs, or the content, quality, and quantity of the services that members of the two research groups received. The content of services refers to whether the substance, structure, and order of the services delivered adhered to that which the models intended for each research group. One aspect of the quality of services is the level of mastery with which staff delivered services as intended. In other words, did CBI-Emp staff deliver workshops with fidelity to the program model? For example, did they review homework at the start of a workshop and did they assign additional homework at the end of the workshop? Another aspect of quality is the fathers' satisfaction with services. For instance, did fathers in

the CBI-Emp program group enjoy CBI-Emp workshops and find them useful? Did fathers in the services as usual group enjoy the services in which they participated? The quantity of services refers to the number of CBI-Emp sessions or usual service sessions fathers completed, and the attendance patterns. Figure 3.1 presents a number of these outputs, specific to the CBI-Emp program component. The process study will compare the findings related to these outputs for the two study groups. An additional output is fidelity of services, which measures the degree to which program staff implemented services with the proper frequency and intensity as prescribed by the program model and whether staff maintained a standard of fidelity. In this case, a measure of fidelity applies only to the CBI-Emp component. A final output that the process study will assess is whether the CBI-Emp model was adapted in any way to integrate the component into the existing program structure and services. For example, was the order of the workshops changed, or were some workshop topics delivered in a group setting rather than individually?

COST OF IMPLEMENTING CBI-EMP

The primary goal of the cost analysis is to determine the cost of the CBI-Emp component. It may be difficult in some cases to disentangle the CBI-Emp component from the broader set of services available to the CBI-Emp program group. The focus of this analysis is the steady-state of the program component, meaning it will not include costs associated with curriculum development but will include the costs of the curriculum developer's coaching and technical assistance. The process study will collect data that helps approximate the costs of implementing the CBI-Emp component and services as usual, such as information about staffing structure, how staff serving the two research groups spend their time, and the resources required to offer each set of services. This information will be gathered as part of the staff surveys and interviews. In addition, the study will collect data on overall expenditures and expenditures per relevant staff.

Impact Study

IMPACT STUDY OVERVIEW

The CBI-Emp impact study will take advantage of the experimental research design to rigorously estimate program impacts on cognitive behavioral functioning, employment, and other outcomes. The CBI-Emp intervention has been piloted, and related interventions have been shown to reduce recidivism.¹⁸ The CBI-Emp impact study will add to the evidence base by evaluating an intervention that combines cognitive behavioral approaches with employment services and targets fathers in a community setting.

The impact study will compare the outcomes of fathers in the CBI-Emp program group and the services as usual group to address the following research questions related to the CBI-Emp logic model:

¹⁸ Lipsey, Landenberger, and Wilson (2007).

- 1 Did the CBI-Emp intervention affect key outcomes for fathers, including employment and earnings, involvement with the criminal justice system, and relationship with the co-parent?
- 2 Did the CBI-Emp intervention affect more distal outcomes such as fathers' relationship with their children and child support payments?

The first question addresses outcomes directly targeted by the CBI-Emp intervention, whereas the second question concerns outcomes that may be somewhat less closely tied to the content and focus of the CBI-Emp intervention. As discussed below, a forthcoming analysis plan will designate primary and secondary outcomes in detail for the impact study before impacts are estimated.

IMPACT STUDY DATA AND METHODS

The logic model for CBI-Emp hypothesizes that the intervention could have a range of positive impacts on short-term outcomes such as employment and earnings. The study team will measure outcomes at the start of the study in a baseline survey and six months later in a follow-up survey. Employment and earnings will be available at a quarterly level in administrative records and in more fine-grained detail in surveys. Chapter 2 describes these data sources in greater detail.

Some of the potential primary and secondary outcomes for the CBI-Emp impact analysis are shown in the logic model, and the potential set of primary outcomes is listed in Table 3.2. By encouraging positive thought patterns and behaviors and building cognitive behavioral skills that are valuable in the labor market, the CBI-Emp intervention aims to increase employment and earnings. By improving cognitive behavioral functioning and skills, the CBI-Emp intervention also aims to reduce involvement with the criminal justice system. Positive effects of the program on managing anger and impulsivity and on improving communication and other relationship skills could lead to improvements in fathers' co-parenting relationships.

If the CBI-Emp intervention has positive effects on employment and earnings and on relationship skills, it may also lead to effects on secondary outcomes such as increasing child support payments or improving the quality of the father-child relationship.

To evaluate whether the CBI-Emp program component had impacts in these domains, the study team will conduct an impact analysis that compares the outcomes of the CBI-Emp program group with the outcomes of the services as usual group. As discussed in Appendix A, the impact analysis will pool the samples in the three CBI-Emp sites to achieve a sample large enough to detect program impacts. With a projected sample size of 1,100 fathers split evenly between the CBI-Emp program and services as usual groups, the study has the power to detect impacts in the range of 7 or 8 percentage points (for administrative records and

TABLE 3.2
POTENTIAL OUTCOMES FOR CBI-EMP INTERVENTION

POTENTIAL PRIMARY OUTCOMES	MEASURES	DATA SOURCE	
		Six-Month Follow-Up-Survey	Administrative Records
Increased employment	Length of time at current or most recent job	✓	
	Employment in both quarters since random assignment		✓
Increased earnings	Earnings since random assignment		✓
Reduced involvement with the criminal justice system	Ever arrested since random assignment		✓
	Ever spent time in prison or jail since random assignment	✓	
Reduced co-parenting conflict	Co-parenting conflict	✓	
Improved employment-related behavior	Employment-related behavior problems	✓	

survey data, respectively) on outcomes such as employment rates or involvement with the criminal justice system.¹⁹

With the projected sample size, the study is unlikely to have the statistical power to detect impacts that differ across subgroups defined by baseline characteristics. Nevertheless, the study will engage in an exploratory analysis of a small number of subgroups — defined by, for instance, recently released from jail or prison, high or low executive function, or high or low on a measure of employability. These subgroups will be pre-specified in an analysis plan.

¹⁹ These percentage point estimates assume a control group mean of 50 percent. If the control group mean is 25 percent or 75 percent, then percentage point impacts in the range of 6 or 7 percentage points can be detected.

Just Beginning (JB) Intervention

4

The Just Beginning (JB) program is a parenting education intervention that incorporates instructional videos and serves fathers and their young children together over the course of five sessions to enhance the quality of the father-child relationship. The intervention was previously known as “Baby Elmo” and was originally designed for nonresident, incarcerated teenage fathers and their young children. For the B3 study, the program was adapted to be appropriate for resident and nonresident fathers of any age and their young children.

Programs that work with parents and children together have typically focused on mother-child dyads and have rarely engaged fathers with their children. The JB program represents a new and novel component for Responsible Fatherhood programs and the B3 evaluation will offer valuable information for the field on the potential for program approaches that include child participation to strengthen father-child relationships.

A fundamental question is whether programs can successfully implement an intervention that requires that fathers attend with their children. A substantial portion of the fathers served by Responsible Fatherhood programs do not live with their child and may have weak relationships with their child’s mother or guardian.¹ For nonresident fathers, the JB program will require the cooperation of the child’s mother or guardian, which represents an important implementation challenge.

The key research questions addressed by the test of the JB program component include the following:

- 1 What set of approaches did programs use to engage fathers and to gain the cooperation of mothers or guardians in scheduling children’s participation in the JB program? What participation rates were achieved for fathers and for their children? How were the services received by the JB program group different from usual services?
- 2 What implementation supports were needed to operate the JB program and how did they differ from supports for usual services?
- 3 Did the JB program improve the quality of fathers’ relationships with their young children?

¹ Zaveri, Baumgartner, Dion, and Clary (2015); Holcomb et al. (2015).

The chapter proceeds by describing the JB program component, the theory of change, the evidence base, and the context of the three Responsible Fatherhood programs within which the JB program component is being tested. The chapter then explains the random assignment study design, and gives an overview of the design of the process study and the impact study.

The JB Logic Model

Psychologist Rachel Barr at Georgetown University and Carole Shauffer, a lawyer and director of the Youth Law Center, developed the JB program model. The overall goal of the intervention is to improve the quality of the father-child relationship.

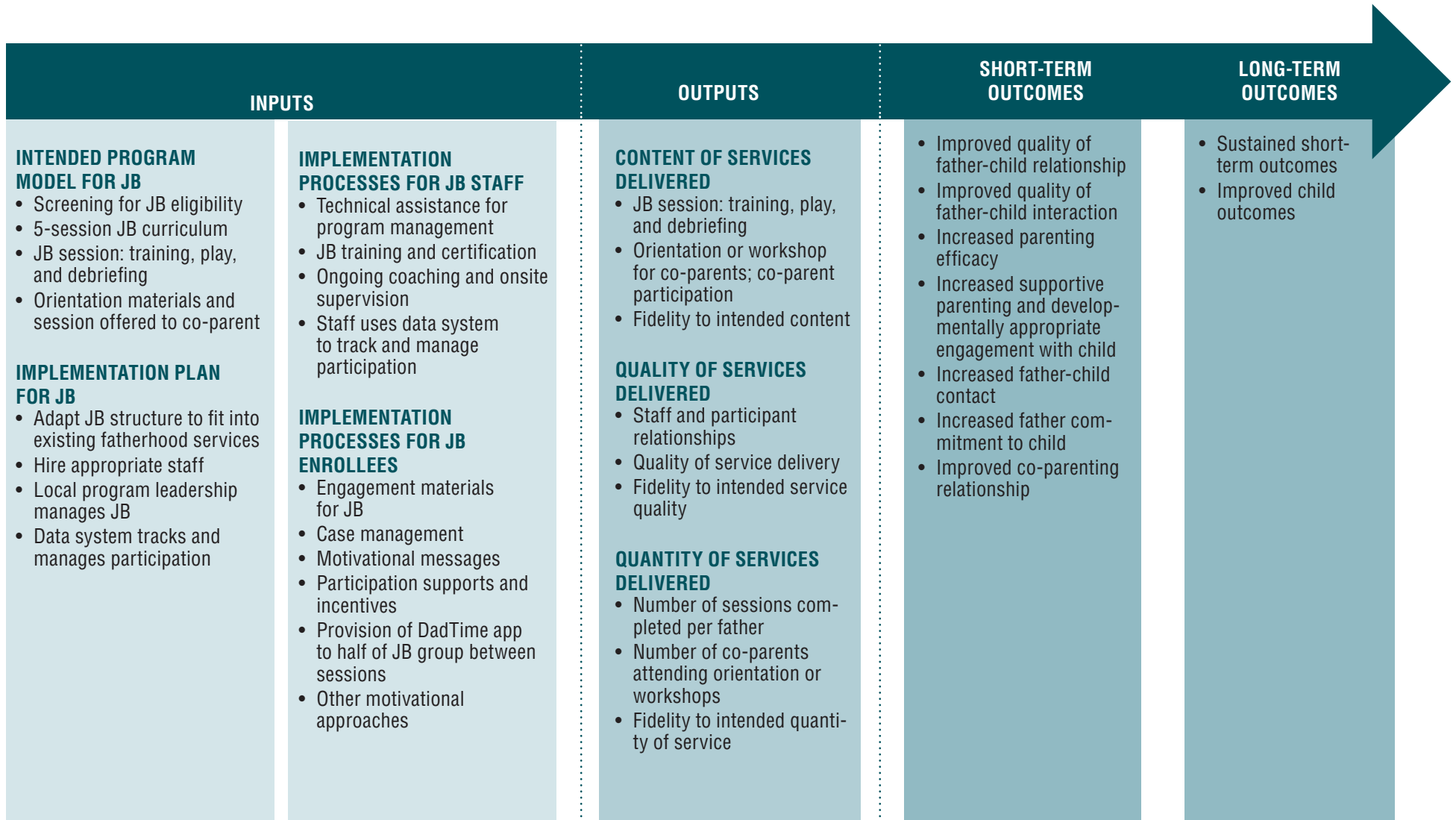
Figure 4.1 depicts the logic model for the JB intervention, which maps out the process through which the intervention is expected to affect outcomes related to the father-child relationship. The JB logic model lists inputs, outputs, and short- and long-term outcomes for the new JB program component being added to the existing services for fathers in the JB program group.

