Evaluation of the Bright Start Genetic Testing Program

Prepared for the State of Washington Department of Social and Health Services

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CHAPTER 1

Introduction and Summary

Introduction

In mid-2005, the federal Office of Child Support Enforcement (OCSE) awarded Washington State’s Division of Child Support (DCS) a Section 1115(a) demonstration grant to implement and rigorously evaluate enhancements to its pioneering work in voluntary paternity establishment. The demonstration project—called Bright Start—sought to demonstrate that a renewed and reinvigorated relationship with hospital staff could measurably improve rates of in-hospital paternity establishment. The project also sought to test the feasibility and demand for complementary services that could be offered during a hospital stay, including genetic testing. Bright Start’s four-year experience in the implementation of genetic testing is the focus of this report.

To build the case for the free genetic test offer, DCS managers noted that not all mothers were certain about the paternity of their newborn. And, hospital staff had few, if any, suggestions for mothers who declined to sign an affidavit because of uncertainty about paternity. The program’s supporters argued the offer could eliminate some inappropriate affidavits signed by men who are not biological fathers and could encourage additional affidavits among men who, before the test, were uncertain about paternity. To avoid situations in which parents, who are already certain about paternity, request a test simply because it is free, Bright Start instructed hospital staff to limit the offer to only parents who express uncertainty about paternity. If a couple chose not to complete an affidavit, however, hospitals were to offer testing information without further questioning.

During 2006-2008, the Bright Start demonstration operated in 15 hospitals in the Tacoma, Fife, Vancouver, and Yakima areas. In mid-2008, the federal government approved funding to expand the program to 14 additional hospitals in Seattle, Spokane, Moses Lake, and the Tri-Cities areas. As the demonstration came to an end in the Fall 2009, DCS planned to expand to all birthing hospitals in the state.

Key Findings

Stakeholders inside and outside of DCS viewed the genetic test offer as an appropriate complement to the paternity affidavit program.

- The program enjoyed near universal support among hospital staff. Nurses, social workers, and vital records staff embraced the service and saw it as filling a gap for couples that were unsure about paternity of a newborn. In the views of many, the test offer filled a hole in the affidavit program. For years, hospital staff has been providing the opportunity to attest to paternity but could offer no
advice to mothers who were unsure about the paternity of their newborn.

- **Hospital staff training likely explains uneven implementation.** Despite strong support for the genetic testing component of Bright Start, hospitals varied greatly in how consistently they offered parents information about the no-cost genetic test, as suggested by the distribution of referrals by hospital. While differing patient demographics explain some of the variation, interviews at several hospitals revealed that staff does not consistently offer the genetic test information when parents decline to sign the paternity affidavit. Such inconsistencies appeared to primarily be the result of staff turnover, and managers at underperforming hospitals indicated that they will be more vigilant in presenting this service in the future.

- **A small but measurable share of couples request tests.** The percent of unmarried parents that requested a test through Bright Start birth hospitals varies between 0 and 6 percent. We predict that, statewide, between 1.3 and 2.0 percent of unmarried parents will request a genetic test while at the hospital with statewide implementation of the program.

- **Hospitals with higher hospital-based paternity establishment rates also tend to have higher referral rates for genetic tests.** Although the relationship is not strong, a more robust statewide paternity acknowledgement program might be expected to produce relatively more genetic test requests than a weaker program.

- **With a few exceptions applicants’ demographic characteristics mirror those of all unmarried mothers giving birth at Bright Start hospitals.** As a group, non-white mothers were relatively less likely to request a test than were white mothers, although the share of applicants mothers identified specifically as African American was greater than the share of African American mothers among all unmarried births. At the same time, mothers with greater educational attainment and greater socioeconomic status were relatively more likely to request a test. The data were too limited to draw strong conclusions regarding these findings, but they suggest that different demographic groups vary in either their uncertainty regarding paternity, their willingness to participate in voluntary genetic test, or both.

- **A waiting period does not dampen participation among genetic testing applicants.** Couples interested in genetic testing had to apply to Bright Start for services and then typically waited about 25 days to take the test. Despite the wait and required travel, 83 percent of applicants appeared for their test appointments. Prompt

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1 Bright Start reports that the typical lag between application and scheduled test date has shrunk over time.
processing of applications and reasonably convenient testing locations were a key to the high participation rate.

- **Bright Start program helped resolve paternity uncertainty and may have prevented errors in paternity establishment.** Although a minority of men (18%) were ultimately ruled out as the biological father, 82% of Bright Start’s genetic tests confirmed the paternity of the tested child.

- **Offering genetic testing has improved establishment outcomes.** Out of 216 applications completed with tests indicating inclusion within 120 days, 33% ultimately established paternity. This results in an average of 1 establishment per every 3 to 4 inclusions.

- **The total program cost per completed test for statewide program implementation is estimated between $304 to $317.** The estimates include the cost of the test itself and the staff resources necessary to process genetic test referrals. We estimate a program that includes enhanced “second effort” follow-ups with identified biological fathers to encourage official paternity establishment would cost between $350 and $365 per completed test, and somewhat less per referral because not all referrals produce a test result.

**Organization of the Report**

This report is designed to document the processes and outcomes of Bright Start’s genetic testing offer, as well as, to serve as a “how to” guide for other states or regions that might be interested in implementing a similar service. Chapter 2 details the program’s processes, step-by-step, from the hospital-based offer and application to the couple’s receipt of test findings. Chapter 3 outlines the analysis of program outcomes and summarizes: the total number of applications by hospital, the characteristics of applicants and testing no-shows, the incidences of paternity inclusion and exclusion, and subsequent paternity establishment status of men included by the genetic test. Chapter 4 projects the staffing and funding requirements of a genetic test program at full implementation and offers concluding thoughts for states considering a similar program.
Chapter 2

Genetic Testing Process

INTRODUCTION

The State of Washington viewed the offer of a genetic test as a natural complement to the long-standing in-hospital paternity establishment program. To be effective, the test offer would need to take place at the hospital, at the same time unwed couples are considering paternity acknowledgement. Bright Start’s managers hypothesized, and the program’s experience confirmed, that a small but measurable percentage of couples are uncertain about paternity at the time of birth.

The program’s design and process are relatively simple. To deliver the genetic test offer, Bright Start tapped the network of birthing clerks, nurses, and social workers that disseminate the Washington Paternity Affidavit form. Next, Bright Start’s manager developed a self-standing management information system to accept applications, set and track client appointments, and close cases. Bright Start selected a national genetic testing company approved under an existing Washington State contract as the provider of tests in sites across the state.

Because the Bright Start genetic testing program operated outside of Title IV-D of the Social Security Act and offered tests to some couples with no current IV-D case, the greatest implementation challenges related to emerging or subsequent IV-D actions. The remainder of this chapter steps through processes implemented by Bright Start to deliver free genetic testing.

THE HOSPITAL-BASED OFFER

Drawing on nearly two decades of work with birthing hospitals, Bright Start’s manager knew that expanding the paternity-related discussion in the hospitals could be a challenge. While the affidavit program was generally embraced by Washington hospitals, the paternity conversation falls in second tier of importance—well behind ensuring and monitoring the mother’s and child’s health, counseling on child feeding and care, and collecting payment and insurance information. In recent years, hospital visits have become shorter, and mothers are inundated with materials on birth certificates, breastfeeding, photographs, and additional social service programs.

