Final Report for the E-referral Demonstration:

Project Summary, Training Implementation Evaluation, and Final Data Analysis

Prepared for

State of Washington, Department of Social & Health Services

November 2010

ECONorthwest
ECONOMICS • FINANCE • PLANNING

KOIN CENTER • SUITE 1600
222 SW COLUMBIA STREET
PORTLAND, OREGON 97204
PHONE • 503-222-6060

TABLE OF CONTENTS

TABLES

FIGURES

Executive Summary

BACKGROUND AND PROJECT PURPOSE

In 2007, the Administration for Children and Families' federal Office of Child Support Enforcement (OCSE) awarded Washington State's Division of Child Support (DCS) an 1115 demonstration grant with the goal of improving cooperation between DCS and its sister agencies. Through the proposed demonstration, DCS committed to invest in a focused, three-year project to revamp and reinvigorate its then five-year-old e-referral process. E-referral is the electronic process by which clients associated with new Temporary Assistance for Needy Families (TANF) and Medicaid cases are referred by Community Service Offices (CSOs) to DCS for enforcement services. As planned, the demonstration project consisted of two key interventions:

- **Expansion of data sharing with vital records and full automation of the data exchange**. Washington State's Department of Health (DOH) currently shares birth, death, marriage, and divorce records with DCS. DCS contracted with DOH to automate the sharing of these records to eliminate the need for cumbersome case-by-case record checks. Ultimately, because of a divergence of understanding about project goals and the requirements for successful implementation, this part of the project was not completed.

- **Statewide training of TANF/Medicaid and DCS staff on the process of referring new cases.** In 2004, a DCS/TANF workgroup identified staff training on e-referrals as a critical need throughout the state. The group, convened through OCSE's *Better Outcomes Through Collaboration* seminars, found that DCS and TANF/Medicaid workers had different interpretations of the data fields on the non-custodial parent (NCPS) screen in the Community Services Division (CSD) computer system, and that no systematic training was available. Through the demonstration project, DCS documented the existing e-referral processes, identified strengths and weaknesses across the state, and built a joint TANF/Medicaid/DCS training curriculum with the goal of sharply improving the quality of information transferred by TANF/Medicaid staff.

DCS managers anticipated that more accurate and complete e-referrals would expedite the enforcement of child support for new TANF and Medicaid cases. Better information at the beginning of the process would presumably save a considerable amount of DCS staff time and would address at least three OCSE goals:

- Improve rates of paternity establishment
- Expedite the establishment of orders for support

- Strengthen the efficiency and responsiveness of DCS operations

DCS contracted with ECONorthwest to conduct an evaluation of the project. Due to a series of setbacks, the DOH data-matching project was not implemented as originally planned. The staff training, though significantly delayed, was completed by mid-2010. In addition to these delays, two external factors affected project implementation: (1) the recent recession and resultant increase in CSD caseloads, and (2) beginning in late 2009 e-referral processing was centralized, thereby dramatically changing the processes the evaluation set out to examine. These factors may have independently affected child support outcomes and certainly complicated our evaluation of the e-referral training module.

TRAINING IMPLEMENTATION AND EVALUATION

The training curriculum designed for the demonstration sought to accomplish several goals identified as important by CSD and DCS staff:

- Refresh CSD staff's understanding of the relationship between TANF and child support enforcement.
- Identify the critical NCPS fields.
- Promote consistent use of the notes screens in the Automated Client Eligibility System (ACES).
- Emphasize that incorrect NCP information is worse than no information.
- Improve communication with TANF applicants about non-cooperation sanctions.

Training development staff identified the following lessons learned through the development process:

- Experience and expertise were important resources for developing the online training.
- Training time for CSD staff was a critical constraint.
- To be most effective, the training needed to be mandatory.
- The collaboration between CSD and DCS staff was critical to developing a useful and credible training module.
- DCS and CSD can improve their communication in areas beyond those targeted by this grant.

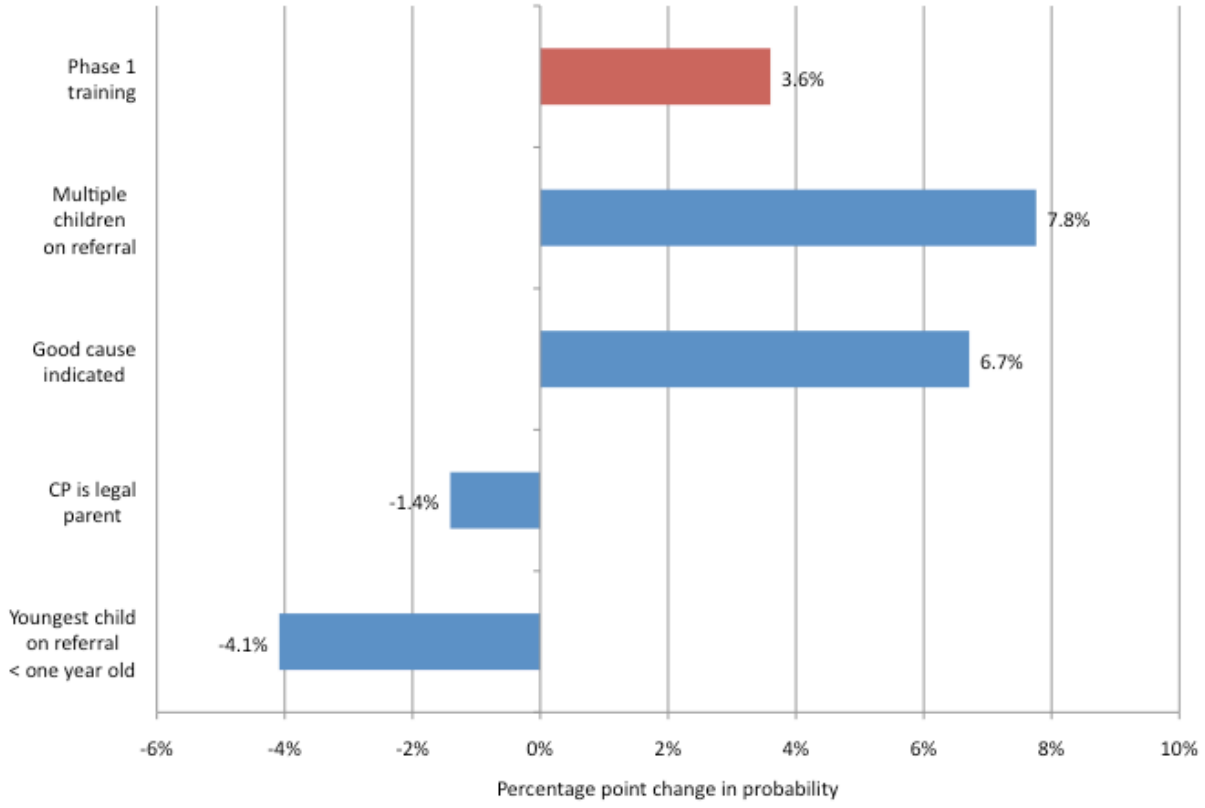
Staff implemented the training module in three phases from July 2009 to July 2010. By the end of Phase 3, a total of 1,429 CSD workers had completed the training, for a completion rate of 95 percent. Responses to a post-training survey were largely positive, with about 75 percent of survey respondents agreeing with several positive statements about the training, although some trainees provided negative feedback.