JB INPUTS

The intended JB program model is designed for resident and nonresident fathers with children between 2 months and under 3 years of age. Fathers of children in this age range are eligible to participate in the B3 study if they have seen their child at least once in the past month and there are no legal or safety-related impediments to the child's participation. The JB curriculum focuses on developing father-child relationships across five sessions. Box 4.1 describes the topics covered in the weekly training sessions. Each session consists of the following three components:

- 1 Father-facilitator one-on-one parent training.** The first program component is a one-on-one training session between the father and facilitator. The training session includes the viewing of a short *Sesame Beginnings* video featuring some simple approaches the father can use to improve the quality of his interactions with his young child. The facilitator will discuss the parenting approaches covered in the video with the father, and together they will lay the groundwork for applying these approaches in the subsequent father-child play session.
- 2 Father-child play session.** Immediately following the father-facilitator training, the father will engage in play with his young child and practice the parenting approaches just presented. The facilitator will be present to observe the play and to make note of positive examples to share with the father during a subsequent debriefing session.

FIGURE 4.1
JB LOGIC MODEL



BOX 4.1

JB CURRICULUM SESSIONS

SESSION 1

Notice presents the JB curriculum and session format to fathers as they first learn about the importance of father-child relationships, attachment, and stranger anxiety in young children.

SESSION 2

Follow focuses on the theme of control within the father-child relationship and in the play session. Participants are encouraged to follow their young child's lead, by reading cues and exploring with the child the things the child wants to explore and by offering their child choices.

SESSION 3

Talk stresses the importance of verbal communication in child development. Participants learn to foster

their child's language and cognition skills by describing and labeling things for their child. Fathers with toddlers are introduced to pretend play.

SESSION 4

Encourage teaches fathers how to create a positive learning environment for their child via praise and encouragement. The curriculum also addresses common misconceptions that fathers have about spoiling their child.

SESSION 5

"Putting It All Together" wraps up the JB program by asking fathers to recapitulate their experiences, challenges, and learnings. The session ends by asking fathers to think about their future goals regarding their relationship with their child.

- 3 Father-facilitator debriefing session.** After the play period, the father and facilitator will debrief to reflect on how the play period went. At the end of the debriefing session, the father and facilitator will discuss and finalize plans for the next week's session.

Since the JB program requires that the father attends session with his child, a critical element of the intervention will be helping nonresident fathers communicate with co-parents to negotiate access to their child for sessions. One way in which programs will support this process is by scheduling an orientation session for the child's mother or legal guardian in which the individual can learn about the JB program and its potential benefits for the child. The session aims to help the mother understand the goals and content of the program, view herself and the father as a team, and focus on the child. Small incentives will be offered to the mother to encourage her to attend the orientation, but her participation is optional and not a prerequisite for the father and child to begin their JB sessions.

The implementation plan for JB includes adapting the program components to fit within existing services. The JB program component will be but one that each provider in the B3 study offers, and must be planned around the timing of other usual program services. Facilitators at each of three local Responsible Fatherhood programs will deliver the program with at least one session scheduled per week for approximately five weeks. Fathers may engage in other services offered by the provider.

The three JB session components — the parenting training, play session, and debriefing session — are expected to take about 60 to 90 minutes altogether. Ideally, the father will bring his young child to each of the five JB sessions, and each of the three components of the JB sessions will take place on the same day. In some cases, such as in the event of a child’s illness or other scheduling challenges, the father may be permitted to complete the father-facilitator and father-child portions of the session at separate times. For the first JB session, however, the father and child must be present, or it will be rescheduled.

When possible, the co-parenting orientation will be completed in person. If that is not feasible, staff may conduct the co-parenting orientation by phone. Hiring appropriate staff and developing data systems for tracking participation are also part of the implementation plan.

The implementation processes for staff include a training and certification process and onsite supervision. Ongoing coaching and technical assistance will be available to facilitators. After the certification process is complete, the JB curriculum developer will have at least monthly phone calls with each facilitator and review video recordings of sessions with fathers to offer specific feedback to individual staff about how they are delivering the intervention. They will also engage with the B3 study team and staff at each site to discuss challenges and recommendations for improvements.

The implementation process for JB enrollees represents the supports provided to fathers and their families to encourage participation in the JB program component. To encourage father and co-parent participation, the programs will offer incentives for attendance at various points throughout the series of sessions. For example, fathers could be offered free diapers or a \$25 gift card after the first two sessions, and a \$50 gift card upon completion of the fifth session. Incentives will be offered at different points because programs have reported that fathers sometimes stop coming after the first or second session or toward the end of the series. Further, mothers will be offered a \$25 gift card to encourage their attendance in the co-parent orientation either in person or by telephone. At completion, fathers will receive a certificate and a framed photo of themselves with their child. Other incentives will include small age-appropriate toys or supplies for the child. To support attendance, fathers will receive free transit passes or gas cards to defray transportation costs, and appointment cards to help them remember their scheduled JB sessions. Throughout their engagement, fathers will also be eligible for case management support and will receive motivational messages from staff about the potential benefits of the program for them and their child.

As Chapter 5 describes in detail, the B3 study team and its partners designed a smartphone app, DadTime, to encourage fathers’ attendance and participation in the JB program. The study design offers this engagement intervention to a randomly selected subset of fathers in the JB program group. If the engagement intervention boosts participation in the JB program, then it could strengthen JB program impacts. The other implication for the JB evaluation is that, while all fathers in the JB program group will receive well-structured engagement supports and incentives, some fathers in the JB program group will receive additional app-based support for participation during the course of the program.

JB OUTPUTS

The combination of inputs just described is expected to lead to outputs, which are the actual JB services that fathers receive. Figure 4.1 lists some measures that capture these outputs, which are organized by content (what services were delivered), quality (with what level of mastery did staff deliver the services), and quantity (how much of each service was received). Outputs relate to the father, child, and the co-parent's participation in the intervention.

JB OUTCOMES

The JB component is designed to have positive impacts on the quality of the father-child relationship in the short-term, six-month follow-up period. The program is also designed to increase father-child contact and to improve parenting confidence, father engagement in developmentally appropriate activities with his young child, and the quality of the father-child interaction. The program may also have positive effects on the co-parenting relationship if it increases the co-parents' confidence in the father's parenting skills or successfully supports fathers in communicating constructively with the co-parent. Over the longer term, the JB program could have sustained impacts in these same outcome domains and may also have positive effects on children, though the currently planned B₃ study activities do not include measurement and analysis of long-term outcomes.

Evidence Base

Research shows a strong link between supportive fathering and positive child outcomes, and that the absence or disengagement of the father from the family can pose developmental risks for the child.² Research has consistently documented a strong association between a father's absence and worse child outcomes.³ The research on the involvement of nonresident fathers suggests that the quality, not just the quantity, of father-child interaction is consequential.⁴

This evidence on the importance of the quality of the father-child interaction is the motivation behind the JB intervention for fathers and their young children.⁵ The JB program is an early intervention program that focuses on fathers with children between 2 months and under 3 years of age. The intervention design draws upon research documenting that a father's supportive parenting is associated with positive language

2 Amato and Gilbreth (1999); Cabrera, Shannon, and Tamis-LeMonda (2007); Carlson and Magnuson (2011).

3 Carlson and Magnuson (2011).

4 Amato and Gilbreth (1999).

5 Barr et al. (2014).

and cognitive outcomes for children.⁶ It also draws upon extensive literature in the parenting field demonstrating that parental sensitivity is associated with better social and cognitive outcomes, including better emotion regulation and school readiness.⁷

Improving father-child relationships and encouraging healthy co-parenting relationships are core objectives of Responsible Fatherhood programs. Yet, to date these programs have primarily worked with fathers only and have not regularly engaged their children or co-parents in program services. Therefore, the JB intervention, as a component added to the usual program services, represents a relatively new and untested direction for the field.

The evidence base on interventions designed to improve the quality of the father-child interaction and relationship is limited. A review of the available research identified eight rigorous impact studies that included programming intended to increase the amount and improve the quality of fathers' involvement with their children.⁸ While some of these studies showed positive impacts on fathers' involvement with children, most were small in scale and not all of them targeted low-income fathers; there is much left to learn about how to best support parenting skills among low-income fathers. The evidence base for programs that involve children and co-parents is particularly limited. The B3 study represents an important opportunity to break new ground by testing targeted parenting skills training that directly engages fathers with their children and co-parents.

In prior small-scale before-after assessments, the Baby Elmo program was found to improve the quality of the father-child interaction and communication and increase multiple dimensions of fathers' emotional responsiveness to their children.⁹ These assessments were based on small samples — 20 father-child dyads in one study and 41 father-child dyads in the other. Both of these assessments took place in juvenile detention centers and compared the quality of father-child interaction across each workshop session. The B3 study represents the first large-scale evaluation of the JB program component operating in a community setting and using an experimental research design.

Fatherhood Program Context for the JB Program

The JB component is offered to fathers assigned to the program group, in addition to whatever usual services the Responsible Fatherhood program offers as a matter of course. In each of the three Responsible Fa-

⁶ Cabrera, Shannon, and Tamis-LeMonda (2007).

⁷ Mills-Koonce et al. (2015).

⁸ Avellar et al. (2011).

⁹ Barr et al. (2011); Barr et al. (2014).

therhood program sites selected for the JB test, the services as usual did not incorporate child participation in program activities to ensure a strong service contrast between the JB program group and the services as usual group.

To integrate the new JB component in with their existing programming, providers needed to make some adaptations. The provider descriptions below present any planned modifications to the intended JB program services documented at the beginning of the study period. Future B3 study reports will document any subsequent modifications to services.

Children’s Institute, Inc. (CII), has been operating family-oriented programs in Los Angeles, California, for over 100 years and has been a Healthy Marriage and Responsible Fatherhood (HMRF) federal grantee since 2006. CII’s Project Fatherhood is one of the largest Responsible Fatherhood programs in the country. The program maintains a large network of referral partners from whom they draw their participants; these participants may be any fathers or father figures with children under the age of 24. At the heart of Project Fatherhood program is the Men In Relationships Group (MIRG), a peer learning and support group. MIRG uses a CII-developed curriculum that covers a variety of parenting and relationship topics while being responsive to the men’s needs and issues arising in their lives. Each MIRG group meets weekly; fathers may join groups at any time and may continue to attend the meetings indefinitely. Project Fatherhood also offers employment and healthy marriage services to participants, both through CII directly and through their network of subcontracting partners. These services may include healthy marriage and financial literacy workshops and subsidized employment opportunities. Fathers assigned to the JB program group will be offered the JB component in addition to the usual program services. Fathers in the JB program group will participate in MIRG groups facilitated by staff trained in both the JB and MIRG curricula. These MIRG groups will typically not include fathers in the services as usual group to avoid diffusion of JB program content.

People For People, Inc., in Philadelphia, Pennsylvania, is a multiservice organization founded in 1989 and a HMRF federal grantee since 2011. The Responsible Fatherhood program is called Project Developing Active Dads (DAD) and serves low-income noncustodial fathers who are 18 years or older. The usual services offered to fathers include a four-week Parenting and Healthy Relationship education course that meets twice a week, a seven-week economic stability workshop group that meets twice a week for the first four weeks and four times a week for the remaining three weeks, and drop-in job search assistance. As part of the seven-week economic stability training program, all fathers are also offered opportunities to develop soft skills and pursue occupational training or certifications. In addition, case management services are available to all clients seeking supportive services. DAD enrolls fathers according to a cohort system in which a new cohort of fathers begins services every seven weeks, and the program serves seven cohorts of fathers per year. Fathers assigned to the JB program group will be offered the JB component in addition to the usual DAD program services. Fathers assigned to the services as usual group will be offered the usual DAD program services only.