At the program’s outset, Bright Start’s manager feared that genetic testing could be viewed as one more offer squeezed—and perhaps lost—in an increasingly short and crowded conversation between mothers and hospital staff. With that in mind, Bright Start designed the hospital’s role to be as small and focused as possible.

Leveraging the same conversation on paternity that introduces the affidavit, Bright Start encouraged hospital staff to:
1. **Offer the paternity affidavit first without a mention of the genetic test offer.** At Bright Start’s outset, the manager worried that a simultaneous offer of the affidavit or testing could cause confusion and lead some couples to conclude that they need a test before they sign the affidavit. Bright Start wanted couples that were sure about paternity to simply proceed with the affidavit.

2. **If couples appear uncertain about paternity or are otherwise unwilling to sign the affidavit, hospital staff makes the free genetic test offer.** When a test offer is appropriate, the hospital’s role is minimal but key. The staff distributes a self-addressed, stamped application to the mother, provides a very brief explanation of the process and typical timing, and offers to send completed applications to Bright Start. The application form requests simply the names and contact information of the mother, child, and possible father (see Appendix A).

Hospital staff were generally supportive of the genetic testing service. They noted that cost is a major issue for many parents, and being able to get a free test is an important option for those mothers who are uncertain about the biological father’s identity. Similarly, those staff who are aware of the long-term implications of paternity acknowledgement (e.g., the difficulty in disestablishing paternity) supported the option of offering the test to those individuals who expressed doubt about paternity.

Staff did note that genetic testing can be a sensitive topic. When the mother and potential father are hesitant to sign the affidavit, it can be uncomfortable to probe for the reasons why. In many cases, staff suggested that it is easier to raise the issue of the genetic test when only the mother is present. Others noted that, especially with teen parents, the grandparents can create additional problems. In some cases the parents of the mother may have strong feelings about the father and not want him to be the legal father, regardless of whether or not he is the biological father. Additionally, the parents of the presumptive father may be wary about their son consenting to a genetic test.

Overall, staff in most hospitals reported offering the genetic test information at the appropriate time (i.e., when the mother and potential father decline to sign the paternity affidavit). Typically, the staff responsible for presenting the paternity affidavit information will also discuss the genetic test option.

A number of Bright Start hospitals use social workers to address the issue of genetic testing. Interviewees suggested that social workers are often better equipped to deal with these issues than other staff involved in the paternity affidavit process (e.g., medical records clerks). Similarly, some staff noted that patients are sometimes embarrassed about receiving genetic test information.
Despite strong support for the genetic testing component of Bright Start, hospitals varied greatly in how consistently they offered parents information about the no-cost genetic test. While some of this variation is likely due to differences in patient demographics across hospitals, interviews at several hospitals revealed that staff does not consistently offer the genetic test information when parents decline the paternity affidavit. Interviewees in one hospital indicated that they do not always offer the genetic test, and they only provide the information if the parents explicitly ask about genetic testing options. In other hospitals, interviews with staff revealed inconsistency within the hospital. While some staff regularly offered the genetic test information, others were not aware that the service was even available. Such inconsistencies appeared to primarily result from staff turnover, and managers in underperforming hospitals promised they would be more vigilant in presenting this service in the future.

**APPLICATION PROCESSING**

Bright Start receives and processes applications for genetic tests centrally at an office in Olympia, Washington. The demonstration operated in the Department of Social and Health Services (DSHS), Operations Support Division (OSD), Economic Services Administration Management Accountability and Performance Statistics (E-MAPS), which is formally outside of the Division of Child Support. It manages demonstrations, audits, and other special projects.

Throughout the Bright Start demonstration, a single manager handled application processing, with assistance during vacation, leave, and training periods. Bright Start also developed a self-standing management information system (MIS)—separate from the large, mainframe child support information system. The system was built in-house using Microsoft ACCESS and captured the identifying applicant data, as well as the key process dates and steps. A genetic test application generates a self-standing Bright Start case—separate from the IV-D system. Washington has developed an enhanced MIS for the statewide implementation of the genetic testing program. The new system captures more case information than the original system and improves the ease of case management. Appendix A includes screen shots from the system.

Upon receipt of an application for testing, the manager opens a Bright Start case and steps through the following case processes:

1. **Ensures paternity isn’t already established through an affidavit.** The manager has online access to paternity affidavit records, which—in Washington—are maintained by the Department of Health. In rare instances, the manager finds genetic test applications for couples that had already signed a paternity affidavit. If the mother or man disputes paternity—despite having signed the affidavit—Bright Start refers the couple to a legal education and referral network. The manager encourages the parties to read the rights and responsibilities section on the
back of the affidavit and will send an extra copy, if necessary. However, Bright Start does not provide genetic testing if an affidavit is in force.

2. **Ensures the mother isn't married.** In Washington, the husband of a married mother is presumed to be the father unless the husband formally denies paternity. If the husband signs a denial of paternity *and* is not named as father on the birth certificate, Bright Start will pay for a genetic test for another putative father.

3. **Checks the child support system for case activity and rejects applications already involved in a formal establishment process.** For many, the application for genetic testing takes place well before involvement with the child support system. And many couples never interact with child support. However, it is important to check a couple’s child support status before proceeding with a Bright Start-funded genetic test. Bright Start occasionally uncovers mothers with open child support cases, and some have parallel paternity establishment processes underway.

   If the Washington State Division of Child Support (DCS) has a case but has not made progress on paternity establishment, Bright Start’s manager will ask for permission to proceed with the genetic test. However, if DCS has already referred a case to the prosecuting attorney office for the county in which the mother lives for formal paternity establishment, Bright Start typically defers to the formal process, rejects the application for genetic testing, and closes the Bright Start case.

   Even if Bright Start does not find an active child support case, the case manager takes the first opportunity to clearly ask whether the parents have applied for public assistance. Bright Start typically opens a case before any type of DCS case is open.

4. **Sends closure letters to couples that Bright Start cannot serve.** Couples who already have paternity established or have a formal paternity establishment process underway, receive Bright Start closure letters.

5. **Calls eligible mothers to determine convenient testing times and locations.** Unmarried mothers without established paternity and no formal establishment activity underway are eligible for the free genetic test. The Bright Start manager calls each applicant mother to verify the application’s details and ensure continued interest in the test by both parties. If there is continued interest, the manager will inquire about convenient or specific testing times and locations (e.g. before or after work) for the mother and man and pass this information on to the genetic test vendor for final scheduling. Appendix A includes letters from the vendor and Bright Start to illustrate. If appropriate, couples
are offered separate testing locations. The state’s vendor has been able to accommodate a range of requests, including out of state and tests of military personnel stationed overseas, though this has not yet been requested. Bright Start was generally satisfied with the vendor’s ability to establish testing sites across the state. Based on discussions with couples, Bright Start’s manager reports that while work conflicts, inclement weather, and the distance to testing locations are barriers to participation, unresponsiveness by the mother or man is the most prevalent barrier. Bright Start was generally satisfied with the vendor’s ability to establish testing sites across the state.

Figure 2-1, below, displays a flowchart of the application process.
Figure 2-1: Bright Start Process

Application received; Bright Start case opened

Paternity already established?

Y

Case Closed

N

Formal paternity establishment effort underway?

Y

Couple shows for testing?

N

Couple request second chance for test?

Y

Man is the father?