OUTCOME ANALYSIS

Original evaluation plans recommended tracking eight child support outcome measures, but several of these, such as the share of current support paid as due,

are only measurable with a lag, thus precluding a full analysis of post-training outcomes given the late implementation schedule. Nonetheless, a regression analysis of e-referral and child support data from before and after training implementation suggests some positive impacts of the training. In particular, we found, after controlling for case characteristics, time trends, and other factors, the Phase 1 training coincided with a statistically significant increase in the share of e-referrals with an NCP name or Social Security number of 3.6 percentage points. This increase is substantial and corresponds to a *28 percent reduction* in e-referrals with neither piece of information, relative to what would have been predicted without the training. Figure ES.1 compares the estimated impact of the first phase of training to the impacts of several case characteristics on data quality. All reported impacts are statistically significant at conventional levels ($p<0.05$).

Figure ES.1: Impact of case characteristics and Phase 1 training on the probability that an e-referral includes NCP name or SSN



Notes: Estimates based on e-referrals received during Dec. 2009-March 2010
Source: ECONorthwest analysis of Washington DCS data

In theory, this increase in data quality should translate into improved child support outcomes. We found only very limited evidence that training had a significant impact on child support outcomes, although our analysis data set also had important limitations, as noted above, so we consider these findings largely inconclusive. We found no evidence that the training affected the length of time from referral to the opening of a child support case or the timing and type (administrative or court-based) of support order establishment. We found

suggestive evidence that the training ultimately reduced the time from referral to paternity establishment, if paternity is in question at the time of referral, and that it increases the likelihood of administrative paternity establishment relative to court-based establishment.

We applied our analysis of e-referral data quality to the development of a method for creating CSD performance benchmarks. Such benchmarks would provide CSD staff a summary of their e-referral submission performance from the DCS perspective—something many CSD employees identified as potentially useful. Regular benchmarking could also be used to identify offices that might benefit from additional training or other outreach by DCS that seeks to improve referral data quality.

RECOMMENDATIONS

This 1115 demonstration grant had the stated goal of improving Washington State's e-referral process. In spite of the implementation challenges, the demonstration ultimately produced many positive outcomes from which Washington, and other states, can learn:

- The DOH data matching efforts initiated important conversations about the needs and interests of both DCS and CSD. These discussions should continue and will inform the two agencies as they continue to work toward greater data sharing.

- The e-referral training was well received and should continue, as should curriculum development consistent with staff suggestions. Requiring new CSD intake staff to view the training, possibly in conjunction with additional training by co-located DCS staff, will improve CSD staff understanding about DCS data needs and the benefits to CSD clients of supporting DCS efforts.

- DCS has ready access to data necessary for performance benchmarks that can help DCS and CSD target outreach and training efforts. DCS should convene agency staff to further develop this concept.

- The process of collaborating and discussing project goals opened important channels of communication between DCS and CSD, suggesting several ideas for continued collaboration efforts such as developing an incentive system that rewards CSD staff for providing high-quality NCP information. Both DCS and CSD staff also reported that specific upgrades to the ACES system would improve the flow of information between the agencies.

Overview of the Evaluation

BACKGROUND

In 2007, the Administration for Children and Families' federal Office of Child Support Enforcement (OCSE) awarded Washington State's Division of Child Support (DCS) an 1115 demonstration grant with the goal of improving cooperation between DCS and its sister agencies. Through the proposed demonstration, DCS committed to invest in a focused, three-year project to revamp and reinvigorate its then five-year-old e-referral process. E-referral is the electronic process by which clients associated with new Temporary Assistance for Needy Families (TANF) and Medicaid cases are referred by Community Service Offices (CSOs) to DCS for enforcement services.

As planned, the demonstration project consisted of two key interventions:

- **Expansion of data sharing with vital records and full automation of the data exchange**. The Department of Health (DOH)—Washington State's vital records department—currently shares birth, death, marriage, and divorce records with DCS. DCS contracted with DOH to automate the sharing of these records to eliminate the need for cumbersome case-by-case record checks. Ultimately, because of a divergence of understanding about project goals and the requirements for successful implementation, this part of the project was not completed.

- **Statewide training of TANF/Medicaid and DCS staff on the process of referring new cases.** In 2004, a DCS/TANF workgroup identified staff training on e-referrals as a critical need throughout the state. The group, convened through OCSE's *Better Outcomes Through Collaboration* seminars, found that DCS and TANF/Medicaid workers had different interpretations of the data fields on the non-custodial parent (NCP) screen in the Community Services Division (CSD) computer system, and that no systematic training was available. Through the demonstration project, DCS documented the existing e-referral processes, identified strengths and weaknesses across the state, and built a joint TANF/Medicaid/DCS training curriculum with the goal of sharply improving the quality of information transferred by TANF/Medicaid staff.