Structured Employment Economic Development Corporation (Seedco) is a national workforce development organization headquartered in New York City. Since 2011, Seedco has overseen the federally funded Strong Fathers, Stronger Families (SFSF) Responsible Fatherhood program, which has served more than 5,100 noncustodial parents since its launch five years ago. Currently, Seedco operates SFSF with two experienced community-based organization partners, BronxWorks and STRIVE International. Through a large and diverse referral network, SFSF enrolls low-income parents, guardians, or caregivers who are 18 years or older. SFSF's core program services are provided in a two-week cohort model that includes parenting education and support, healthy relationship education and support, and job-readiness training and job placement support services. Individualized case management and job development complements the group workshops. After completing the cohort phase, participants will receive ongoing case management for the duration of the program, including career case management focused on job retention, job advancement, and rapid reemployment assistance. Fathers assigned to the JB program group will be offered the JB component in addition to the core program services, while those not assigned to that group will be offered only core program services.

Overview of JB Random Assignment Research Design

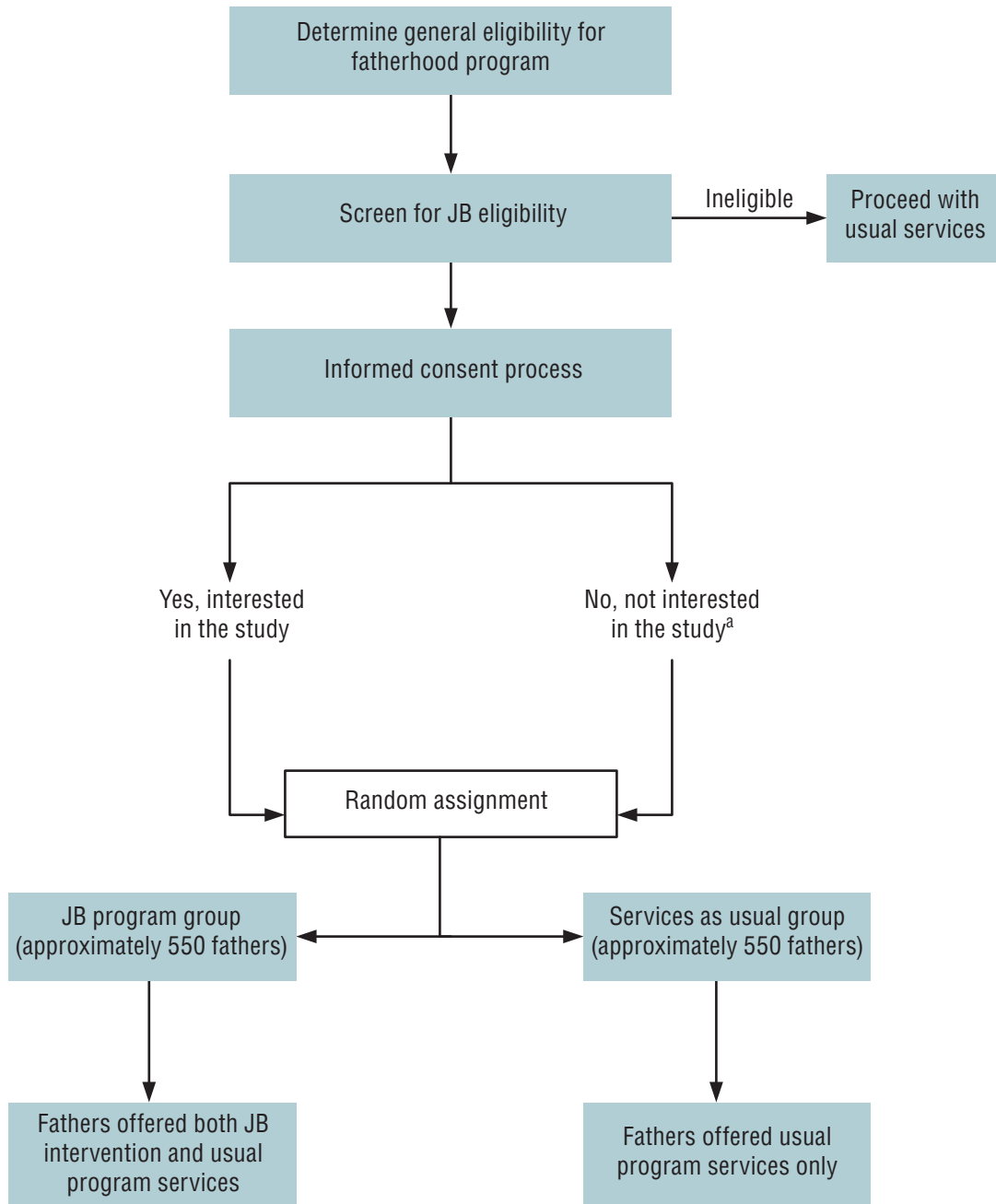
Figure 4.2 depicts the B3 evaluation study design's intake and random assignment process.

The JB program targets fathers with children between 2 months and under 3 years of age. Fathers also need to have seen their child at least once in the past 30 days to be eligible for the JB program. Fathers with restraining orders or other legal restrictions that limit access to their child will not be eligible for the JB component. Ineligible fathers will be offered services as usual and will not be included in the B3 study.

JB eligible fathers will go through an informed consent process with a provider staff member who explains the study requirements, risks, and benefits. Fathers who consent to be a part of the study will complete a 15-minute applicant characteristics survey, which provides background information for the B3 study and for the Fatherhood and Marriage Local Evaluation (FaMLE) and Cross-Site project, a separate project that is collecting performance measures data in federal HMRF program sites. Fathers will then complete a separate 30-minute baseline survey that collects data on parenting, co-parenting, employment, and child support. Fathers that do not consent but are eligible will still be randomly assigned and offered services, though they will not be considered study participants and no data will be collected by the B3 study team for these fathers.

Next, fathers will be randomly assigned to one of the two following research groups: the JB program group, which is offered the JB program services in addition to any usual program services, or the services as usual group, which is offered usual program services only. For fathers assigned to the JB group, program staff will seek to engage co-parents in a JB orientation session. Program staff will make no such effort for co-parents

FIGURE 4.2
JB RANDOM ASSIGNMENT FLOW



NOTE: ^aEligible fathers who do not consent to participate in the study will still be randomly assigned and offered program services. These fathers will not be considered research participants and will not be included in the study sample.

of fathers in the services as usual group. The difference in outcomes between these two research groups after a six-month follow-up period will serve as the basis of the experimental impact evaluation.

JB Process Study Research Questions, Data Collection, and Analysis

JB is a new program component that has not been implemented in a community-based Responsible Fatherhood program context. The process study will document what it took to establish and maintain the JB component at this scale and in this context and how the JB program component operated over the course of the study. The process study will also document the differences in the services received by fathers in the JB program group and those in the services as usual group as context for interpreting the impact findings. The process study will provide lessons for the field on what it takes to engage fathers in the JB program component, the challenges that Responsible Fatherhood programs face when implementing the component, fathers' experiences with and perspectives of JB, and the perspectives of co-parents on having their child and the father participating in the program together.

Building on the conceptual framework of the process study presented in Chapter 1 and the JB logic model, the process study addresses the following research questions:

- 1 Intended program models.** What are the usual services available to fathers participating in the Responsible Fatherhood program at each site? What is the JB model? In what ways does the JB model differ from usual services at each site?
- 2 Contextual factors.** What are the contextual factors associated with each JB program site that might influence how the program operates? Do staff and participant characteristics differ between the JB and services as usual groups?
- 3 Implementation processes.** What does it take to implement the JB program component? What processes are in place to support the implementation? What engagement strategies did program staff use to encourage fathers in the JB program group to participate? In what ways are these processes and strategies different for the JB program and services as usual groups?
- 4 Outputs.** What were the content, quality, quantity, and pattern of services delivered to the JB program group? How did they differ from the content, quality, quantity, and pattern of services delivered to the services as usual group? To what degree was there fidelity to the JB model? To what degree was the JB model intentionally adapted during implementation?

These process study research questions identify the main challenges encountered and lessons learned from implementing the JB model, which will inform the community of fatherhood service providers or others interested in adopting JB or a similar program.

The JB process study collects data from a variety of sources and uses both quantitative and qualitative analytic methods. The data collection incorporates multiple perspectives — the father, the co-parent, and the staff — to provide a better understanding of key implementation features and challenges associated with the JB program. Chapter 2 describes the multiple process study data sources.

The process study research questions are directly related to the conceptual framework: the first three questions address the three different input categories (intended program and usual services models, contextual factors influencing inputs, and implementation processes) shown in Figure 1.2. The fourth research question relates to the outputs and subsequent service contrast. The research questions will be addressed by analyzing the measures and data sources listed in Table 4.1.

First, the intended program models for the JB program and services as usual groups will be documented according to the content they are expected to cover, the quality standards they are expected to meet, and the number of sessions (quantity of services) fathers are expected to complete. The process study will also document the resources and materials required to implement each set of services. Together, these measures will allow the study team to draw conclusions about the expected differences in services between the JB program and services as usual groups. The study team will largely pull data to address these measures from qualitative sources: document review, interviews with program staff, and information from the JB curriculum developers.

Second, there are a number of contextual factors that could influence program operations. One such factor is the community context, which includes local sociodemographic, economic, criminal justice system, and child support characteristics as well as other fatherhood services available in the community outside of the B3 study program site. Other contextual factors are the characteristics of the provider organization. The study team will measure the factors using the following qualitative and quantitative data sources: information pulled from staff surveys, management information system data, and staff interviews. The data from these sources will provide information about the organization's size, structure, administrative procedures, funders, and other services offered. Since the same B3 study provider in each community will serve both the JB and services as usual groups, some organizational characteristics will be crosscutting while others may be more specific to one of the research groups; the process study will identify any differences. In addition, the study team will collect information to develop an understanding about each provider's organizational climate and culture, such as the degree to which the provider is driven by a mission, the available resources, the sense of trust and cooperation among staff, and the latitude given to staff to do their jobs. Organizational culture and climate may influence a provider's ability to carry out an implementation plan for and deliver a program, which could ultimately affect the program's effectiveness. There could be differences of the perceived climate and culture between staff working with each study group. Further, the

TABLE 4.1

PROCESS RESEARCH QUESTIONS, MEASURES, AND DATA SOURCES FOR THE JB INTERVENTION

RESEARCH QUESTIONS	MEASURES	DATA SOURCES
<p>Intended Program Models What were the usual parenting services and what is the JB model?</p>	<ul style="list-style-type: none"> • Expected content • Expected quality • Expected quantity • Expected implementation process 	<ul style="list-style-type: none"> • Staff interviews • TA/curriculum developer interviews • Document review
<p>Contextual Factors What were the contextual factors associated with each JB site that might influence how the program operates?</p>	<ul style="list-style-type: none"> • Community resources and context • Characteristics of implementing organization • Organization climate and culture • Staff characteristics • Participant characteristics 	<ul style="list-style-type: none"> • Baseline/intake survey • Staff survey • nFORM • Father focus groups • Staff interviews • Document review
<p>Implementation Processes What did it take to implement JB?</p>	<ul style="list-style-type: none"> • Curriculum training • Curriculum TA support/coaching • Onsite supervision/other staff development and feedback • Management driven by data • Staffing • Engagement strategies 	<ul style="list-style-type: none"> • Staff survey • Staff coaching log • Mobile phone survey • DadTime usage data • Father focus groups • Staff interviews • TA/curriculum developer interviews • Document review
<p>Outputs What were the content, quality, quantity, and pattern of services delivered to the JB program group? What were the differences between services delivered to the JB group and the services as usual group?</p>	<ul style="list-style-type: none"> • Content • Program flow • Quality • Quantity • Component fidelity • Adaptation 	<ul style="list-style-type: none"> • Six-month follow-up survey • Staff survey • Staff quality and fidelity rating • Mobile phone survey • nFORM • Father focus groups • Mother focus groups • Staff interviews • Observation • TA/curriculum developer interviews

Note: TA = technical assistance; nFORM = the B3 study’s management information system.

characteristics of staff at each provider, such as work experience or education background, could play a role in how they deliver both the JB component and services as usual. For instance, do staff with a specific set of credentials or work histories seem to learn how to deliver the JB more easily? Or, can a wide range of staff learn the curriculum easily and deliver it well? The process study will also examine the characteristics of participating fathers, including their prior service receipt, their stated interest in fatherhood services, and their barriers to participation in program services.