N

Parties and Bright Start notified; Mother can name another putative father

Y

Mother, Father, and Bright Start notified; IVD notified, if appropriate

Case Completed

Case Completed

Testing vendor sets test location and time

Call mother / man to get testing preferences (e.g., location, time)

N

Case Closed
GENETIC TESTING

Bright Start forwarded completed test applications to its testing vendor. The vendor operates a large network of laboratories and testing sites worldwide and has more than 28,000 employees.

The vendor was responsible for scheduling the test at a testing location reasonably near the applicants. During the Bright Start demonstration, the vendor established an appropriate number of sites in Tacoma, Fife, and Vancouver but struggled initially in Yakima area, which delayed the program’s implementation in that region. As Bright Start expanded in 2008 to Seattle, Olympia, Spokane, Moses Lake, and the Tri-Cities area, the vendor encountered little difficulty in finding new sites. The vendor has used a variety of venues including child support and prosecuting attorneys’ offices, hospitals, and vendor-owned clinics. Bright Start’s manager has not sensed hesitation by non-child support clients to visit child support or prosecuting attorneys’ offices.

With applicants’ preferences in hand, the vendor would notify couples of the specific time and location of the test (or tests). Again, the vendor could accommodate different testing locations for geographically separated couples.

The DNA samples were obtained using a buccal swab method. The sample is collected by swabbing the inner facial cheek—or buccal cavity—with a sterile cotton swab. The company reports its DNA tests are highly accurate and that they typically exclude 99.99% of men who are not the true biological father.

The vendor distributed findings to the mother, putative father, and the Bright Start program. A summary findings report identifies the tested parties, the date of the test, and whether the putative father was included or excluded. The vendor maintains the results for seven years.

POST-TEST PROCESSES

To date, a relatively high share of couples report to their first assigned testing date.\(^1\) Bright Start has been lenient with first time “no shows” for testing. The Bright Start manager calls the parties, explores why they were unable to make the appointment, and requests preferences for a rescheduled test. Bright Start tolerates as many as two “no shows” per couple before closing a case.

In cases in which a couple completes a test and the man is excluded as father, Bright Start allows the mother to apply for testing with another man. However, Bright Start will not authorize genetic testing for multiple men simultaneously.

\(^1\) The next chapter provides details on the share of couples that show up for their tests.
For cases in which a test includes the man as father, Bright Start sends the man a paternity affidavit and an information booklet entitled *Establish Paternity for Your Child's Sake* to encourage voluntary paternity establishment. The paternity establishment outcomes for included fathers are discussed in the next chapter.

**Ownership and Subsequent Uses of the Genetic Test Findings**

At the outset of the demonstration, Bright Start’s manager weighed the advantages and disadvantages of the ownership and uses of the genetic test results. On the one hand, Bright Start viewed the test offer as a service to the parents and considered keeping the findings confidential. Without that confidentiality, the reasoning went, some uncertain couples would forgo testing out of fear that the child support agency would learn of paternity and initiate enforcement actions. On the other hand, the state pays for the tests and has legitimate downstream interests in the findings should the couple apply for child support enforcement services.

During the demonstration, the requesting couple essentially governed the tests. Bright Start had access to the results but did not share with other agencies unless both parties agreed to release them. Such releases were executed in two instances during the demonstration.

As Bright Start transitioned from a demonstration to a state-funded program, managers saw a need to tie the genetic testing program more closely to the child support program. In the event that the couple does require child support services in the future, the Bright Start findings could potentially save the state the cost of identifying and locating the father and/or the cost of retesting the couple. Without these potential downstream benefits, managers believed it would be difficult to make the case for on-going program funding. After consultation with a DCS attorney, Bright Start staff decided not to receive a copy of the test reports during the demonstration, although the vendor still considered DCS the “owner” of the reports, and the program has requested copies of test results on a few occasions. As Bright Start moved out of its demonstration phase, the state changed the messaging on the test application to indicate that if the applicants have a case with the Division of Child Support, Bright Start may give DCS a copy of the test findings.

With the change, Bright Start’s manager now circles back to the IV-D system before closing a case and adds a comment to the state’s main child support database to document the genetic test findings.

**Conclusions**

From end to end, Bright Start’s manager estimates that a typical genetic test case requires 60 to 90 minutes of staff work. That includes the upfront checking of affidavit, child support, and marriage databases, conversing with one or both parties and occasionally others in the family, forwarding and
managing the application, and dealing with any post-test issues. For the most part, the process is straightforward and, as is discussed in the next chapter, proceeds at a pace that does not deter participation.

The critical point in the process is the hospital. If hospital managers buy into the program and keep records clerks, social workers, and nurses trained on the few required procedures, the program runs smoothly. However, if a hospital loses track of the program, fails to inform new staff, or misplaces applications, the program is easily derailed. That suggests a key to a successful process is a very close monitoring of application flow by hospitals and quick intervention by Bright Start if test applications decline abruptly without good reason. The intervention can be as simple as a call or site visit—as it appears that a large majority of hospital staff embrace the genetic test offer. But in some cases, that offer gets lost during a very crowded and hectic hospital stay.
Genetic Test Outcomes
and Applicant Characteristics

Chapter 3

INTRODUCTION

This chapter describes outcomes from Bright Start’s offer of no-cost genetic tests to unmarried couples. In most cases, hospital staff extended the test offer to an unmarried mother and man who chose not to sign a paternity affidavit during their hospital stay. Bright Start also offered the genetic test applications at Division of Child Support offices, Community Service Offices, and other venues. Below, we detail the number and type of referrals, test outcomes, paternity establishment outcomes after genetic tests, and examine the characteristics of mothers who requested a test.

GENETIC TESTING APPLICATIONS, REFERRALS, AND OUTCOMES

As described in Chapter 2, the genetic testing application process may begin in the hospital directly after a child is born or it may begin in a non-hospital setting months or years after a child is born, though a majority of application forms are distributed to mothers in the hospital near the time of birth. An applicant is counted as a referral when a Bright Start manager receives the application for testing. It is important to note that not all applications are complete when received by Bright Start and not all complete applications are ultimately referred to the genetic testing vendor to establish a testing location and date. For example, in many cases only the mother signed the test application, whereas Bright Start generally requires both man and mother to sign before making a referral to the vendor. We describe the genetic testing process, from application to completion in detail in Chapter 2.

Table 3-1 shows the total number of genetic testing referrals between May 2006 and May 2009. Out of 620 total applicants, 16% (100 referrals) did not complete the testing process. Incomplete applications resulted from a variety of circumstances. Some applicants were rejected because paternity had been established through an affidavit by the time the application was received by Bright Start. In other cases, the applicant did not confirm a schedule test date. In others, the applicant did not show up for the test itself. Of the remaining 520 completed applications, 82% (426 applications) ultimately confirmed the tested man as the biological father, while 18% (94 applications) excluded the man.

Fourteen applicants requested one or more additional tests after a potential father was excluded by a genetic test. Of the twelve mothers requesting a total of two tests, 10 of the second tests identified the child’s biological father. Of the two cases with three tests, only one identified the biological father. Although a minority of tested men were ultimately determined not to be the biological father
of the child, the test outcomes nonetheless suggest that the Bright Start program helped many couples resolve uncertainty regarding paternity and may have prevented errors in paternity establishment. From this perspective, even a test that excludes a man can be considered a success.