DCS managers anticipated that more accurate and complete e-referrals would expedite the enforcement of child support for new TANF and Medicaid cases. Better information at the beginning of the process would presumably save a considerable amount of DCS staff time, prevent inappropriate paternity e-referrals to the courts, and get support to children sooner. In 2008, DCS received about 1,400 e-referrals monthly with incomplete or no information about the non-custodial parent. Through the 1115 demonstration, management expected to cut that number by half or more.

Improved e-referrals would address at least three goals in OCSE's strategic plan:

- **Improve rates of paternity establishment** (OCSE Goal 1). When cases are set up appropriately, incorporating all the information known to DOH, DCS can quickly isolate and target those that truly need paternity establishment services. DCS and prosecuting attorneys would no longer start judicial establishment motions only to later discover a voluntary affidavit or evidence of marriage. An automated data match with DOH would also improve the quality of DCS's paternity data and increase the likelihood that the division continues to pass its annual audits.

- **Expedite the establishment of orders for support** (OCSE Goal 2). Incomplete or inaccurate e-referrals slow down the order establishment and/or enforcement process. In some cases, DCS officers may be investigating old, inaccurate addresses when an interview or untapped database has more current information. In other instances, DCS officers may be unnecessarily starting their investigations from scratch. DCS expected a measurable decrease in the elapsed time between DCS case openings and support order establishments.

- **Strengthen the efficiency and responsiveness of DCS operations** (OCSE Goal 5). The inefficiency of the current system has been widely recognized by frontline DCS staff across the state. Reinvigorating the efforts of TANF/Medicaid staff and making full use of all information known to the state was intended to revamp the e-referral system and sharply reduce the amount of unnecessary investigative work associated with new cases. The Department of Social and Health Services anticipated that DCS, TANF, and Medicaid workers would be increasingly satisfied with the e-referral process over the course of the demonstration.

KEY FINDINGS FROM THE MIDTERM EVALUATION REPORT

As reported in the midterm report, an analysis of baseline data from e-referrals transmitted in calendar year 2008 supported the theory behind the interventions: Better data in the e-referral correlates with better child support outcomes. Specifically, an analysis of the baseline data showed the following:

- The average elapsed time from the date of e-referral to DCS and the establishment of paternity was about two weeks shorter for cases that were referred with an NCP name and Social Security number (SSN).

- Similarly, the elapsed time from e-referral to the date of order establishment was about a month shorter for cases with names and SSNs.

- E-referrals that included the NCP name and SSN were 14 percent more likely to be handled through administrative rather than judicial orders, saving families and the state from entering the court system.

- The average arrearage at the time of order establishment and the share of current support paid as due were similar. We expected these indicators to change as the training intervention was implemented and evaluated.

PURPOSE OF THIS REPORT

DCS contracted with ECONorthwest to conduct the required evaluation of the grant. The publication of this final evaluation report comes at the end of the third year of the demonstration. Due to a series of setbacks, the DOH data-matching project was not implemented during the project. However, all three phases of the training implementation were completed.

This chapter outlines the original research design, outcome measures, and timelines for evaluating the key interventions intended for Washington's e-referral program under the 1115 demonstration grant. It also discusses how the evaluation actually unfolded under several important constraints, including a severe fiscal crisis, workload increases, staffing shortages, and difficulty coordinating with the DOH to automate data matching of vital records.

Chapter 2 explains why automatic data matching did not occur, describes the training development process, and summarizes feedback from trainees. Chapter 3 provides an assessment of the data collected during the demonstration and evaluates the impact of the training intervention.

ORIGINAL EVALUATION DESIGN

Early in the project, the ECONorthwest project team recommended a design for the implementation and evaluation of the planned interventions. Specifically, we recommended that DCS implement the interventions in phases that would allow for analyzing pre- and post-intervention data. First, the automated DOH data matches and staff training were to be implemented in CSOs associated with four DCS field offices: Everett, Kennewick, Spokane, and Tacoma. These sites were chosen because DCS's SEMS staff was already collaborating with CSD field staff in Everett, Kennewick, and Spokane, and staff in the Tacoma office had expressed interest in collaboration.

The plan for the second phase was for all relevant staff in the regions associated with the pilot offices (regions 1, 2, 3, and 5) to receive training. Then, in Phase 3, the training would be rolled out to all staff in the two remaining CSD regions (4 and 6). Ultimately, about 3,000 CSD staff statewide would be asked to take the training.

The original evaluation design called for collecting pre- and post-demonstration data on selected child support outcomes for all 10 DCS field offices during the three implementation phases and using regression analysis to

estimate whether the implementation of the automated DOH matching and the staff training had independent effects on any of the key evaluation outcomes. To differentiate between the effects of the automated data match and those of CSD staff training, the original study design recommended staggered implementation of the two interventions. Ideally, DCS would have implemented the automated matches with DOH beginning in early January 2009, and staff training would have commenced in April 2009, roughly three months thereafter.

OUTCOMES TO BE EVALUATED

Both interventions planned under the 1115 demonstration grant were intended to accomplish a similar goal: expedite the assembly of accurate information about the identity and location of non-custodial parents. The main opportunity for improving NCP data is during the e-referral process. Staff training was intended to help CSD intake workers enter more complete client information from clients into the Automated Client Eligibility System (ACES). Further downstream in the process, the automated match with DOH was intended to similarly improve the quantity and quality of NCP data available to DCS caseworkers *after* the e-referral is transmitted to DCS.

The evaluation of this demonstration project focuses on a number of important child support outcomes for which we hypothesized improvement with more accurate and timely data. Presumably, these outcomes would differ noticeably across the treatment and control offices if the demonstrated interventions had the hypothesized impacts, although the two interventions could differ in the extent to which they affected each outcome measure.