Third, the process study will explore the implementation processes using a number of measures drawn from qualitative and quantitative data sources. There are two sets of implementation processes: support for staff and support for enrollees. For the former, the study team will develop an understanding of what it takes to implement the JB component and how it differs from what is needed to implement the usual services. Measures associated with staff support include the content, quality, and quantity of JB curriculum training and the technical assistance support throughout the study period; onsite supervision of staff delivering the JB component and other staff development opportunities; the extent to which management is data driven; and staffing structure, staff roles, and how staff spend their time, including how much time they spend working directly with fathers or doing other tasks.

Several implementation processes are in place to support participating fathers' engagement in the program. These processes include incentives such as gift cards or items for the child for achieving specific milestones and case management services to address various needs. Program staff will also use motivational messaging to encourage fathers to participate in JB by emphasizing the potential benefits for them and their children. Some fathers in the JB program group will be offered the DadTime app to support their engagement in JB.

Finally, the process study will assess outputs, or the content, quality, and quantity of the services that members of the two research groups were offered. The content of services refers to whether the substance, structure, and order of the services delivered adhered to that which the models intended for each research group. For the JB program group, content includes whether all three components of a session were delivered appropriately. One aspect of the quality of services is the level of mastery with which staff delivered the services as intended. For instance, did staff give examples from both the lesson plan and previous lessons? Another aspect of quality is the fathers' satisfaction with the JB services; this aspect also includes the perspectives of the mothers or co-parents who allowed the children to participate in the JB program component with their fathers. The quantity of services refers to the types of JB or usual services that were offered to fathers, the number of sessions fathers attended, and the attendance patterns. Figure 4.1 lists a number of these outputs, specific to the JB component. The process study will compare the findings related to these outputs for the two study groups. An additional output is fidelity of services, which measures the degree to which program staff implemented services with the proper frequency and intensity as prescribed by the program model and whether staff maintained a standard of fidelity. In this case, a measure of fidelity applies only to the JB component. The engagement study, presented in Chapter 5, also explores many of these outputs.

JB PROGRAM COST ANALYSIS

The primary goal of the cost analysis is to determine the cost of JB. It may be difficult in some cases to disentangle the cost of JB from the cost of the broader set of services available to the JB program group. Therefore, the analysis will focus on the difference in costs between delivering the usual services to the services as usual group and delivering all services including the JB component to the program group. The focus of this analysis is the steady-state of the program component, meaning it will not include costs associated with curriculum development, but will include the costs of coaching and support associated with the JB component. The study team will collect data to approximate the costs of implementing the JB component and services as usual. These data could include information about staffing structure, how staff serving the program and control groups spend their time, or the resources required to offer each set of services. In particular, the study team will examine JB facilitators' caseloads and the supervision structure. This information will be collected as part of the staff surveys and interviews. In addition, the study team will collect data on overall expenditures and expenditures per relevant staff member. As Chapter 5 explains, this analysis will not include the cost of the DadTime engagement intervention.

Impact Analysis

IMPACT STUDY OVERVIEW

The JB impact study, in the same way as the CBI-Emp impact study described in Chapter 3, will take advantage of the experimental research design to rigorously estimate program impacts. For the JB program component, the outcomes of primary interest capture multiple dimensions of the father-child relationship. The JB intervention has shown promise in small-scale studies, mostly involving teenage fathers in juvenile detention facilities, in improving the quality of the father-child interaction.¹⁰ In the B3 evaluation, the impact study will assess whether the JB intervention has positive effects on the father-child relationship when administered on a larger scale and in a community setting.

IMPACT STUDY DATA AND METHODS

The logic model for the JB program (see Figure 4.1) hypothesizes that the intervention could have a range of positive impacts on the father-child relationships. The amount and quality of father-child contact and other potential outcomes will be measured at the start of the study in a baseline survey, and again six months later in a follow-up survey after participation in the JB intervention has ended. Chapter 2 describes the survey data in more detail.

¹⁰ Barr et al. (2011); Barr et al. (2014).

Some of the potential primary and secondary outcomes for the JB impact analysis are shown in the logic model, and the potential set of primary outcomes is listed in Table 4.2. The outcome measures focus on dimensions of the father-child relationship that the JB intervention is expected to affect. The fundamental goal of the JB intervention is to improve the quality of the father-child interaction. The impact analysis relies on fathers' self-reports of multiple dimensions of their relationship with their child, their relationship with the co-parent, and other outcomes. The outcome measures are drawn from previous studies including the Early Head Start evaluation, the Fragile Families and Child Wellbeing study, and a Fatherhood Research and Practice Network pilot survey administered in 2015.¹¹ Some measures were also adapted from the open-ended "This Is My Baby" questionnaire that has been used in prior evaluations of the Baby Elmo program.

As discussed previously, the JB intervention will require some involvement and cooperation from co-parents, and improved co-parenting quality could be a secondary outcome. Program staff will offer nonresident fathers support in negotiating access to their child for workshop sessions. Co-parents will be invited to an orientation session or be provided information on the program in other ways. The program could conceivably affect the quality of the co-parenting relationship. If JB has positive effects on fathers' relationship with their child and the co-parent, these effects could lead to an increase in child support.

To assess whether the JB program component has the intended effects on the father-child relationship and other outcomes, the study team will conduct an impact analysis that compares the outcomes of the JB program group with the outcomes of the services as usual group. As described in Appendix A, the impact analysis will pool the samples in the three JB program sites to achieve a sample large enough to detect program impacts. With a projected sample size of 1,100 fathers split evenly between the JB program and services as usual groups, the study has the power to detect impacts around 8 percentage points on dichotomous survey outcomes, such as whether the father engaged verbally with his young child.¹²

With the projected sample size, the study is unlikely to have the statistical power to detect impacts that differ across subgroups defined by baseline characteristics. Nevertheless, the study will undertake an exploratory analysis of impacts for a small number of subgroups — for instance, those defined by the child's age or whether or not the father lives with his child. These subgroups will be pre-specified in an analysis plan.

11 Office of Planning, Research and Evaluation (2010); Princeton University (2017); Office of Planning, Research and Evaluation (2015); Bates and Dozier (1998); Barr et al. (2011); Barr et al. (2014).

12 These percentage point estimates assume a control group mean of 50 percent. If the control group mean is 25 percent or 75 percent, then percentage point impacts of around 7 percentage points can be detected.

TABLE 4.2
POTENTIAL OUTCOMES FOR THE JB INTERVENTION FROM
THE SIX-MONTH FOLLOW-UP SURVEY

POTENTIAL PRIMARY OUTCOMES	MEASURES
Improved quality of parent-child relationship	Overall relationship quality; score on a scale of father-child relationship quality
Improved quality of father-child interaction	Father-child interaction quality; warmth and supportive parenting
Increased parenting efficacy	Score on a scale of parenting efficacy; perceived parenting quality
Increased developmentally appropriate engagement with child	Father engages child in labeling and verbal communication; father engages in learning and play with child
Increased commitment to child	Father's dedication and commitment to child
Increased father-child contact	Father's contact with child
Increased perceived influence over child	How much influence a father feels he has over his child now and in the future

VIDEO OBSERVATIONS OF FATHER-CHILD INTERACTIONS

The analyses from the process and impact studies will be complemented by observations of father-child interactions for a subset of JB fathers. In one or two JB program sites, the study team will video record father-child interactions during JB play sessions. The video recordings will begin in the second or third quarter of the study, and from that point on staff will video record all father-child play sessions for which parental consent can be obtained. These video recordings of father-child interactions will be systematically coded using a parent-child interaction coding scheme. The coded data will allow the study team to describe the nature of father-child interactions for a sample that includes a large proportion of fathers who live apart from their young children. While some research suggests that the quality of the father-child relationship may influence children's outcomes, information on how low-income nonresident fathers interact with their

young children is extremely rare. Collecting and coding data on father-child interactions will allow the study team to compare the features of these father-child interactions to those of other populations, such as low-income mothers, for which parent-child interaction data are more widely available.

The video observations of father-child interactions will also be used to assess whether fathers are applying the parenting techniques covered in the JB curriculum. Because the video recordings will capture each father-child dyad interacting in up to five JB sessions, the coded interactions will reveal whether use of the parenting techniques increases over the course of the intervention, as fathers acquire more experience with the JB program. This type of assessment of the change in father-child interaction quality over the course of the parenting intervention has been used in prior studies of the Baby Elmo program on which JB is based.¹³

¹³ Barr et al. (2011); Barr et al. (2014).

DadTime Intervention

5

As described in Chapter 4, the Just Beginning (JB) intervention comprises five sessions in which the father and child participate together. To bolster program participation and engagement in JB, the B₃ study team designed an engagement intervention called DadTime. The DadTime intervention is designed to both increase attendance at the JB sessions and also increase and improve the quality of the time fathers spend with their child.¹ A novel aspect of this intervention is that it is delivered via a smartphone app, allowing fathers to connect with the program component between sessions.

The DadTime engagement intervention is embedded within the JB program intervention but involves *only* the fathers who were assigned to the JB program group and who also had a smartphone at study entry. The DadTime study sample size is therefore much smaller than that of the JB study as a whole. For this reason, the DadTime engagement study should be considered *exploratory* — that is, it is not designed for drawing policy conclusions, but to support process and program improvement decisions.

This chapter describes the DadTime intervention and research design at the time this design report was written. Because the intervention involves new processes and features, some aspects may be modified during the follow-up period and after this report is published. The final impact report will document any changes or updates.

Based on reflections from program staff about when and why fathers stop participating in services, the study team learned that fathers may drop out immediately, between intake and the first session, meaning that some fathers are never exposed to program content. In addition, drop-off occurs between later sessions for several reasons:

- **Instability.** Fathers in the target programs face intermittent employment, interrupted housing, and other chaotic circumstances that make planning and follow-through challenging
- **Competing responsibilities.** Employment or job search and family commitments may demand the time and attention they would otherwise devote to the JB program
- **Unclear benefits.** Without a clear explanation, fathers may not immediately see the potential benefits of participating in a program with their child

¹ The Community Foundation for Greater New Haven (2016); Hayward (2016).

The engagement intervention aims to tackle these challenges in several ways. To help manage some of the instability that is associated with uneven program attendance, the DadTime smartphone app automates attendance reminders. These automated reminders have the added goal of freeing up staff to address fathers' other needs; while program staff contact many fathers between program sessions, it is difficult to reach everyone consistently given competing demands on staff time. To capture the limited attention of fathers with competing responsibilities, the intervention team designed the DadTime app to help fathers make plans through brief, self-guided interactions. These interactions can seamlessly create a plan for him with its own set of reminders. The app also displays messages at the end of each session that explain how attending sessions or practicing a new skill can improve the father's relationship with his child, helping him to identify and remember the JB program's benefits.

Mobile technology offers a promising, low-cost approach to reach and encourage fathers to participate in program services for a combination of reasons: First, smartphones have grown in prevalence and are now common among low-income populations.² Second, organizations increasingly use information technology to deliver program services.³ Finally, there is a growing evidence base to support the idea that technology-based behavioral interventions are a viable mode for low-cost, large-scale outreach.⁴

Mobile apps or text messaging interventions have shown promise in prior research. For example, multiple health interventions use mobile apps to curb smoking.⁵ Mobile apps and text messaging interventions have also been developed to promote father engagement and reinforce parenting skills.⁶ Results of these fatherhood and parenting evaluations have indicated a need for rigorous testing of mobile technology.⁷ With respect to program attendance, the Strengthening Relationship Education and Marriage Services (STREAMS) study — concurrent with the B3 study — is testing the effectiveness of various types of text messages to promote program attendance at healthy relationship education group sessions.⁸ Another recent study tested behaviorally informed e-mail messages to promote program participation in reemployment services.⁹

2 Poushter (2016).

3 Hackler and Saxton (2007).

4 Technology-based interventions have gained ground in the public health field and have been used to help people curb substance abuse and quit smoking and to treat depression (Gonzales, Anglin, and Glik (2013); Wei, Bouffard, and MacKenzie (2011); Preston, Walhart, and O'Sullivan (2011); Free et al. (2013)).