Table 3-1: Genetic test applications and test outcomes, May 2006-May 2009

<table>
<thead>
<tr>
<th>Completed Applications</th>
<th>Count</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusions</td>
<td>94</td>
<td>18%</td>
</tr>
<tr>
<td>Inclusions</td>
<td>426</td>
<td>82%</td>
</tr>
<tr>
<td>Not Completed Applications</td>
<td>100</td>
<td>16%</td>
</tr>
<tr>
<td>Total Applicants</td>
<td>620</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Includes only the final test results for applicants that received more than one test.

Source: Bright Start and Washington State Division of Health

As illustrated in Table 3-2, below, not all mothers referred to the genetic testing program had recently given birth. This table shows the number of new births as a share of the total applications for genetic testing. New births constituted 89% of the applications for genetic testing. The remaining 11% were applications from mothers who obtained an application from another source (e.g., a DCS office).

Table 3-2: Source of genetic test applications, May 2006-May 2009

<table>
<thead>
<tr>
<th>Count</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Births</td>
<td>550</td>
</tr>
<tr>
<td>Other</td>
<td>70</td>
</tr>
<tr>
<td>Total Applicants</td>
<td>620</td>
</tr>
</tbody>
</table>

Source: Bright Start

After the first round of hospital training visits in Spring 2006, the number of referrals built for several quarters before reaching a plateau. Figure 3-1 shows the time trend of genetic test applications per quarter, referred by Bright Start hospitals between 2006 and 2009. As illustrated, the number of applications rose quickly for several quarters before declining in late 2007, just over one year after program implementation. The referral count then held steady well into 2008, at which point the second cohort of hospitals (hereafter Bright Start II hospitals), further increasing the total referral count. As a share of total un-established, unmarried births, at Bright Start hospitals, however, referral rates have remained at about one or two percent after the initial ramp-up in applications. We use this range for program take-up rates in our Chapter 4 estimates of the likely costs to implement the program statewide. As shown below, the take-up rate varied considerably across hospitals, but was rarely above two percent.
TIME AND THE TESTING PROCESS

For all applicants, the time between birth and paternity establishment, and between each of the steps in the testing process can vary significantly from referral to referral. The median number of days between a child’s birth and the time Bright Start received an application was 17; the median time between the referral and receipt of test results was 44 days. Paternity acknowledgement following the identification of the biological father took a median of 135 days.

Table 3-3 shows in more detail the time lapse between the application date and the date test results were received.

Table 3-3: Time between date of referral and receipt of test results for hospital-based applications, May 2006-May 2009

<table>
<thead>
<tr>
<th>Total</th>
<th>0-30</th>
<th>31-60</th>
<th>61-90</th>
<th>91-120</th>
<th>120+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed</td>
<td>369</td>
<td>58</td>
<td>255</td>
<td>48</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Data based on the 369 completed applications for which we had both a referral data and a test completion date.

Source: Bright Start and Washington Division of Health
PATERNITY ESTABLISHMENT OUTCOMES FOR TEST COMPLETERS

Among testing applicants, the data contain every conceivable permutation of testing outcome and paternity establishment. In 14 cases, Washington’s Department of Health (DOH) had a paternity affidavit record before the test was completed. As noted above, this resulted in some couples being denied a test if Bright Start found evidence of the paternity establishment before referring the couple to the genetic testing vendor. In most cases for which the data indicate a filed paternity affidavit, however, paternity establishment followed the completion of the test. Table 3-4 displays the paternity status 120 days after birth for children participating in the testing process.¹

Table 3-4: Paternity establishment for completed genetic tests, Bright Start hospitals, May 2006-May 2009

<table>
<thead>
<tr>
<th>Paternity Established</th>
<th>Paternity Not Established</th>
<th>Total</th>
<th>% Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included</td>
<td>72</td>
<td>144</td>
<td>216</td>
</tr>
<tr>
<td>Excluded</td>
<td>3</td>
<td>44</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>188</strong></td>
<td><strong>263</strong></td>
</tr>
</tbody>
</table>

Note: Only those tests completed within 120 days of child’s birth were used in analysis
Source: Bright Start and Washington State Division of Health

As illustrated, a majority of the children subject to testing had not had paternity established within the 120-day window regardless of whether or not the results indicated that the tested man was the child’s biological father. While this 29% paternity establishment rate is low when compared to the statewide hospital-based paternity establishment rate—56% within 90 days of birth during 2009—the target population for the genetic test offer is actually the remaining 44% of parents who do not establish paternity soon after birth. Seen in this light, even the much lower establishment rate for test takers is indicative of paternity establishments that would not have occurred in the absence of the testing program.

Among 216 completed tests that identified the tested man as biological father, 72 of the tested men acknowledged paternity within 120 days of birth. While a majority of exclusions did not result in paternity establishment, as might be expected, there were 15 cases for which paternity was established after the genetic test resulting in exclusion. Assuming that a man other than the one tested signed the paternity affidavit in these cases, we again find evidence that the genetic test offer has improved establishment outcomes, although we do not have sufficient data to prove this conclusively and, as we note elsewhere, it is likely that an excluded man occasionally acknowledges paternity despite strong evidence contradicting the acknowledgement.

¹ For this report, DOH provided birth record and paternity establishment data through September 2009. This allows a four-month follow-up period for the last births eligible for the testing offered by Bright Start in May of 2009. Thus we restrict the analysis here to 120 days after birth, although a handful of affidavits may ultimately be signed after 120 days.
Figure 3-2 illustrates the “productivity” of referrals at producing paternity establishments: Of the 535 hospital-based genetic test applications, 444 tests were completed. Of the completed tests, 363 resulted in inclusions, confirming the tested man as the tested child’s. Of these 363 men, 101 ultimately signed a paternity affidavit, for approximately one paternity establishment every 5 referrals. Again, we cannot prove that the test results necessarily caused the father to acknowledge paternity, but the results are suggestive.

Due to the timing of data collection, these data do not reflect the total number of paternity affidavits eventually signed after parents receive test results. In many cases, as discussed below, there is a significant lapse between the time the applicants receive the test results and the time an affidavit is signed. Because our analysis includes referrals collected through May 2009, the available data do not allow us to track paternity establishment related to the most recent referrals beyond about four months, but the number of such delayed establishments is likely to be fairly small.

**Figure 3-2: Paternity established as a share of total genetic testing applications, Bright Start hospitals, May 2006-May 2009**

![Bar chart showing paternity established as a share of total genetic testing applications, Bright Start hospitals, May 2006-May 2009.]

Source: Bright Start and Washington State Division of Health

**DEMOGRAPHIC CHARACTERISTICS OF MOTHERS WHO APPLIED FOR A GENETIC TEST**

In the *Update Evaluation of the Bright Start Demonstration Program*, completed in September 2009 as part of the Bright Start evaluation, ECONorthwest identified demographic characteristics that helped to predict hospital-based paternity establishment. This section examines a similar set of demographic characteristics of mothers requesting a genetic test. Differences in the demographic characteristics of these mothers may suggest that certain subpopulations are either more uncertain about the paternity of their child or are more likely to accept a no-cost offer that can definitively determine biological paternity of their child.
RACE AND ETHNICITY

In general, the 33% of applicants identifying as non-white mothers appear relatively less likely to request a genetic test than are white mothers, although the difference varies by race (see Figure 3-3). Among the pool of applicants, the share of mothers in the “other race” category is small compared to the share of “other race” mothers among all unmarried mothers in the analysis. The share of Black mothers among applicants is, on the other hand, slightly higher than that of Black mothers among all unmarried mothers.