The automated data-matching project was intended to be a low-cost way to ensure that DCS knows everything about a potential non-custodial parent that DOH knows. At the very minimum, matches would eliminate the need for support enforcement technicians (SETs) to manually review the DOH database. In some cases, matched information would allow SEMS to automatically create and update cases—bypassing SETs altogether for a sizeable share of e-referrals. In other cases, a data match would correct incorrect information transmitted from ACES, allowing caseworkers to more efficiently locate the appropriate non-custodial parent.

The CSD staff training intervention was hypothesized to have a similar, but potentially broader, effect compared to automated DOH data matching. Ideally, all CSD intake workers would regularly check information in the DOH paternity database, rendering the subsequent automated data matching obsolete. This evaluation was intended to examine the extent to which CSD workers fail to make full use of their online DOH access and the factors that drive this underutilization, including the impact of client demographic characteristics on the performance of individual CSOs in sending DCS accurate information.

The training had many potential benefits beyond the intake workers' use of specific DOH data elements. It was intended to explain the benefits—for CSD, DCS, and their clients—of gleaning better information about the non-custodial parent during initial intake interviews. A better understanding of DCS's mission

and how DCS services improve the lives of CSD clients could result in more thorough probing about NCP information during CSD intake interviews. More in-depth interviews would presumably improve the quality of paternity information DCS receives about children, including those born outside of Washington, for whom DOH may have no data.

Beyond the upfront savings in DCS staff time resulting from reduced need for manual casework and NCP location activities, expedited assembly of accurate NCP information could help expedite case openings, result in smaller arrears judgments at order establishment, and lead to higher support order compliance resulting from smaller arrearages and earlier order establishments.

The evaluation of the training project (exclusive of the DOH data-matching project) was designed to measure the impacts of the intervention on the following outcomes (explained in greater detail in Chapter 3):

1. The share of e-referrals that require manual SET intervention.
2. The elapsed time from e-referral to case opening.
3. The elapsed time from e-referral to DCS-recognized paternity establishment.
4. The share of e-referral cases with paternity established through an administrative process.
5. The elapsed time from e-referral to order establishment for current support.
6. The share of e-referral cases with an order for current support established through an administrative process.
7. The average arrearage at the time an order is established.
8. The share of current support paid as due.

EVALUATION TIMELINE

The actual implementation schedule varied from the original plan for a number of reasons. Table 1.1 compares the original and actual timelines. The DOH data-matching implementation was scheduled to occur before the training began, but delays and setbacks prevented this part of the project from being implemented. DCS decided to move ahead with the training project without the DOH data-matching component and began developing the online training module in early 2009.

Because both parts of the project were delayed from the original timeline, the DCS and e-referral data received in August 2010 provided relatively little post-implementation data for us to evaluate. DOH data matching was not implemented at all during the demonstration period, so there were no impacts to measure. All three phases of the training intervention were, however, completed by the end of the grant period.

Table 1.1: Original and actual implementation timeline

Activity	Sites	Original Timeline	Actual Timeline
Begin automated matches with DOH vital records data	DCS pilot sites	January 2009	Did not occur
Training Phase 1: Begin training in pilot site offices (Pierce North, Everett, Spokane Valley, and Kennewick)	4 CSOs	April 2009	Beginning in July 2009
Training Phase 2: Training in all CSOs in regions 1, 2, 3, and 5	27 CSOs	At completion of Phase 1	March 1 through April 14, 2010
Training Phase 3: Training in all CSOs in regions 4 and 6	25 CSOs	At completion of Phase 2	May 1 through June 30, 2010

Phase 1 began when the training was made available to staff in the four pilot offices in regions 1, 2, 3, and 5 in July 2009. In this phase, the training was mandatory. As of August 28, 2009, 89 out of 138 CSD staff at these offices had taken the training. As of late October 2009, 132 CSD staff members had taken the training, for a 96 percent completion rate. On October 19, 2009, the CSD training and development office sent a request for pilot training participants to take an online survey about their experience. By October 26, 2009, 22 trainees had responded to the online survey, for a response rate of 17 percent. Although this is a relatively small response rate, CSD staff reported greatly increased workloads during this period, so project staff decided not to push for a greater response. During this period, we also conducted two site visit interview sessions with training recipients at the Pierce North CSO.

At the end of Phase 1, the training developer revised the training based on the content of the survey responses and the site visit interviews and uploaded the training to the Department of Social and Health Services (DSHS) training system (staff were not aware of the training unless they were specifically invited to take it). Phase 2 involved advertising the training to all CSD staff in regions 1, 2, 3, and 5 via an email to region managers on November 16, 2009. Unlike the first phase, the second phase of training was not initially deemed mandatory. However, severe caseload increases and staffing shortages at CSOs made it nearly impossible for staff to devote time to training, and at the end of December 2009, only two CSD staff members in Phase 2 regions had taken the training. DCS and CSD managers decided to make the training mandatory, estimating that CSD workers would need approximately two months from the date the training was made mandatory to reach a satisfactory completion rate. Thus the new schedule for implementing Phases 2 and 3 was as follows: In Phase 2, staff in regions 1, 2, 3, and 5 were required to take the training between March 1 and April 30, 2010. Phase 3 followed immediately, with staff in regions 4 and 6 required to take the training between May 1 and June 30, 2010.