5 Valvidvieso-Lopez et al. (2012); Buller et al. (2014); Bricker et al. (2014); Baskerville et al. (2015).

6 Lee and Walsh (2015); Cramer (2014).

7 Lee and Walsh (2015); Coughlin et al (2016).

8 Office of Planning, Research and Evaluation (2017).

9 Darling et al. (2016).

The B3 DadTime study builds on this evidence base with a systematic, experimental test of a mobile app in a fatherhood program, for both resident and nonresident fathers, to encourage program attendance, reinforce skills, and improve father-child engagement. The B3 study team created the DadTime app, in conjunction with researchers from the University of Michigan and University of Wisconsin who had developed an app that showed promise in supporting fathers' engagement with their young children,¹⁰ and with CauseLabs, a mobile app developer.

This chapter proceeds with the research questions the study seeks to answer and a description of the intervention. The description includes a brief review of the literature that guided the development of the specific intervention components, drawing on key principles from behavioral economics. The chapter then describes the random assignment design and the analytic approaches related to the process, exploratory impact, and cost studies.

A fundamental impact study question the engagement intervention will address is whether use of a mobile app with reminders and planning tools can actually affect participation in a parenting program that requires the father to attend with his child.

Key process study questions the intervention will address are how was DadTime app implemented and how did fathers use it.

The DadTime Logic Model and Evidence Base

The theory of change for the intervention is that helping fathers *between sessions* to plan for their attendance and for how they will spend time with their child will boost program engagement, by supporting them at times when they may become discouraged.

Figure 5.1 displays the engagement intervention logic model and maps out the relationship between key inputs and expected outcomes.

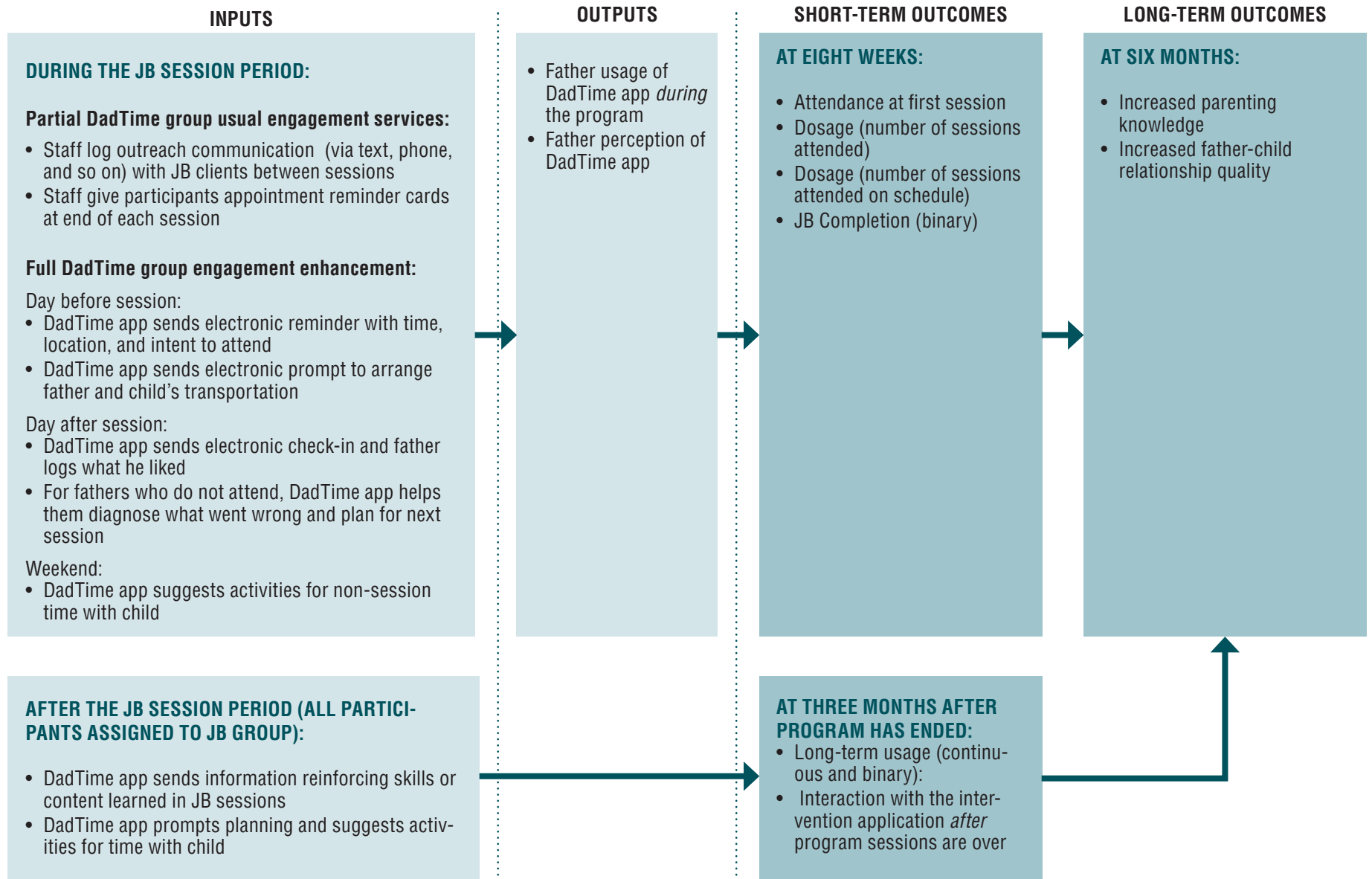
DADTIME INPUTS

During the JB session period, all fathers in the study will be offered the usual program services that support engagement, which include staff outreach and appointment reminder cards. Fathers in the full DadTime group also will have access to the DadTime app while they are participating in JB sessions. The app's engagement-enhancing interactions occur around three key points of contact: (1) reminders and planning support the *day before* a JB session to encourage attendance, (2) check-ins the *day after* the session to pro-

¹⁰ Lee and Walsh (2015). Fathers in this pilot were not engaged in any fatherhood programs.

FIGURE 5.1

DADTIME LOGIC MODEL



mote reflection and perceived value of the session’s content, and (3) activity suggestions and prompts *during the weekend*, when they are likely to see their children, to promote engagement with their children and a way to practice the skills learned in the sessions. These three brief interactions make up the contrast between the full and partial DadTime groups.

The literature suggests that an engagement intervention — whether to boost attendance or to promote increased usage of information or other resources — is best when each interaction lasts for a short duration but occurs with high frequency and interactivity.¹¹ The participants also will choose what time of day is most convenient to receive messages. Studies of health-related intervention also suggest that repeated educational messages offered at customized intervals increased effectiveness of a program in comparison with a single outreach.¹²

The partial DadTime group will not receive any app-driven tools or content during the JB session period, and will only receive twice-a-week skill reminders after the JB session period is over.

The DadTime engagement intervention builds on principles from behavioral economics and evidence from the literature on health-related behavioral change.¹³ The intervention draws on evidence about the importance of behavioral tweaks — or “nudges,” as they are frequently called — and behavioral concepts such as personalization of information, reminders, and prompts to action.¹⁴ The intervention applies the following behavioral concepts:

- **Personalization.** DadTime content will be personalized based on the child’s age and gender, and the frequency with which the fathers sees the child. For example, a father who sees his two-year-old child weekly may receive suggestions for ways to engage the child in conversation, while a father who sees his one-year-old child monthly may receive ideas for what the father could notice about his child’s growth the next time they are together. Previous text message interventions related to health and behavior identified tailoring of content as an important component.¹⁵ Tailoring of information through a smartphone app also has shown potential promise.¹⁶

- **Reminders.** The DadTime app allows the father to set the time at which he would like to receive a reminder, and the app will push a reminder to his phone at the scheduled time. For a nonresident

¹¹ Rolffs and Rogge (2016).

¹² Lenert, Munoz, Perez, and Bansod (2004).

¹³ Free et al. (2013).

¹⁴ Farrell, Smith, Reardon, and Obara (2016).

¹⁵ Fjeldsoe, Marshall, and Miller (2009).

¹⁶ Lee and Walsh (2015).

father, the app also allows him to send a prepopulated message to the person responsible for bringing his child to the JB sessions reminding the person of the appointment time and location. This opportunity to remind oneself and others enlists the father in coordinating and planning for his session, rather than just receiving an external reminder.

A variety of studies on participation in substance abuse counseling sessions showed that reminder letters, phone calls, and help with resolving transportation and other logistical obstacles to attendance improved participation.¹⁷ In addition, a recent MDRC evaluation showed that text messages plus postcard reminders boosted attendance at an initial program benefits session by 12 percentage points.¹⁸

- **Simplification.** The DadTime app collects and summarizes program content into bite-sized information takeaways, as well as embeds the main JB concepts of “notice,” “follow,” “talk,” and “encourage” (see Box 4.1) in a series of activity suggestions that allow fathers to practice the concepts easily. Simplified and behaviorally informed messages to promote action and attendance have shown to produce positive behavioral change.¹⁹
- **Planning tools.** Because fathers in the JB program group may have challenging life circumstances and may be unstably employed or involved in multiple social service systems, their schedules may vary quite a bit. Before each JB session, the DadTime app guides the father through a plan for transportation, directions, and when to depart for the session. When the app sends the reminder, it asks the father whether his plan still holds and whether he needs to reschedule. If he does, the app will send automatic notification to program staff. Planning tools have been main components of other mobile apps supporting fathers, which have not been experimentally evaluated. For example, the 24/7 To Go app, a free National Fatherhood Initiative mobile app, provides a planning checklist for fathers to download online.²⁰
- **Addressing barriers of fathers who do not attend.** When a father does not attend a JB session, the DadTime app asks him about the specific barriers that interfered with attendance, shows him examples from fathers who confronted those barriers, and walks him through planning and goal-setting exercises. In a recent study of problem-solving techniques, parents of children receiving mental health

¹⁷ Lefforge, Donahue, and Strada (2007).

¹⁸ Dechausay, Anzelone, and Reardon (2015).

¹⁹ Farrell, Smith, Reardon, and Obara (2016).

²⁰ National Fatherhood Initiative (2017).

services who experienced these practices were three times more likely to attend initial and subsequent appointments.²¹

To bolster program attendance and engagement during JB sessions, the DadTime app integrates these behavioral concepts in a set of interactions, each of which guides the father through a short and simple task and concludes with a message that clearly states the accomplishment. In this way, the app removes hassles for fathers, who may have limited time and financial and cognitive resources as a result of unstable housing and employment and competing responsibilities.²² The concluding message at the end of each interaction (see Figure 5.2) identifies clear benefits to the father of spending time with his child. The DadTime app also aims to create a sense of routine in the father around planning that, if successful, could extend beyond attending JB sessions to dedicating time with his child and following through on parenting and co-parenting commitments.

To reinforce skills and content after JB sessions have stopped, DadTime will be available to all fathers in the JB program group eight weeks after they enroll in the B3 study. For up to 10 weeks, DadTime will focus on a specific skill or strategy from the JB sessions, prompt the father to plan activities with his child, and offer suggestions for how to spend time together. Figure 5.2 presents examples of messages from DadTime.

DADTIME OUTPUTS

Taken together, the inputs are expected to lead to outputs. For this intervention, outputs are the measurable usage of the DadTime app during the study period and staff's and fathers' perceptions of DadTime's content and usability.