As described in our companion evaluation reports, unmarried African American mothers give birth to children who are, all else equal, over 16 percentage points less likely to have paternity established through the birth hospital. Although the difference is not large, the fact African American mothers are relatively more prevalent among test applicants suggests the possibility that greater uncertainty about paternity explains the large impact of being an African American mother on the likelihood of paternity establishment.

Figure 3-3: Mother’s race for genetic test applicants and by paternity establishment status at Bright Start hospitals, May 2006-May 2009

Notes: The data include only births during those months for which Bright Start services had been available at each hospital. The chart reflects data from the 518 applicant mothers for which DOH was able to provide demographic data. Number of births includes mothers of all races.

Source: Bright Start and Washington State Division of Health

Figure 3-4 displays the share of Hispanic mothers among applicants, and among all unmarried mothers who did and did not complete a paternity affidavit at the hospital. The pattern resembles that displayed above in Figure 3-3. Namely, non-Hispanics make up a larger share of applicants (81%) than they do of either group of mothers of Hispanic origin represented in the genetic test applicant group. Our analysis of paternity establishment determinants found that the children of Hispanic mothers were significantly more likely to have paternity established than were the children of other mothers. That relatively fewer Hispanic mothers request a genetic test supports the implication that these mothers have less uncertainty about the paternity of their children.
Figure 3-4: Share of unmarried mothers classified as Hispanic for test applicants and by paternity establishment status at Bright Start hospitals, May 2006-May 2009

Notes: The data include only births during those months for which Bright Start services had been available at each hospital. The chart reflects data from the 518 applicant mothers for which DOH was able to provide demographic data.

Source: Bright Start and Washington State Division of Health

EDUCATIONAL ATTAINMENT

When compared to mothers foregoing paternity establishment, applicants for genetic testing were 7 percentage points more likely to have a high school education or better, as illustrated in Figure 3-5. Overall, applicant mothers appear more similar to mothers of children who ultimately had paternity established than to mothers of children who did not. The primary difference between applicants and the “not established” group is the six percentage point difference between the share of mothers with post-high school education (33% versus 27%).

This pattern suggests, but does not prove, that more educated mothers are more willing to engage in the genetic test process, all else equal. It is also possible that, among mothers with great uncertainty about paternity, more educated mothers are more likely to request a test than are less educated mothers—a subtle but important difference.
PRESENCE OF OTHER LIVING CHILDREN

Another indicator of attitudes with respect to paternity is whether a mother had other living children at the time of her new baby’s birth. Figure 3-6 shows the share of unmarried mothers who reported having other children at the time of birth.

Figure 3-6: Presence of other living children of genetic test applicants and by paternity establishment status at Bright Start hospitals, May 2006-May 2009

Notes: The data include only births during those months for which Bright Start services had been available at each hospital. The chart reflects data from the 518 applicant mothers for which DOH was able to provide demographic data.

Source: Bright Start and Washington State Division of Health
Mothers with prior children make up a smaller proportion—by six percentage points—of test applicants than of all unmarried mothers giving birth at Bright Start hospitals. This pattern reinforces the findings from our regression analysis, and suggests that these experienced mothers are either less concerned about paternity establishment, less uncertain about the paternity of their children, or both.

**TEST OUTCOMES BY MOTHER’S DEMOGRAPHIC CHARACTERISTICS**

Table 3-5 provides another look at test outcomes broken down by the demographic characteristics of applicant mothers. The table illustrates a number of interesting features of the data with respect to test completion and paternity establishment.

**Table 3-5: Test outcomes and paternity status by mother’s characteristics for genetic test applicants who gave birth at Bright Start hospitals, May 2006-May 2009**

<table>
<thead>
<tr>
<th>Race</th>
<th>All Applications</th>
<th>Completed Applications</th>
<th>Not Completed Applications</th>
<th>Paternity Established Included</th>
<th>Excluded</th>
<th>Paternity Not Established Included</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>47</td>
<td>39</td>
<td>7</td>
<td>10</td>
<td>0</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>American Indian</td>
<td>13</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>17</td>
<td>13</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Other Race or Combination</td>
<td>94</td>
<td>79</td>
<td>15</td>
<td>22</td>
<td>2</td>
<td>54</td>
<td>16</td>
</tr>
<tr>
<td>Hispanic</td>
<td>98</td>
<td>75</td>
<td>22</td>
<td>26</td>
<td>0</td>
<td>55</td>
<td>16</td>
</tr>
<tr>
<td>Mother had previous children</td>
<td>218</td>
<td>180</td>
<td>38</td>
<td>46</td>
<td>4</td>
<td>144</td>
<td>24</td>
</tr>
<tr>
<td>Employed</td>
<td>311</td>
<td>260</td>
<td>50</td>
<td>83</td>
<td>9</td>
<td>183</td>
<td>35</td>
</tr>
<tr>
<td>Not Using Medicaid</td>
<td>201</td>
<td>164</td>
<td>36</td>
<td>59</td>
<td>9</td>
<td>115</td>
<td>17</td>
</tr>
<tr>
<td>Current Residence for &lt;6 months</td>
<td>171</td>
<td>141</td>
<td>28</td>
<td>42</td>
<td>3</td>
<td>104</td>
<td>20</td>
</tr>
<tr>
<td>Mother was not using WIC</td>
<td>126</td>
<td>104</td>
<td>22</td>
<td>33</td>
<td>5</td>
<td>70</td>
<td>18</td>
</tr>
<tr>
<td>High school education, no higher</td>
<td>164</td>
<td>130</td>
<td>32</td>
<td>48</td>
<td>4</td>
<td>92</td>
<td>18</td>
</tr>
<tr>
<td>Some post-high school education</td>
<td>170</td>
<td>148</td>
<td>22</td>
<td>40</td>
<td>5</td>
<td>106</td>
<td>19</td>
</tr>
<tr>
<td>No high school diploma</td>
<td>184</td>
<td>155</td>
<td>31</td>
<td>46</td>
<td>6</td>
<td>107</td>
<td>27</td>
</tr>
<tr>
<td>Total Applications</td>
<td>518</td>
<td>433</td>
<td>85</td>
<td>134</td>
<td>15</td>
<td>305</td>
<td>64</td>
</tr>
</tbody>
</table>

Source: Bright Start and Washington State Division of Health

For example, not only are Hispanic mothers relatively less likely to request a genetic test, they are also less likely than average to complete the test after applying (77% versus 84%). Mothers with educational attainment beyond high school were relatively more likely to complete the test (87%). Because of the small sample size for most sub-groups, we view the differences implied in table 3-5 as suggestive and worthy of future investigation, but not conclusive regarding propensity to take a genetic test or the level of uncertainty surrounding paternity.