SUMMARY OF THE E-REFERRAL PROCESS STUDY

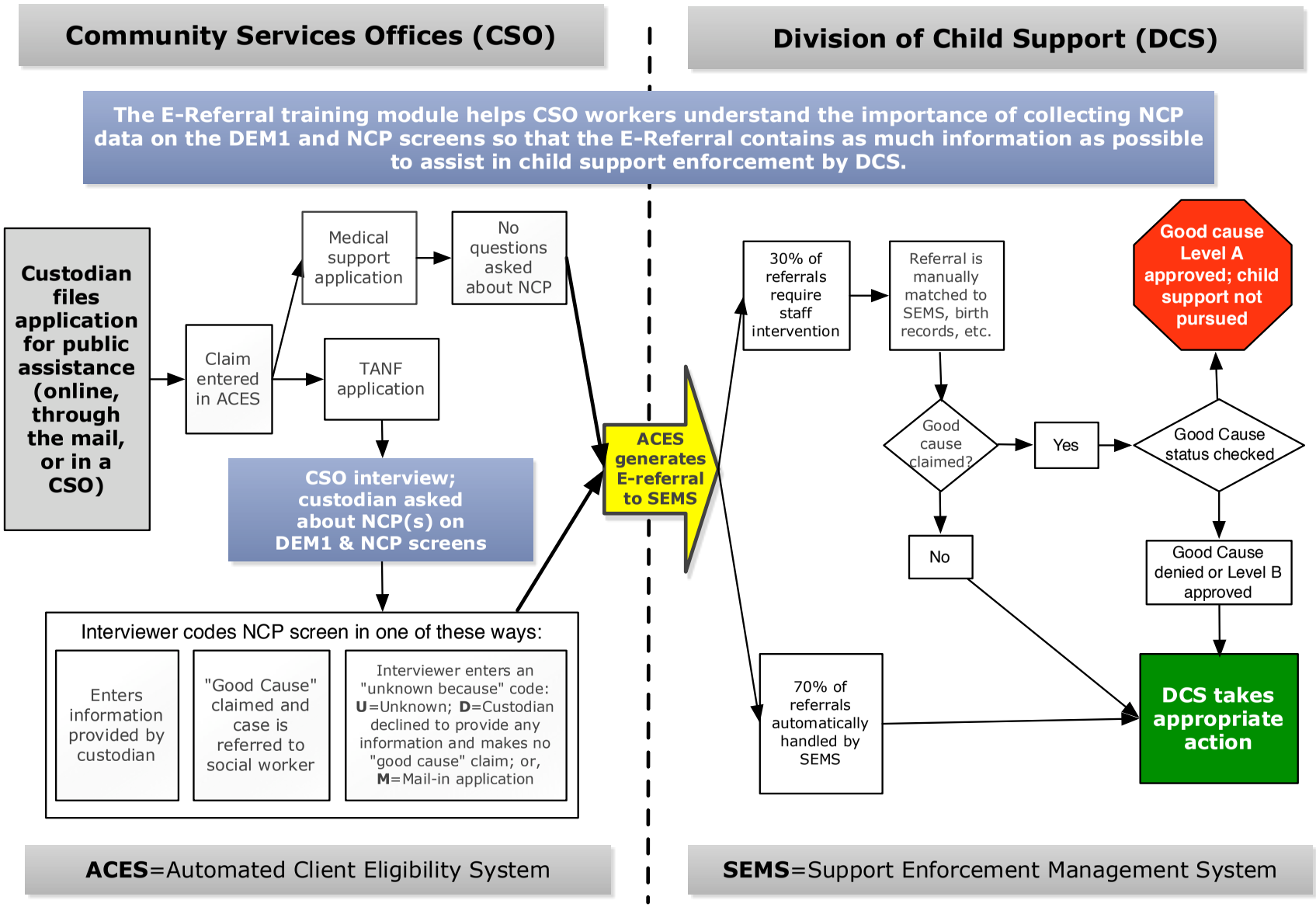
The first step in the evaluation was completing a process study of the e-referral system to identify specific areas of weakness in the CSOs' data collection process. We conducted interviews with an array of CSD workers to understand the e-referral process from the CSD perspective. Typically, we met with the office administrator, one or more supervisors, and several line workers. The conversations sought to explore the typical client flow as it relates to the interaction between TANF and DCS, as well as the impressions CSD staff had about child support and the e-referral process. The process study resulted in a handful of specific recommendations that guided the development of the training module and are described in Chapter 2. This section reviews CSD's TANF intake process and how it relates to DCS's processes.

THE E-REFERRAL PROCESS

Figure 1.1 shows a diagram of the process involved in generating an e-referral. Families may apply for public assistance, including TANF, medical support, and food stamps, either in person, online, or by mail. For a TANF application, which necessarily involves dependent custodial children, the applicant must be the child's legal custodian: the mother, the father, or another adult with legal custody, such as a grandparent. When a custodian applies for a TANF grant, he or she is required to have an in-person interview with a CSD intake staff person.

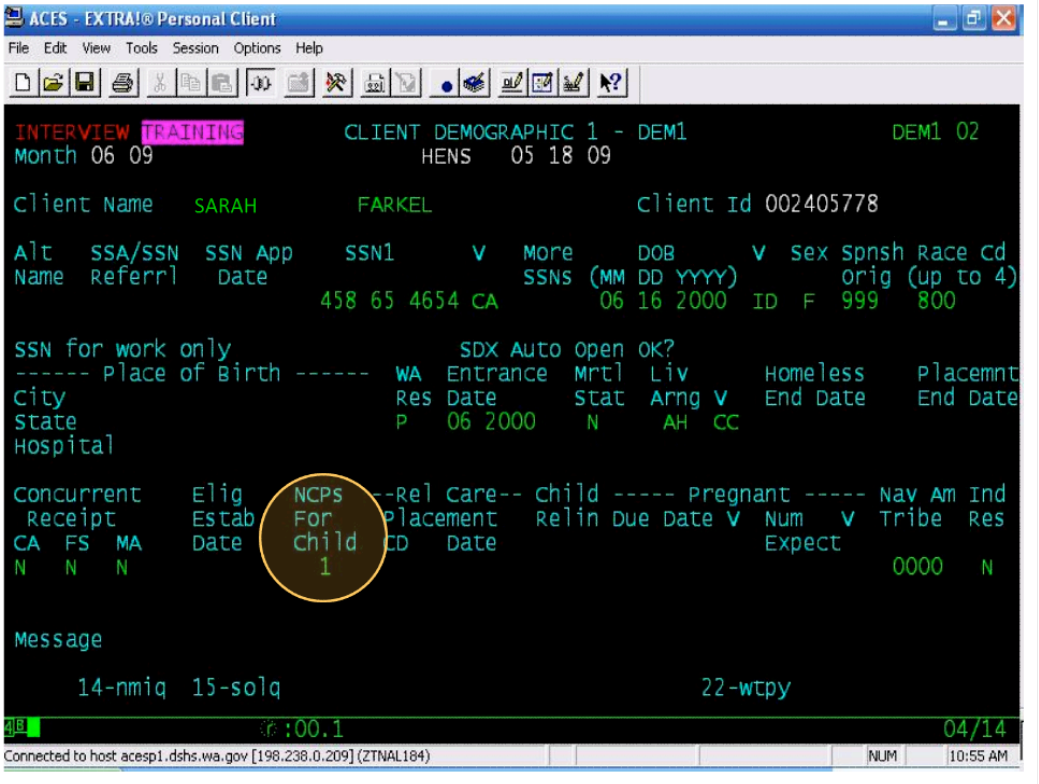
During the intake interview for in-person applications, the CSD worker proceeds through a series of data collection screens in ACES. Two of these screens, the child's basic demographic information (DEM1) screen and the subsequent non-custodial parent (NCPS) screen, ask for data that are critical to DCS for processing child support enforcement actions against non-custodial parents. These two screens were the focus of the training intervention designed by DCS for CSD staff.