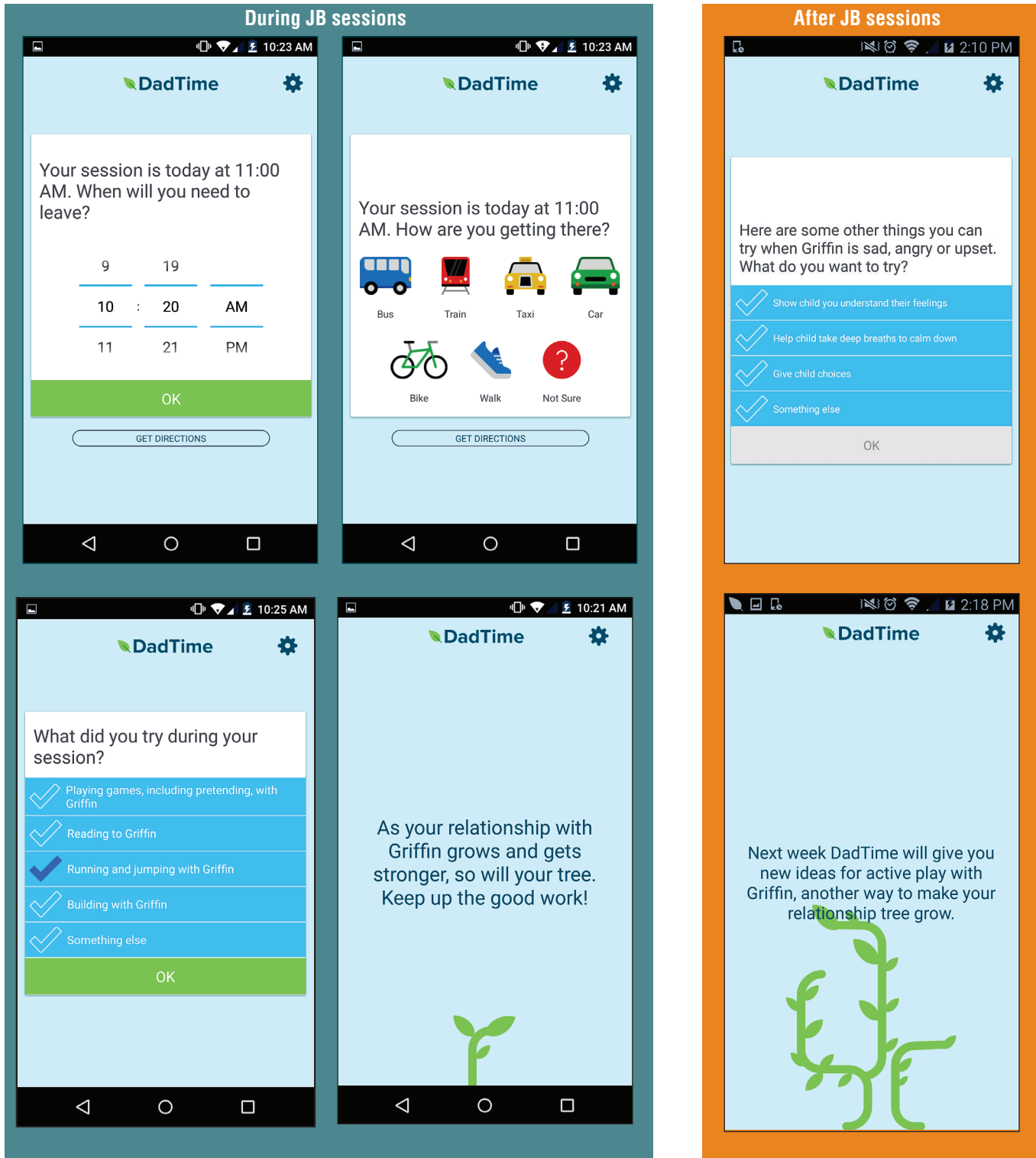
DADTIME OUTCOMES

The engagement intervention targets a more immediate proximal outcome than do the employment or parenting interventions — attendance at the first JB session and attendance rates across all five sessions. A long-term outcome is use and application of the skills at six months.

²¹ Stern et al. (2015).

²² Mullainathan and Shafir (2013).

FIGURE 5.2
EXAMPLES OF MESSAGES FROM DADTIME



Overview of DadTime Random Assignment Research Design

Figure 5.3 illustrates the random assignment design that the B3 study team will use to evaluate the intervention's impacts. Fathers in the JB program group who have smartphones at intake will be randomly assigned to either the full or partial DadTime group. Fathers assigned to the full DadTime group are offered access to the DadTime app during and after their participation in the JB sessions, which includes planning tools and support to attend the JB sessions. Fathers assigned to the partial DadTime group are offered access to the DadTime app only eight weeks after intake, when the father is likely to have completed his participation in the JB sessions — therefore these fathers do not receive planning support via the app.

All fathers in the JB program group who had smartphones at intake, regardless of whether or not they completed the five sessions, will be offered access to DadTime after the eight-week interval. The app content after the eight-week interval provides fathers an opportunity to practice the skills they learned in JB, essentially extending the JB intervention.

This type of concurrent experiment embedded within a randomly assigned program group was used in MDRC's Paycheck Plus evaluation, in which individuals randomly assigned to a group that was eligible for Paycheck Plus were also given referrals to employment services.²³

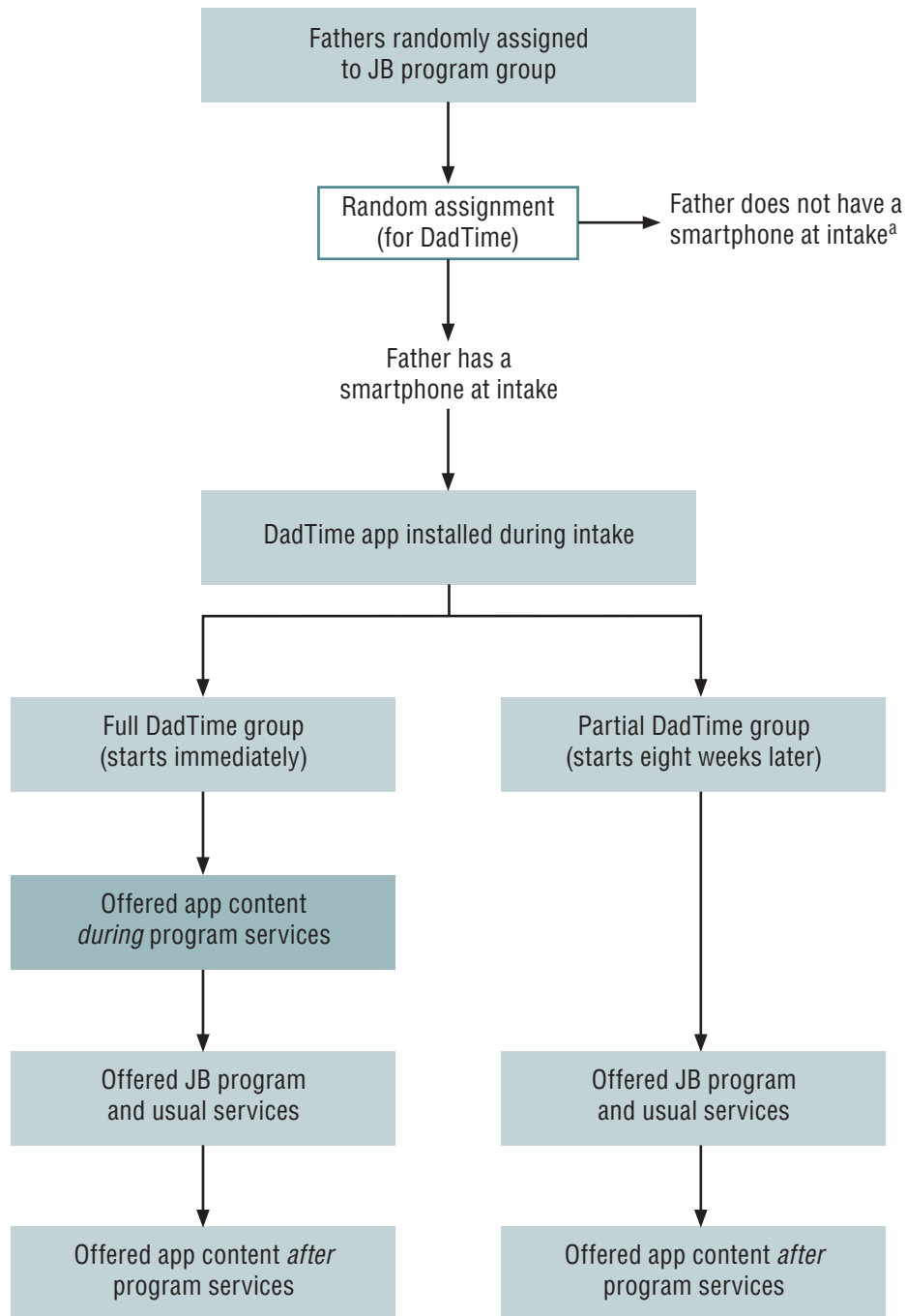
Service contrast of interest. The contrast between the two experimental groups is the access to the app-driven reminders and planning prompts while attending the JB sessions. All fathers assigned to the JB program group, regardless of whether they are in the full or partial DadTime group, will be offered a similar package of core engagement services that include the following:

- 1 Incentives for participation.
- 2 Staff will follow structured guidelines for setting up fathers' JB session appointments, including providing appointment reminder cards. Staff will troubleshoot with fathers (and co-parents) about participation issues as needed.
- 3 Eight weeks after study intake, all JB program group members will be offered access to the DadTime app, whose content and activity prompts at this time will reinforce the skills learned in the JB sessions. (After eight weeks, most fathers will have completed the JB sessions.)

²³ Pardoe and Bloom (2014).

FIGURE 5.3

DADTIME INTERVENTION INTAKE FLOW



NOTE: ^aFathers who do not have a smartphone at intake will not be included in the DadTime research sample but will be randomly assigned. If a father gets a smartphone after random assignment, staff can install DadTime but he will not be part of the research sample.

DadTime Process Study Research Questions, Data Collection, and Analysis

The process study for the DadTime engagement intervention will focus on how the DadTime mobile app was implemented, how fathers used it, and what fathers thought of it. The study will also compare how the app was used by fathers in the JB program group who had access to it from study intake (full DadTime group) with those who had access to it eight weeks later (partial DadTime).

The study team will rely on a mixed-method approach to understand the role of program engagement strategies used at each JB program site, specifically the DadTime mobile app. This approach includes using semi-structured interviews with program staff and focus groups with program participants, the staff survey, and participants' DadTime app usage data. Table 5.1 lists the process study research questions, the measures informing the research questions, and data sources.

The following are the key process research questions:

- 1 Intended model.** What usual engagement strategies does each Responsible Fatherhood program use with fathers? What is DadTime? In what ways does DadTime differ from the usual strategies?
- 2 Activities.** How was DadTime implemented?
- 3 Outputs.** What were the app usage patterns of fathers in the full DadTime group? What were the app usage patterns of fathers in the partial DadTime group? Did fathers' repeated use of the app vary by key baseline characteristics? What did fathers with any access to DadTime — and the staff who worked with them — think of the app? What engagement strategies did JB program sites actually use with fathers in the partial DadTime group while they participated in JB sessions?

The study team will use a number of measures to address each research question. For the first research question, the team will combine qualitative data sources (interviews and focus groups) with a quantitative data source (staff survey) to determine what the intended models were and how the DadTime engagement intervention differs from usual engagement strategies. For the second research question, the study team will rely on staff interviews and participant focus groups to describe how the DadTime app was implemented; these data include information about installing the app on fathers' smartphones, the app's content and features, and the information and message delivery schedule. This information will provide practical lessons to those in the field interested in implementing mobile technologies.