**HOSPITAL DETAIL**

We conclude this chapter with a look at detailed test outcomes for each of the Bright Start hospitals. Table 3-6 displays counts for unmarried births and genetic test referrals at each Bright Start hospital during the demonstration. For Bright Start I hospitals, the table includes all unmarried births from May 2006 through May 2009. For Bright Start II, the included period covers August 2008 through
Table 3-6: Number of Referrals by Hospital

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Unmarried Births</th>
<th>Number of Referrals</th>
<th>% of Unmarried Births Referred</th>
<th>% Referrals Complete</th>
<th>% of Completed Tests Resulting in Signed Establishment</th>
<th>Hospital-Based Paternity Establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bright Start I Hospitals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auburn Regional</td>
<td>1,522</td>
<td>5</td>
<td>0.3%</td>
<td>100.0%</td>
<td>40.0%</td>
<td>51.2%</td>
</tr>
<tr>
<td>Good Samaritan</td>
<td>2,350</td>
<td>34</td>
<td>1.4%</td>
<td>73.5%</td>
<td>32.0%</td>
<td>55.1%</td>
</tr>
<tr>
<td>Harrison</td>
<td>2,474</td>
<td>38</td>
<td>1.5%</td>
<td>76.3%</td>
<td>24.1%</td>
<td>61.2%</td>
</tr>
<tr>
<td>Kittitas Valley</td>
<td>293</td>
<td>2</td>
<td>0.7%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>72.4%</td>
</tr>
<tr>
<td>Klickitat</td>
<td>32</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34.4%</td>
</tr>
<tr>
<td>Legacy, Salmon Creek</td>
<td>1,706</td>
<td>92</td>
<td>5.4%</td>
<td>82.6%</td>
<td>40.8%</td>
<td>67.4%</td>
</tr>
<tr>
<td>Madigan Army</td>
<td>477</td>
<td>18</td>
<td>3.8%</td>
<td>88.9%</td>
<td>68.8%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Skyline</td>
<td>88</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>73.9%</td>
</tr>
<tr>
<td>St. Francis</td>
<td>1,626</td>
<td>16</td>
<td>1.0%</td>
<td>81.3%</td>
<td>46.2%</td>
<td>45.0%</td>
</tr>
<tr>
<td>St. John</td>
<td>1,869</td>
<td>35</td>
<td>1.9%</td>
<td>88.6%</td>
<td>38.7%</td>
<td>68.2%</td>
</tr>
<tr>
<td>St. Joseph</td>
<td>5,243</td>
<td>47</td>
<td>0.9%</td>
<td>74.5%</td>
<td>40.0%</td>
<td>56.5%</td>
</tr>
<tr>
<td>Sunnyvale</td>
<td>1,157</td>
<td>26</td>
<td>2.2%</td>
<td>73.1%</td>
<td>52.6%</td>
<td>61.2%</td>
</tr>
<tr>
<td>SW Washington</td>
<td>3,646</td>
<td>72</td>
<td>2.0%</td>
<td>84.7%</td>
<td>37.7%</td>
<td>42.7%</td>
</tr>
<tr>
<td>Tacoma General</td>
<td>4,380</td>
<td>39</td>
<td>0.9%</td>
<td>87.2%</td>
<td>35.3%</td>
<td>46.8%</td>
</tr>
<tr>
<td>Toppenish</td>
<td>911</td>
<td>13</td>
<td>1.4%</td>
<td>76.9%</td>
<td>40.0%</td>
<td>54.6%</td>
</tr>
<tr>
<td>Yakima Valley</td>
<td>4,544</td>
<td>33</td>
<td>0.7%</td>
<td>78.8%</td>
<td>26.9%</td>
<td>39.2%</td>
</tr>
<tr>
<td><strong>Bright Start I Hospital Total</strong></td>
<td>32,318</td>
<td>470</td>
<td>1.5%</td>
<td>81.3%</td>
<td>38.5%</td>
<td>51.7%</td>
</tr>
</tbody>
</table>

**Bright Start II Hospitals**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Unmarried Births</th>
<th>Number of Referrals</th>
<th>% of Unmarried Births Referred</th>
<th>% Referrals Complete</th>
<th>% of Completed Tests Resulting in Signed Establishment</th>
<th>Hospital-Based Paternity Establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Medical</td>
<td>224</td>
<td>2</td>
<td>0.9%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>63.4%</td>
</tr>
<tr>
<td>Central Washington</td>
<td>478</td>
<td>12</td>
<td>2.5%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>62.3%</td>
</tr>
<tr>
<td>Evergreen</td>
<td>577</td>
<td>1</td>
<td>0.2%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>53.2%</td>
</tr>
<tr>
<td>Group Health Coop</td>
<td>424</td>
<td>3</td>
<td>0.7%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>56.5%</td>
</tr>
<tr>
<td>Kennewick</td>
<td>556</td>
<td>6</td>
<td>1.1%</td>
<td>100.0%</td>
<td>16.7%</td>
<td>51.9%</td>
</tr>
<tr>
<td>Lourdes</td>
<td>153</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>49.7%</td>
</tr>
<tr>
<td>Prosser</td>
<td>130</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>33.8%</td>
</tr>
<tr>
<td>Providence Centralia</td>
<td>265</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>29.1%</td>
</tr>
<tr>
<td>Providence Everett</td>
<td>1,094</td>
<td>1</td>
<td>0.1%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>50.2%</td>
</tr>
<tr>
<td>Sacred Heart</td>
<td>676</td>
<td>17</td>
<td>2.5%</td>
<td>100.0%</td>
<td>11.8%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Samaritan</td>
<td>433</td>
<td>1</td>
<td>0.2%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Swedish Medical</td>
<td>1,411</td>
<td>7</td>
<td>0.5%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>49.5%</td>
</tr>
<tr>
<td>U of Washington</td>
<td>689</td>
<td>10</td>
<td>1.5%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Valley Hospital</td>
<td>181</td>
<td>4</td>
<td>2.5%</td>
<td>50.0%</td>
<td>50.0%</td>
<td>51.5%</td>
</tr>
<tr>
<td><strong>Bright Start II Hospital Total</strong></td>
<td>7,271</td>
<td>64</td>
<td>0.9%</td>
<td>96.9%</td>
<td>6.5%</td>
<td>50.5%</td>
</tr>
</tbody>
</table>

**Bright Start I & II Total**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Unmarried Births</th>
<th>Number of Referrals</th>
<th>% of Unmarried Births Referred</th>
<th>% Referrals Complete</th>
<th>% of Completed Tests Resulting in Signed Establishment</th>
<th>Hospital-Based Paternity Establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bright Start I &amp; II</strong></td>
<td>39,389</td>
<td>534</td>
<td>1.3%</td>
<td>83.1%</td>
<td>34.0%</td>
<td>51.5%</td>
</tr>
</tbody>
</table>

Source: Bright Start and Washington State Division of Health

Although the relationship is not strong, hospitals with higher genetic test referral rates tend to have higher paternity establishment rates. Legacy Salmon Creek, for example has the highest referral take-up rate as well as a paternity establishment rate well above average. This is counterintuitive in the sense that a higher in-hospital rate implies a smaller pool of potential test applicants. On the other hand, as with the paternity program overall, we suspect that greater attention to the testing program is likely to produce a greater flow of referrals. This implies that hospitals with robust paternity acknowledgement programs will also have produce a robust flow of genetic testing referrals.

Figure 3-7 displays the referral rate data visually. The figure includes hospitals of very different scale (see Table 3-6), so some comparisons can be misleading. But

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'Bright Start II hospitals may have implemented the program a month or two later than August 2008. The table also includes the two hospitals selected for the second cohort but that never received the initial training—Evergreen and Group Health Centralia.'
there is clearly a wide range of take-up rates across the hospitals, with most hospitals substantially above or below the Bright Start average of 1.4%. While demographic differences in the patients seen at each hospital likely affect referral rates, and we do not know whether an optimal referral rate exists, the data suggest that parents, children, and the Division of Child Support benefit from the genetic testing program and that greater effort at low-referral rate hospitals would likely yield greater benefits.