Figure 1.1: The e-referral process



The DEM1 screen, shown in Figure 1.2, asks for basic demographic information about the child for whom the application is being made, including the number of non-custodial parents for the child. This field is called "NCPS for Child" on the DEM1 screen. The TANF applicant may be a parent in a two-parent household, a single parent, or the custodian of the child with neither parent in the household. In a two-parent household, the NCPS field is coded as "0," meaning there are no non-custodial parents for that child; in a single-parent household it is coded as "1;" and for a non-parent custodian the field is coded as "2," meaning both parents are non-custodial.

Figure 1.2: DEM1 screen in the Automated Client Eligibility System (ACES)



In any case involving a non-custodial parent (single parent or non-parent custodian), to receive full benefits the applicant generally must agree to cooperate in the process of identifying and locating the non-custodial parent(s). The CSD interviewer must complete the NCPS screen for each non-custodial parent related to the children in that household. Figures 1.3 and 1.4 show the NCPS screen and its data elements.

Figure 1.3: Non-custodial parent (NCPS) screen in ACES

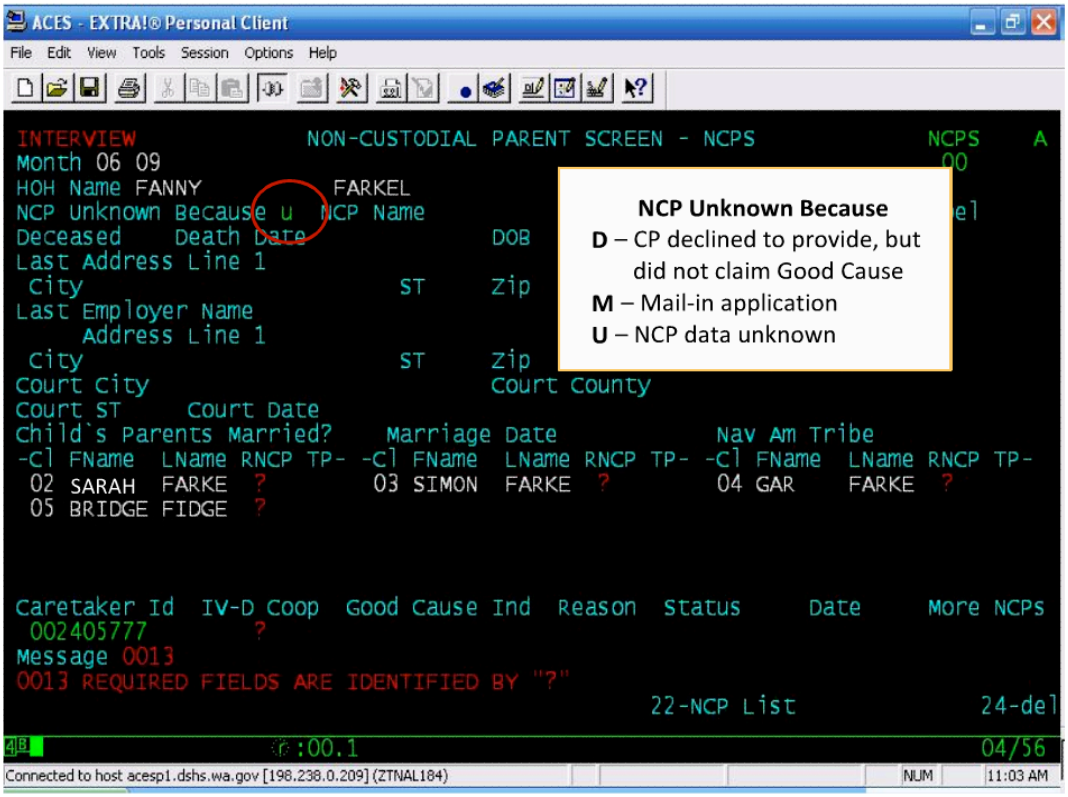


Figure 1.4: Data elements on the NCPS screen in ACES

Head of household

- Name
- Client ID

Non-custodial parent

- Name
- Date of birth
- Sex
- Social Security Number
- Last address
- Phone number
- Last employer name and address
- Court order (divorce, paternity)
- Court location
- Marital status/marriage date
- Native American Tribal code

Non-custodial parent (continued)

- Deceased (Y/N)
- Date of death
- Reason if NCP is unknown (*e.g.*, mail in application, custodial parent declined to answer, custodial parent does not know)

Child(ren)

- Name
- Relationship to NCP (*e.g.*, father, mother, paternity affidavit, alleged father)