TABLE 5.1

PROCESS STUDY RESEARCH QUESTIONS, MEASURES, AND DATA SOURCE FOR THE DADTIME INTERVENTION

RESEARCH QUESTION	MEASURES	DATA SOURCES
<p>Intended Model What were usual engagement strategies and what strategies were involved in DadTime?</p>	<ul style="list-style-type: none"> Engagement strategies 	<ul style="list-style-type: none"> Staff survey Father focus group Staff interviews Document review
<p>Activities How was DadTime implemented?</p>	<ul style="list-style-type: none"> Installation Content and features Delivery schedule 	<ul style="list-style-type: none"> Father focus groups Staff interviews Document review
<p>Outputs What were the DadTime app usage patterns of fathers in the full DadTime group? What were the app usage patterns for fathers in the partial DadTime group?</p>	<ul style="list-style-type: none"> Frequency of usage Timing of usage Feature preferences Number of fathers who opted out 	<ul style="list-style-type: none"> DadTime app usage data
<p>Did repeated use of the DadTime app vary by key characteristics of the father?</p>	<ul style="list-style-type: none"> Frequency of usage Native English-speaking status Stated frequency of contact with one's child Employment status 	<ul style="list-style-type: none"> DadTime app usage data nFORM
<p>What did fathers offered access to DadTime, and the staff who worked with them, think of the app?</p>	<ul style="list-style-type: none"> Quality Satisfaction 	<ul style="list-style-type: none"> Father focus groups
<p>What actual engagement strategies were used with the full and partial DadTime groups?</p>	<ul style="list-style-type: none"> Engagement strategies 	<ul style="list-style-type: none"> Father focus groups Staff interviews

NOTE: nFORM = the B3 study's management information system.

The third set of research questions address the outputs — or, how fathers actually used the app. These outputs include the frequency with which fathers used the app, when fathers tended to use the app, which features father used most, and how many fathers used the app or opted out of having it on their smartphones. The study team will compare these outputs for the full DadTime group with those for the partial DadTime group. Understanding the outputs will offer lessons about how to use mobile technologies in fatherhood and other social service programs.

The process study will dig deeper into the DadTime app usage data to examine the frequency of app usage by fathers' baseline characteristics. These subgroups of interest include native English speaking status, the father's stated frequency of contact with his child, and employment status — factors that may relate to how helpful they find the app content. In addition, the study will explore whether fathers who stop attending the program continue to use the app. This subgroup analysis is not for the purpose of estimating impacts, but rather to determine usage patterns that will inform the structure and content of future apps. The process study will also examine what staff and fathers who used DadTime thought the app, and whether staff changed their engagement strategies because of the app. Specifically, did DadTime unintentionally influence the staff's relationship with the fathers, such as staff reporting they did not work as closely with fathers? Or, to the contrary, did staff find that DadTime led fathers to stay in closer touch with them? Finally, the process study will document what initial engagement strategies staff actually used with fathers in the partial DadTime group, which did not have access to the app during their JB session period.

ENGAGEMENT COST ANALYSIS

The primary goal of the cost analysis is to determine the difference in the steady-state costs of monitoring and maintaining a mobile app with motivational and behavioral features in addition to usual staff outreach for participants between JB sessions and the steady-state costs of usual staff outreach for participants between JB sessions. This analysis will not include the cost of developing the mobile application because development costs are likely to change substantially and quickly as technology improves and because the app is designed so that programs can reuse portions of the app in the future. The technological and staff time costs of monitoring and addressing any problems in the app are analogous to those of monitoring the delivery of social services. The process study will provide the data necessary to understand the costs of implementing the app and usual engagement strategies will come from the process study, which will include how program staff spend their time.

EXPLORATORY IMPACT ANALYSIS

Several factors limit the sample size for the engagement study. Not all fathers who are randomly assigned to the JB program group own smartphones, thereby limiting the pool of eligible participants for the engagement study. In addition, because the app is a newly designed intervention, the study team anticipates needing to modify or adjust components during the initial implementation period or potentially at other

points in the study to address any obstacles that fathers encounter. The goal is to maintain the intervention's primary components and structure if possible, but to be open to modifying elements that hinders fathers' access or use. Due to potential changes to the intervention early in the study, a final standardized version of it likely will not be in place until a few months after the JB program components have begun. Therefore, the sample that the study team will use in the DadTime engagement intervention will likely be a subset of the full JB program group sample.

As a result, the study team will not have a large enough sample to detect modest effects at traditional levels of statistical significance. (Typically attendance-focused interventions do not have effects above 10 percentage points).²⁴ Therefore, the proposed impact analysis does not represent a test of effectiveness at the typical significance levels used in social program evaluations. Instead, it represents an exploratory impact analysis, benefiting from the rigor of a random assignment design. A causal estimate of the effect of full DadTime program component can be determined by comparing the outcomes for fathers assigned to full DadTime with the outcomes for fathers assigned to partial DadTime, both of whom are members in JB program group.

While sample size may limit the statistical *precision* of impact estimates (given the expected effect sizes for attendance outcomes), it should be sufficient to determine whether the direction and strength of effects holds promise for future innovation. Similarly, analyses of effects for particular subgroups are exploratory when they do not have sufficient sample size but still provide guidance on the promise of an intervention and potential future hypotheses to test for a target group.

The primary research questions for the exploratory impact analysis of engagement are the following:

- 1 Does access to the DadTime app upon study enrollment increase attendance at the first JB session compared with attendance among fathers who are offered the app eight weeks later?
- 2 Does access to DadTime's reminders and planning support between sessions cause fathers to attend more JB sessions than fathers who do not receive app-driven reminders and planning support?

The study also will address these secondary questions about engagement and knowledge of JB content:

- 3 Do fathers offered access to the DadTime app during the JB session period (the full DadTime group) use the app tools and JB -related content more during the two to three

²⁴ Farrell, Smith, Reardon, and Obara (2016); Dechausay, Anzelone, and Reardon (2015).

months after completing the JB sessions than fathers offered access to the app only after completing the JB sessions (the partial DadTime group)?

- 4 Does access to mobile app-based information and father-child activity prompts during the JB sessions (the full DadTime group) have an impact on parenting knowledge and father-child relationship quality six months after intake, as compared with the partial DadTime group?

KEY OUTCOMES

As the research questions indicate, the exploratory impact study examines participation outcomes and engagement outcomes.

Participation outcomes. For the primary analysis, the study focuses on attendance at the first JB session and the number of JB sessions attended by eight weeks after intake. If the DadTime app is installed at intake as intended, it will send reminders and prompts to the father before the first JB session (for the full DadTime group only), which could increase attendance at the first scheduled session. Based on existing patterns of participant dropout between intake and the first session, attendance at the first session is an important milestone for programs. The number of sessions attended indicates exposure to, or frequency and intensity of, overall program content.

Engagement outcomes. For the secondary analysis, the study will examine the number of JB sessions attended on schedule, whether all five JB sessions were completed, and whether the father continues to interact with the DadTime app after the JB sessions have ended. In other studies, engagement is typically measured as the number of sessions attended.²⁵

For the latter outcome, effects could manifest in either direction. Fathers assigned to the full DadTime group could interact with the DadTime app after completing their JB sessions *either* more than those who are offered access to the app only after completing their JB sessions because they will have formed more of a habit with the app, or *less* than this group because they could grow tired of the app or for other reasons. Either way, the difference in the fathers' use of the app will provide valuable knowledge for the field about the sustained use of mobile apps, as other text message and mobile app interventions have had mixed results on adherence and drop-off.²⁶

To assess exploratory impacts of the full DadTime app on parenting, the study will examine separate outcomes from the follow-up survey. Given that the app is building on and in some ways extending the JB

²⁵ Manno, Yang, and Bangser (2015).

²⁶ Free et al. (2013); Donker et al. (2013).

curriculum, it is likely that the intervention could improve parenting knowledge by giving fathers in the full DadTime group more opportunity to reinforce concepts learned in the JB sessions since they receive reminders and encouragement from the app to plan particular activities, as compared with fathers in the partial DadTime group.

The study will draw on the six-month follow-up survey to measure how fathers interact with their children and whether fathers maintain their plans to see their children. The study will compare these parenting outcomes for the full DadTime and partial DadTime groups.

METHODOLOGY FOR EXPLORATORY IMPACT ANALYSES

The parameter of interest is the average treatment effect from an intent-to-treat analysis. In other words, the study examines whether the *offer* of the DadTime app to fathers with smartphones in the full DadTime group improved outcomes relative to fathers in the partial DadTime group.

The exploratory impact analysis will pool participants across sites. Due to limitations of sample size, even in an exploratory study, the study team cannot reliably report on differences in impacts between subgroups defined by baseline characteristics.

Looking Ahead

6

Responsible Fatherhood programs seek to improve father-child relationships, promote healthy co-parenting relationships and marriages, and improve fathers' economic stability. To date, there have been few rigorous evaluations of Responsible Fatherhood program services, and those that have been conducted have had limited success in advancing these objectives. Against this backdrop, the B3 study responds to the need for new and innovative program components that could represent promising new directions for the field.

The B3 study is an early efficacy test of three new program components that share the overarching objectives of most fatherhood programs — to encourage fathers' involvement with their children, healthy co-parenting relationships, and employment stability — but represent distinctive and novel avenues for pursuing these goals. The evaluation of the Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp) program component is the first rigorous evaluation of a cognitive behavioral approach to employment services for fathers. Just Beginning (JB) represents the first systematic attempt and rigorous evaluation of fatherhood program services that directly engage fathers and their children. DadTime is the first rigorous test of mobile device technology as a means to encourage program participation in a fatherhood program context. All three of these new components draw on an evidence base outside of the fatherhood program context, but are the first experimental tests of these components implemented within this context.

Because of the innovative and novel nature of these interventions, an important contribution of the B3 study is documenting the implementation processes and providing lessons for the field on how to incorporate these program components into existing fatherhood program services. The study will also provide rigorous evidence on the impacts of these early efficacy tests. The process and impact study findings will provide several lessons for the fatherhood field and policymakers, including:

- What were the sets of resources — staffing, materials, training, monitoring, and technical assistance — required to implement the added program components?
- To what extent can fatherhood programs encourage fathers to voluntarily participate in a cognitive behavioral job-readiness curriculum? What proportion of fathers attended? What proportion of fathers completed participation milestones? Did the added CBI-Emp program component generate positive program impacts on employment stability and other outcomes?
- To what extent can fatherhood programs successfully facilitate fathers' participation in father-child parenting sessions with their young child? Can programs facilitate cooperation with co-parents to

allow children to attend scheduled sessions with their fathers? Did the added JB program component generate positive program impacts on the quality of the father-child relationship and other outcomes?

- Was the use of mobile phone technology a successful strategy for increasing program participation? What were fathers' patterns of usage of a mobile phone app designed to encourage attendance and reinforce program content?

The planned reports and briefs for the B3 study will address these and other policy-relevant questions for the field.

Figure 6.1 presents a timeline of recent and planned B3 study activities and deliverables from 2016 through 2019.