**Figure 3-7: Genetic Test Referral Rate for Bright Start Hospitals**

![Genetic Test Referral Rate for Bright Start Hospitals](chart)

Source: Bright Start and Washington State Division of Health
INTRODUCTION

By all accounts, no-cost genetic testing has been among the most successful of the strategies deployed during the Bright Start demonstration to encourage voluntary, appropriate paternity establishment. Hospital staff supports the program almost without exception. In addition, a small but measurable share of unmarried mothers has received important information about the biological paternity of their children through the genetic tests facilitated by Bright Start. The federal government recognized this success by funding a fourth year of Bright Start. At the conclusion of this fourth program year, Washington State anticipates implementing no-cost genetic testing statewide.

This section uses the test outcome data described in Chapter 3 to update the staffing and funding estimates for the annual cost of statewide implementation of this program. These estimates will also provide a sense of scale to child support agencies in other states that are contemplating a similar genetic testing program. Understanding the likely magnitude of program costs is critical, particularly given the fiscal crisis facing most states over the next several years. In addition, highlighting the program’s relatively low cost helps to bolster the case for implementing this type of program, as it may ultimately save states a significant amount of money by reducing the number of court-ordered paternity establishments in future years.

STATEWIDE IMPLEMENTATION

To estimate program cost, we consider the cost of the genetic tests themselves and the staffing needed to facilitate the expected number of test requests. We estimate the number of requests using Bright Start referral data applied to a simple forecast for the number of unmarried births in calendar years 2010 and 2011.

UNMARRIED BIRTHS

The number of unmarried births rose sharply during the first three years of Bright Start, increasing by an average of 5.8 percent per year in each of 2006, 2007, and 2008. As of September 2009, however, this trend appears to have reversed completely, with unmarried births in January through September of 2009 2.5 percent below the total unmarried births during the same period in 2008. In the calculations below, we assume that the 2009 numbers reflect a significant slowing in the number of unmarried births during 2009, but that 2010 and 2011 totals will produce slight increases in unmarried births relative to 2009 (see Figure 4-1).
Figure 4-1: Actual and predicted number of unmarried births in Washington State, 2004-2011

*T Estimated based on data through September 2009.

Notes: The totals include the approximately one percent of unmarried births registered with the state that do not occur at a birthing hospital.

Source: ECONorthwest

TAKE-UP RATE

Chapter 3 illustrates the wide variability in take-up rates across demonstration hospitals—from zero to about six percent of unmarried births. Some of this variation could result from inter-hospital differences in mothers’ certainty about paternity, but we attribute most of the variation to differences in how each hospital handles the genetic test offer.

The overall take-up rate at the first cohort of Bright Start hospitals was 1.5 percent of unmarried births, with a noticeable acceleration several months after implementation. The second cohort produced relatively fewer referrals, at a take-up rate of 1.0 percent of unmarried births, for a combined average of 1.3 percent during the demonstration. Two of the hospitals in the second cohort, however, had not even fully engaged with the program before the end of the demonstration. Nonetheless, at the conclusion of Bright Start, it was too early to tell whether the second cohort would also increase the take-up rate over time like the first cohort did. Based on these data, we
calculate program cost using an in-hospital take-up rate of between 1.3 and 2.0 percent of all unmarried births.\footnote{As in Figure 4-1, we include in our calculations unmarried births that did not occur at a birthing hospital. Such births typically account for about one percent of all unmarried births.}

Bright Start also offered tests to applicants who found out about the program through non-hospital sources such as child support offices. Clearly, program eligibility policy will determine the potential number of these additional referrals. Based on Bright Start outcomes and an assumption that Washington’s statewide program will operate using similar guidelines as Bright Start, we predict the total number of referrals to be 15 percent higher than the in-hospital total, resulting in a take-up rate of between 1.5 and 2.30 percent of all unmarried births. Of the referrals received by Bright Start, 83 percent resulted in a completed test, and in our calculations we apply the same percentage.

Table 4-1 displays our predicted number of referrals and completed tests in 2010 and 2011 for the low (1.15 percent) and high (2.30 percent) take-up rate scenarios.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmarried births</td>
<td>30,137</td>
<td>30,497</td>
</tr>
<tr>
<td>Referrals (low)</td>
<td>451</td>
<td>456</td>
</tr>
<tr>
<td>Referrals (high)</td>
<td>693</td>
<td>701</td>
</tr>
<tr>
<td>Completed tests (low)</td>
<td>374</td>
<td>378</td>
</tr>
<tr>
<td>Completed tests (high)</td>
<td>575</td>
<td>582</td>
</tr>
</tbody>
</table>

Source: ECONorthwest

TESTING AND STAFFING COSTS

The state pays its genetic testing vendor significantly less per test than parents would have to pay to obtain a test themselves. We do not know whether Washington’s existing vendor contract will continue under similar terms or whether the declining cost of testing generally will necessarily affect the terms of future contracts with genetic testing vendors. Below, we assume that the state will pay $130 for each completed test, close to the actual amount paid during Bright Start. Based on Table 4-1, we anticipate a statewide testing cost of between $48,600 and $75,700 annually during 2010 and 2011.

Based on conversations with Bright Start staff, we estimate referral processing, follow-up, and additional phone support for interested parents would require between about 0.75 FTE of a management analyst at current referral volumes of about 320 referrals per year (the rate observed during
the last ten months of the demonstration). We estimate that the high and low-referral scenarios would require between 1.1 and 1.6 management analyst FTE, respectively, with total staff costs expected to be approximately $55,000 in salary and benefits per FTE. In addition, the genetic test program requires program management to oversee staff, field calls from other agencies (e.g., prosecuting attorneys within Washington or child support staff in other states), and so on. We estimate the statewide program would require 0.15 FTE of a program manager at approximately $78,000 per FTE.\(^2\)

In total, staff resources add between $70,000 and $101,000 to annual program cost, depending on volume. The genetic testing program would therefore cost between $304 and $317 per test, with a higher test volume corresponding to lower cost per test because the staff overhead is allocated over more completed tests.

**FOLLOW-UP COSTS**

The testing results described in Chapter 3 suggest that, while the genetic test offer may have resolved parents’ uncertainty about the paternity of their child, many did not follow through and formally establish paternity after receiving their test results. This fact indicates that child support staff may have the ability to further increase paternity establishment through additional follow-up with parents. For cases where a man was excluded, the program guidelines allow an additional test for the mother and another man. Through experience processing the hundreds of test referrals provided by Bright Start, staff believe that targeted “second efforts” to follow-up with parents who have identified a child’s biological father but have not signed a paternity acknowledgement would prove beneficial.

Clearly, these efforts would require staff resources to contact parents, discuss paternity related issues, and possibly mail mothers additional paternity-related documents. These second efforts were not part of the Bright Start demonstration and we do not have precise data on their likely cost. Assuming that these second efforts would add an average of 15 percent to the cost per case, the total cost per completed test would cost between $350 and $365.

**CONCLUSIONS**

The hospital-based offer of genetic testing is a natural complement to Washington’s voluntary paternity acknowledgement program. As the state has succeeded in extending the acknowledgement offer to nearly all unwed mothers and their partners, hospital staff inherently come across mothers who are uncertain about the paternity of their new child. Washington’s prosecuting attorneys—a one-time opponent of the voluntary

\(^2\) The program manager would likely be the same individual running the broader paternity acknowledgement program. Running the broader program would likely absorb the balance of the program manager's time.
acknowledgement program—have been concerned that some men, absent a genetic test and more formal establishment processes, would acknowledge paternity in instances in which they were not the biological fathers. And hospital staff noted that in those cases in which couples expressed doubts about paternity, they had little tangible advice for those couples about how to proceed.