Other

- Caretaker ID
- IV-D cooperation status

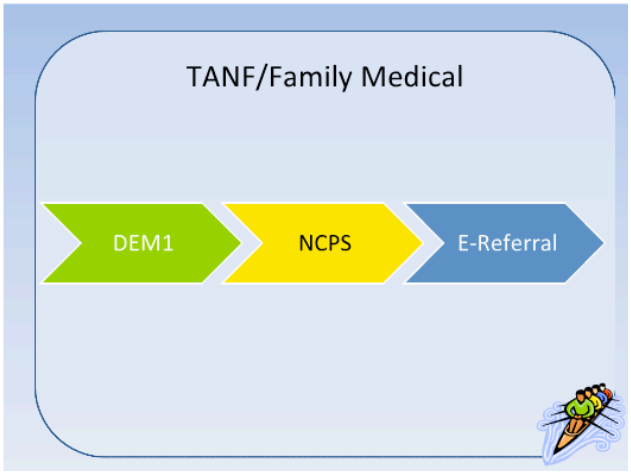
If the applicant provides at least some information about the non-custodial parent, the intake worker enters the applicable data into the fields on the NCPS screen. However, there are cases in which the applicant does not provide such information. A field called "Unknown Because" allows the intake worker to provide one of two codes denoting the reason the applicant did not provide the information:

- **U=Unknown**: the custodian does not have any NCP information, or
- **D=Declined**: the custodian may have NCP information but declines to provide it and does not make a "good cause" claim.

Applicants may claim that there is "good cause" not to pursue child support, for example, when the threat of domestic violence exists. Such cases are automatically referred to a social worker for investigation. The application still generates an e-referral to DCS, but DCS is alerted to check the status of the good cause claim with the social worker before proceeding with child support enforcement.

As illustrated in Figure 1.5, ACES compiles the DEM1 and NCP information gathered during the TANF intake interview and automatically generates an e-referral to DCS's Support Enforcement Management System (SEMS), which begins the process of child support enforcement. Before the training implementation, DCS estimated that 70 percent of the e-referrals they receive have enough information to allow SEMS to automatically identify the non-custodial parent through other databases and automatically take appropriate action. However, 30 percent of e-referrals require DCS staff intervention to identify the non-custodial parent and ensure that DCS is taking the appropriate action. The quantity and, more importantly, quality of the information gathered by the CSD worker during the interview have a direct and significant impact on DCS's workflow and outcomes.

Figure 1.5: Training slide explaining process from ACES screens to e-referral



Chapter 2 Program Implementation

SUMMARY OF DATA MATCHING EFFORTS

The first planned component of the demonstration grant was automating the exchange of vital records. DOH currently shares birth, death, marriage, and divorce records with DCS. DCS contracted with DOH to automate the sharing of these records to eliminate the need for cumbersome case-by-case record checks. Ultimately, because of a divergence of understanding about project goals and the requirements for successful implementation, this part of the project was not completed.

TIMELINE FOR THE DATA MATCH

In November 2008, DCS gave DOH a list of specific questions they wanted DOH to answer during the design phase. DCS anticipated that DOH would complete the design document by May 29, 2009. A contract between DCS and DOH outlined the goals of the vital records design phase: DOH would explain their plan to develop a system to meet the business needs of DCS and the technical requirements in the e-referral vital records specifications. DOH and SEMS staff would meet to discuss the design plan and make any necessary modifications before the beginning of the coding and development phase.

Midway through the design phase of the process, DOH assigned a new work unit to the project. The new programmers had a number of concerns about the DCS/DOH contract and did not deliver the design document until March 22, 2010. However, by early May 2010, DOH had completed several steps in the development process, including generating and testing a real-time data-matching web service; writing modules for matching birth, death, marriage, and divorce records; sending results from test files to DCS for validation; and providing DCS with documentation on the specifications for the web service. As of July 2010, DOH believed they had fulfilled the spirit of their contract with DCS.

DCS decided that they could not accept DOH's design document as written. Their primary concerns were that DOH staff had not explained how they would meet certain specifications of the contract and how their data transfer strategy would meet DCS's expectations. In August 2010, DCS informed DOH of their decision and provided a list of specific requirements that would make the document acceptable. Specifically, DCS requested that DOH explain the following: DOH's requirement that DCS's desired batch process be converted into a "real-time" process, what type of testing DOH would complete, how they would eliminate or mitigate risks, and how they would incorporate searches by SSN and unusual last names. DCS declined to pay DOH for this part of the grant until these concerns were addressed. As of this writing, DOH had not responded to these requests, and DCS had not paid DOH for any of the deliverables in the contract.

INTERVIEWS REGARDING THE DATA MATCH

We conducted interviews with SEMS and DOH programmers and managers to better understand why the DOH data match was never successfully launched. The interviews were conducted on July 1, 2010, at agency offices in Olympia. At the time of the interviews, progress on the data match had been stalled for quite some time. This section summarizes the interviewees' responses to three questions: Why did the process break down? Was anything of value accomplished? What are the prospects for data matching in the future?

WHY DID THE PROCESS BREAK DOWN?

Although apparently supportive of the general goals of the project, staff from both agencies reported similar types of breakdowns in communication, misunderstanding of agency needs by the other agency, and disagreements about the appropriate technology for project implementation. A critical issue from DCS's perspective was DOH's assignment of a new unit to the project, replacing programmers with whom SEMS staff felt they had a positive working relationship. DOH staff explained that the change was necessary and a part of a larger restructuring to improve DOH data systems and address identified data security issues. DOH reported that the original DCS/DOH agreement would not have been approved under the new management, a fact that DCS understands.

From DCS's perspective, DOH never fully accepted or understood how SEMS wanted to implement the data match, why the method was preferable to solutions proposed by DOH, or why DOH's existing work was insufficient. SEMS staff suggested that the proposed data match did not mesh well with DOH's existing fee structure, and that this also caused problems. From DOH's perspective, there was a lack of flexibility in DCS's technical requirements for implementation, too little transparency in how DCS was testing DOH data samples, and a lack of clarity in concerns expressed by DCS about the data. Ultimately, the agencies were unable to move beyond these mutual misunderstandings.

WAS ANYTHING OF VALUE ACCOMPLISHED?