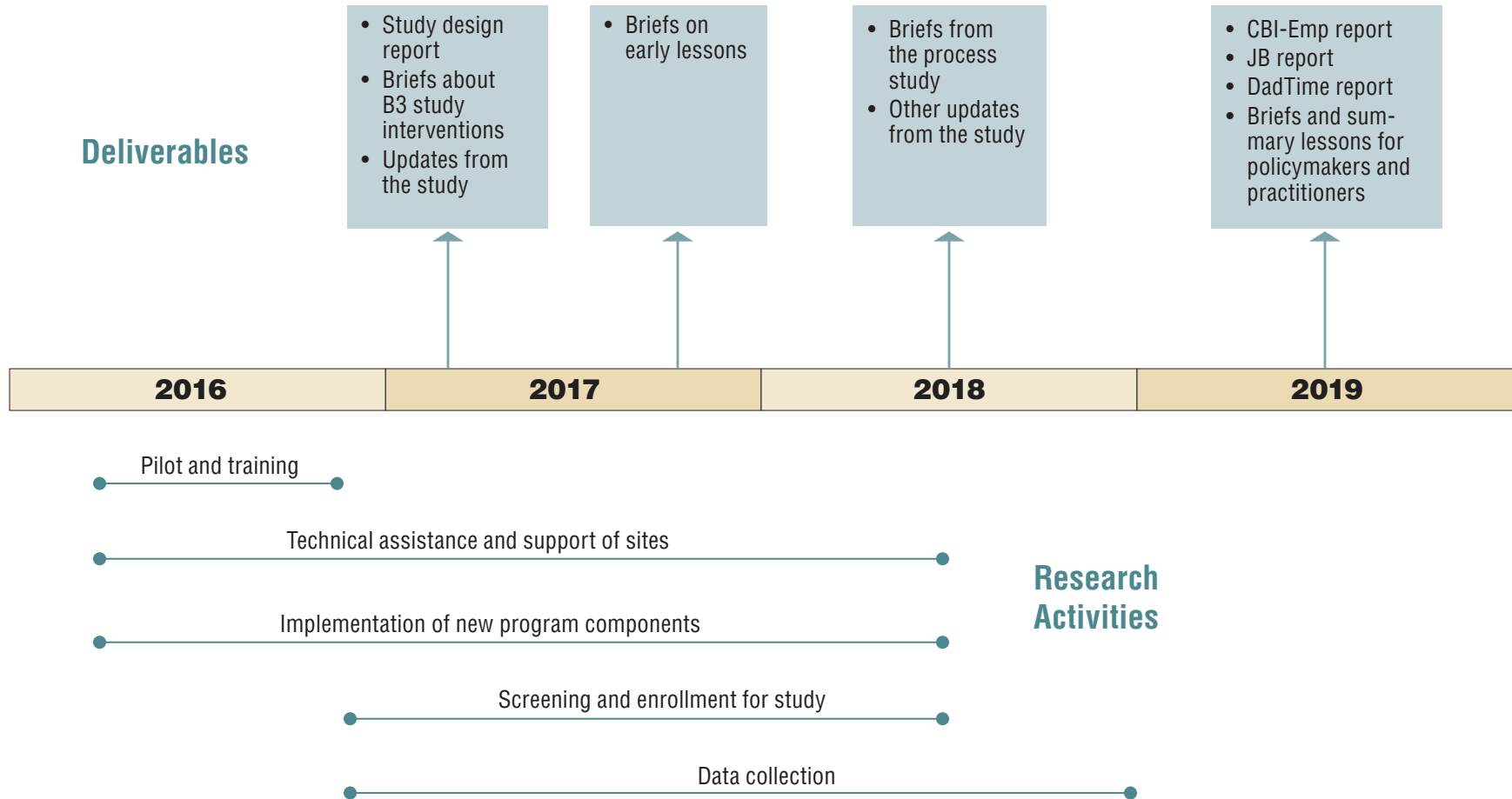
The program components being evaluated in the B3 study — CBI-Emp, JB, and DadTime — are being newly introduced to six local programs and implemented for the study. During a relatively short training and pilot period, staff at each of the program sites have had the opportunity to implement the new program components on a small scale and to troubleshoot service delivery and resolve any data collection issues before the new program components were officially launched and study enrollment began. The training and pilot period for CBI-Emp and JB began in the summer of 2016. The pilot period for the DadTime engagement app will begin in early 2017. The video observations of father-child interactions in one or two parenting sites will begin in the spring of 2017.

Starting during the training and pilot period and continuing through the end of study enrollment in 2018, MDRC, MEF Associates, and curriculum developers will provide ongoing technical assistance and support to program sites. This technical assistance and support will involve visits to each site by the study team on an approximately quarterly basis and regular site visits by curriculum developers or videotaped feedback by coaches of facilitators, as well as ongoing weekly or biweekly phone calls. These program supports will be more intensive at the beginning of implementation but will continue throughout implementation. This pilot and training period may lead to some modifications to the planned program implementation. The process study report will provide an update on any such modifications.

The study began enrolling fathers into the B3 study in the fall of 2016. Implementation of the new program components will continue through 2018, with a possibility of extending the enrollment and service delivery to meet sample size targets.

Survey data collection began when study enrollment began and will continue until the six month follow-up surveys are completed for all fathers. All of the process study data collection will also be collected during this data collection period.

FIGURE 6.1
B3 STUDY TIMELINE



The deliverables for the project will include study reports and shorter research or policy briefs. This report is one of the first project deliverables. In early 2017, a brief was released that describes the three interventions that the B3 study sites are implementing. In 2018, the study team plans to release briefs that will discuss initial process findings from each intervention.

In 2019, the study team anticipates releasing final process and impact study reports for the CBI-Emp, JB, and DadTime engagement interventions.

APPENDIX

A

Power to
Detect
Program
Impacts



To have sufficient statistical power to detect program impacts, the set of three Cognitive Behavioral Intervention for Justice Involved Individuals Seeking Employment (CBI-Emp) program sites and the set of three Just Beginning (JB) program sites will be pooled. The projected pooled sample size is 1,100 fathers in three CBI-Emp sites and 1,100 fathers in three JB sites, divided evenly between the added program component group and the services as usual group. The DadTime app intervention will be evaluated for a somewhat smaller sample of up to 400 or 500 fathers who are assigned to the JB program group and have smartphones.

Appendix Tables A.1 and A.2 show the “minimum detectable effect” for the analysis of program impacts. A minimum detectable effect is the smallest true effect that is likely to generate statistically significant estimated effects. Specifically, the minimum detectable effect is the smallest effect that would generate statistically significant findings in 80 percent of studies with a similar design, using two-tailed t-tests, with a 10 percent significance level. Appendix Tables A.1 and A.2 present effect sizes in standard deviation units of the outcome being examined. These tables also translate these effect sizes into the minimum percentage point impact that could be detected for dichotomous outcomes, given the projected sample size.

Appendix Table A.1 estimates the minimum detectable effects sizes for the CBI-Emp and JB impact analyses. These effect sizes are estimated for the full sample and for subgroups. When estimating effect sizes for subgroups, the power calculations are for detecting significant differences in the impact estimates among subgroups.

The study team will estimate CBI-Emp and JB program impacts on outcomes from the six-month follow-up survey. The power calculations for the survey outcomes assume that 80 percent of fathers in the program and services as usual groups respond to follow-up surveys. The survey impact analyses will be supplemented with analyses of administrative records data. In the power calculations, the administrative records data are assumed to be available for the full sample of fathers, and, therefore, use a larger sample size. If the study team cannot obtain administrative records for the full sample, then these power calculations will slightly overestimate the sample size and statistical power for the administrative records impact analyses.

Because these CBI-Emp and JB interventions have the same projected sample sizes, the power calculations are identical. For dichotomous outcomes, the minimum detectable effects (MDEs) assume that 0 percent of variance in outcomes is explained by covariates. For continuous outcomes, the MDEs assume that a baseline measure of the outcome is included as a covariate and that 30 percent of variance in outcomes is explained by covariates.

With a sample size of 1,100 fathers, the study team is powered to detect impacts that are in the range of .14 to .17 standard deviations or larger when using survey data or in the range of .13 to .15 standard deviations or larger when using administrative records data.

APPENDIX TABLE A.1

MINIMUM DETECTABLE EFFECT SIZE OF PROPOSED SAMPLING PLAN FOR CBI-EMP AND JB INTERVENTION IMPACTS

	Minimum Detectable Effect Size ^a	Effect on Outcome in Percentage Points
SURVEY DATA		
Dichotomous outcomes ^b	0.2	8.4
Continuous outcomes ^c	0.1	—
Subgroups (% in larger subgroup) ^d		
50	0.3	—
60	0.3	—
70	0.3	—
80	0.4	—
Sample size ^e = 880		
ADMINISTRATIVE RECORDS DATA		
Dichotomous outcomes ^b	0.2	7.5
Continuous outcomes ^c	0.1	—
Sample size ^e = 1,100		

NOTES: ^aMinimum Detectable Effects (MDEs) are expressed in terms of standard deviations of outcomes. MDEs are the smallest true impact that would generate a statistically significant impact estimate in 80 percent of studies with a similar design using two-tailed t-tests and with a 10 percent significance level. No adjustment for multiple comparisons is assumed.

^bBaseline covariates are assumed to explain 0 percent of variation in outcomes across fathers participating in the study for dichotomous outcomes. Percentage point estimates assume a control group mean and standard deviation of 0.50.

^cBaseline covariates, including a baseline measure of the outcome, are assumed to explain 30 percent of variation in outcomes across fathers participating in the study for continuous outcomes. Percentage point estimates are not applicable for continuous outcomes.

^dSubgroup MDEs are calculated for continuous outcomes assuming that covariates explain 30 percent of variation in outcomes. Percentage point estimates are not applicable for continuous outcomes.

^eProjected sample sizes are the same for CBI-Emp and JB interventions and are pooled across three sites. The sample is assumed to be split evenly across research conditions. Survey data are assumed to be available for 80 percent of the full sample, and administrative records data for the full sample.

To give a better sense of the magnitude of impacts that can be detected with the expected sample sizes, these effect sizes can be translated into percentage points or other metrics in which particular outcomes are measured. For the CBI-Emp intervention, if 50 percent of the services as usual group is ever employed in the six-month follow-up period, an effect size of 0.17 would correspond to a CBI-Emp program impact of 8.4 percentage points on the ever employed outcome using survey data. If the services as usual group earned \$1,500 on average over the six-month follow-up period and the standard deviation on earnings was \$2,000, the 0.14 effect size would correspond to a CBI-Emp program impact of \$280 in earnings.¹ Using administrative records data, the sample size increases and the minimum detectable effects decrease. With administrative records data, the study team has the power to detect an impact on employment that is 7.5 percentage points or larger and an impact on earnings that is \$252 or larger.

Similarly, for the JB intervention, if 50 percent of the services as usual services group report regularly verbally engaging with their young children in the six-month follow-up period, an effect size of 0.17 would correspond to a JB program impact of 8.4 percentage points, meaning the program increased the percent of fathers who report verbally engaging with their young child from 50 to 58 percent.

MDEs for Exploratory DadTime Engagement Analyses

The DadTime engagement impact study relies on a smaller sample size than the other interventions because only fathers who are assigned to the JB program group and have a smartphone are eligible for the DadTime engagement impact study. Because the sample size for the engagement intervention is expected to be 400 to 500 fathers, the impact analysis will be exploratory. See Appendix Table A.2.

While this analysis is not a traditional impact analysis, some upper and lower bounds for minimum detectable effect sizes are presented to illustrate the magnitude of effects that could be detected. If enrollment in JB is low, closer to 400 participants across the three program sites, a larger effect would be needed than if enrollment in JB reaches 500 people.

Focused on a binary outcome of attendance at the first session, the minimum detectable effect ranges from 11.2 to 12.5 percentage points. For the number or percent of sessions attended, the results are similar, but potentially more difficult to attain since fathers' program participation rates tend to wane over time.

1 The assumptions about the services as usual group earnings and the standard deviation of earnings are based on data from the nonresident parents in the Enhanced Transitional Jobs Demonstration study. The standard deviation of earnings is expected to be relatively large, because of variability in earnings across West Virginia, New York City, and Cleveland, Ohio — the settings that will be pooled for the CBI-Emp study.

APPENDIX TABLE A.2

EXPLORATORY ANALYSIS: UPPER AND LOWER BOUNDS FOR MINIMUM DETECTABLE EFFECT SIZE FOR DADTIME INTERVENTION IMPACT ON PARTICIPATION OUTCOMES

Target Outcomes	Minimum Detectable Effect Size ^a	Effect on Outcome in Percentage Points
ASSUMING HIGHER JB RECRUITMENT		
Attendance at first session	0.2	11.2
Percent of sessions attended	0.2	—
Sample size ^b = 500		
ASSUMING LOWER JB RECRUITMENT		
Attendance at first session	0.3	12.5
Percent of sessions attended	0.3	—
Sample size ^b = 400		

NOTES: ^aMinimum Detectable Effects (MDEs) are expressed in terms of standard deviations of outcomes. MDEs are the smallest true impact that would generate a statistically significant impact estimate in 80 percent of studies with a similar design using two-tailed t-tests and with a 10 percent significance level. No adjustment for multiple comparisons is assumed.

^bSample size is for pooled sample across three JB sites and split evenly between program and control conditions.

Baseline demographic covariates are not assumed to explain any of the variation in participation outcomes across fathers participating in the study. Percentage point estimates assume a control group mean and standard deviation of 0.50.

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