Both the attorneys and hospital staff view the genetic test offer as an improvement to the broader acknowledgement process. To those uncertain parents, the offer sends a strong signal that acknowledging paternity is an important decision with lifelong consequences and that the state is willing to invest resources upfront to ensure that the couple makes that decision with the best information possible. To date, about one in five men who have taken the genetic test has been excluded as the biological father, thereby resolving a degree of uncertainty about paternity for the tested children. Absent a control group, however, we do not know how many of these men may have inappropriately signed a paternity acknowledgement in the absence of testing nor do we know how many men determined to be a child’s biological father would have signed an acknowledgement without the genetic test.

As Washington expands the program to other hospitals, and other states consider implementing a similar program, key questions revolve around how to proceed as efficiently as possible. As a demonstration, Washington appears to have landed on a reasonably efficient process in its first attempt. The demands on the hospital are modest and are limited to identifying potentially interested couples, disseminating an application, and, in some cases, dropping the application in the outgoing mail. Other states may consider on-site testing at the time of birth; however, in Washington’s context that was more than managers were comfortable asking of their hospital partners.

Despite a very simple process, Washington nonetheless found varied outcomes across hospitals that were too large to be explained by socio-economic differences alone. The genetic testing offer, though simple, can still get lost in the clatter of an emotional, exhausting, brief, and information-heavy hospital stay. As with the voluntary acknowledgement process, high turnover can undercut the effectiveness of the program if incoming staff are unaware the offer exists. Applications can go missing. The program is more likely to be successful if it is reintroduced and reinforced with annual, on-site visits that are coordinated with brief trainings on the paternity acknowledgement and, ideally, birth certificate programs.

Given that several weeks can elapse between the application date and the actual test, Bright Start’s 83 percent completion rate3 exceeded expectations. It conveys that couples value the opportunity. The high completion rate also speaks to the timely and careful processing of applications by state staff.

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3 That is, completed tests divided by total applications. Some of the incompletes were applicants deemed ineligible by Bright Start (e.g., DOH had a paternity acknowledgement on file for the child at the time Bright Start received the application).
Those who implement the program should anticipate a wide range of complexity of applications. Easier applications may take well under an hour to process, contact, and refer to the vendor. Others, given the nature of the matter, can take hours and can involve conversations not only with the mother and putative father, but also parents or other relatives of the couple. In this demonstration, case managers were patient with applicants and spent time on the phone explaining the process and its consequences, often to multiple parties.

The selection of vendor and convenience of testing sites is also critical. Applicants—who are disproportionately younger and from lower-income households—may forgo the test if it involves long travel or a need to take significant time off of work. Washington perceived only one problem with test site availability, and that was relatively early in the demonstration. Thereafter, state managers were generally pleased with the vendor’s ability to provide flexible options for couples, including testing some parties out of state and even overseas.

With the test completed and findings known to the state and the parties, Washington can improve upon the subsequent steps in the process. Based on available data, testing found 431 men to be the biological fathers, yet records show only 166 paternities acknowledged. And, a handful of those acknowledgements may have been for men for whom the test excluded paternity.

While the instances will be rare, the state will occasionally come across excluded fathers who nonetheless acknowledge paternity. This raises an important ethical question: Should the state actively counsel couples with negative results, but with paternity acknowledged, to take the legal steps necessary to nullify the acknowledgement, or at least announce the consequences of not doing so?

In all those instances in which included fathers fail to acknowledge paternity, the state may incur downstream confusion and costs. Tested couples—with positive results—may enter the child support system a year or more later with paternity not established and a hazy recollection that the government provided a genetic test. Despite Washington’s best efforts, some of those cases will inevitably slip through the cracks and head down a costly, and wholly unnecessary, court-based paternity establishment process.

Washington already routinely checks administrative databases to ensure the program does not provide genetic tests for men who have already acknowledged paternity. As budgets and staffing recover from the current fiscal crisis, the state may consider focused follow-up efforts and track closely the reasons why some couples—despite a positive test result—fail to take the next step and establish paternity. The state will also have to perfect its processes to ensure that state-funded test results on non-IVD couples are shared with IVD if a couple subsequently enters the system.
Just how much the state invests in the follow-up efforts depends on the goals of the program. If the program is designed primarily to get the right information in the hands of unwed couples, then limited follow-up efforts could be justified. However, if the goal is paternity establishment, then the state needs to work more actively with couples who receive positive test results. In Washington’s case, the Bright Start demonstration initially focused on getting the right test information to parents and essentially expected they would put it to good use. But as the program transitions from a pilot to a permanent program, Washington expects better outcomes on paternity establishments. The findings here suggest the state will have to invest some additional resources on follow-up to achieve those outcomes.
Appendix A

Bright Start Process Details

This appendix includes Bright Start documentation referenced in Chapter 2. The exhibits below illustrate three components of the Bright Start genetic testing program: the application form, the Bright Start management information system, and letters relating to test processing.

Exhibit 1: Bright Start Application Brochure (front)

Exhibit 2: Bright Start Application Brochure (back)
Exhibit 3: Bright Start Information Management System

Exhibit 4: Bright Start Information Management System, cont’d
Exhibit 5: Bright Start Information Management System, cont’d

Exhibit 6: Bright Start Information Management System, cont’d
Exhibit 7: Bright Start Testing notification letter

April 20, 2009

RE: Referral Number

Dear [Redacted],

Thank you for your application for genetic testing through Bright Start. We have referred you, [Redacted], and [Redacted] for genetic testing at the following location, date, and time:

Date: Monday, May 11, 2009
Time: 11:00 AM
Location: [Redacted]

If you are unable to keep your appointment, please notify Bright Start by calling 1-800-285-1892. Leave a message and tell us the referral number noted at the top of this letter.

The lab requires that you provide two forms of ID for yourself. One of those must be a picture ID. You need to also provide some ID for the child such as a birth certificate or social security card.

The genetic testing laboratory will mail a report indicating the probability of paternity to both you and [Redacted]. If the report shows that [Redacted] is the probable father, then you both will likely want to consider legal paternity establishment. I have included in this letter a booklet entitled “Establish Paternity for Your Child’s Sake” and a WA State Paternity Affidavit Form.

You and [Redacted] may complete the form and mail it directly to the WA State Dept. of Health (DOH). DOH will charge a $15 filing fee. Or, you may take it into a WA State Child Support Office. If you do that, Bright Start will pay the filing fee for you. I have noted the address for the nearest office in the letter to [Redacted].

We wish you, [Redacted], and [Redacted], the very best.

Sincerely,

[Redacted]
Manager
WA State Bright Start Project

*This program is made possible through a grant from the Federal Administration for Children and Families*
April 20, 2008

DISH-S-BRIGHT START
PO BOX 9008
OLYMPIA, WA 98507
Phone: (360) 664-5249
Fax: (360) 664-5077

Subject: Testing for the Paternity of

Dear [Name],

[is arranging for paternity testing for the above named case. The following parties have been scheduled for specimen collection:

Appointment: 05/17/2008 11:00 AM

All adult clients need to bring two forms of identification, one must be a picture identification. One form of identification is needed for the child. Acceptable forms of identification are driver’s license, social security card, ID card (with picture), or birth certificate.

Sincerely,

[Signature]