Despite the problems, staff reported that the project was valuable for a number of reasons:

- Recently hired DOH staff became more familiar with Washington's vital records systems through the project; it required gaining an understanding about the limitations to the DOH system.

- The project was a proof of concept for greater vital records data sharing, and the child support project provided a concrete example of what another agency needed. The informatics team learned valuable lessons about what happens when "data processing meets public policy."

- SEMS staff reported that DOH now has a better understanding of DCS business needs, and that the process was an important effort to build a

needed relationship between DOH and DCS. Staff also reported a better understanding of DOH processes and data.

WHAT ARE THE PROSPECTS FOR DATA MATCHING IN THE FUTURE?

Both agencies reported interest in continued work on creating an automatic match of DOH and SEMS data. For DOH, the e-referral project was seen more or less as a proof of concept for techniques to allow greater sharing of vital records data with other government agencies. DOH plans to continue down this path. DCS still sees value in having the automatic data match, but SEMS staff believe that they will most likely need to use different methods to implement a match. Neither agency thought that completing the work planned under the e-referral grant would take very long to complete. But the mutual misunderstandings about project goals and agency priorities make completion as described in the DCS/DOH contract unlikely. SEMS staff noted that an effort at the federal level to encourage this type of data sharing would help to foster greater cooperation and data sharing between state child support and vital records agencies.

SUMMARY OF TRAINING IMPLEMENTATION

The second of the two components of the 1115 demonstration grant called for DCS to develop a training module for CSD staff on the process of collecting critical information during the TANF interview that would expedite the process of collecting child support from non-custodial parents. For evaluation purposes, the implementation plan called for the training to be rolled out in phases, with the third and final phase being statewide implementation.

The training project started with identifying critical data needs for the e-referral process. In 2004, a DCS/TANF workgroup identified staff training on e-referrals as a critical need throughout the state. The group, which was convened through OCSE's *Better Outcomes Through Collaboration* seminars, found that DCS and TANF/Medicaid workers had different interpretations of the data fields on the NCPS screen in the CSD computer system, and that no systematic training was available. Through the demonstration project, DCS documented the existing e-referral processes, identified strengths and weaknesses across the state, and built a joint TANF/Medicaid/DCS training curriculum with the goal of sharply improving the quality of information transferred by TANF/Medicaid. The remainder of this chapter describes the recommendations from the e-referral process study and the process of developing and implementing the training, reports on feedback from trainees about their experience, and summarizes the findings from DCS and CSO site visit interviews.

The development and implementation processes offered some important lessons for organizations that are considering replicating such a training program. These are discussed throughout the chapter:

- Experience and expertise were important resources for developing the online training.

- Training time for CSD staff was a critical constraint.
- In order to be most effective, the training needed to be mandatory.
- The collaboration between CSD and DCS staff was critical to developing a useful and credible training module.
- DCS and CSD can improve their communication in areas beyond those targeted by this grant.

RECOMMENDATIONS FROM THE PROCESS STUDY

During the initial process study, CSD and DCS staff identified six areas of weakness that a focused training session for CSD staff could address. These recommendations formed the basis of the curriculum for the online training sessions developed by DCS:

- **Identify the critical NCPS fields**. CSD workers indicated that it would be useful to know which data fields on the NCPS screen were most important to DCS. By having a better sense of the key data items and how those are used, CSD intake workers felt that they might be able to probe more effectively and obtain higher quality information.
- **Promote consistent use of ACES notes screens**. Although many CSD staff indicated that they collect potentially relevant NCP information that is not captured on the NCPS screen, there is no standard practice for where workers enter this information. SETs, who match e-referrals with other data sources to identify non-custodial parents, do not search for notes on a regular basis, in part because use of the multiple ACES notes screens is not standardized among CSOs.
- **Emphasize that incorrect NCP information is worse than no information**. SETs typically double-check all information provided on the e-referral. Although DCS wants as much NCP information as possible, incorrect information ultimately makes paternity establishment more difficult. This is particularly true in cases where there are multiple children on the grant with different fathers. In these cases, DCS would rather that intake workers simply enter "unknown" instead of entering partial information about one of the absent parents associated with the case.
- **Refresh CSD understanding of the relationship between TANF and child support enforcement**. Although most CSD staff indicated that they had some understanding of the relationship between TANF and child support, there was often confusion about exactly how DCS uses NCP information. CSD financial workers and case managers may benefit from occasional refreshers that reiterate the importance of the data collection effort. The refreshers would help staff fill in the appropriate fields and better equip them to answer questions from

clients about how child support will affect the grant amount and the implications of assigning rights and responsibilities to the state. In addition, if child support is presented to clients as a means of self-sufficiency, it may result in greater cooperation from previously hesitant applicants.

- **Improve communications to TANF applicants about non-cooperation sanctions**. A common refrain during interviews with CSD staff was that clients who are sanctioned for non-cooperation with DCS are typically unaware of (1) the requirement to provide information about the absent parent and (2) the fact that non-cooperation results in a reduction of the TANF grant.[1] Although CSD staff indicated that they always discuss this with new applicants, and clients receive several letters informing them of this responsibility before sanctions are initiated, the sanction process still surprises many clients. Some of these situations might be avoided with more succinct explanations of the sanction process to new TANF applicants. For clients already inclined to provide information about the absent parent, it may be possible to better ensure that they have ample opportunity and incentive to provide the relevant details.

- **Provide periodic feedback to CSOs about the relative quality and completeness of their e-referrals.** SEMS staff can produce office-by-office summaries of the share of e-referrals with incomplete or wrong information about the non-custodial parent. Analyses suggest a wide variation in e-referral data quality that socioeconomic conditions alone do not appear to explain. Using SEMS data, DCS should develop performance benchmarks—tailored to the socioeconomic conditions of each office—and share them quarterly with each CSO.

TRAINING DEVELOPMENT

DCS was responsible for developing the training module for CSD staff. At the beginning of the project, DCS had an expert on e-learning who took the lead on developing the training. However, this person left early in the grant period, and training development was left to another program manager at DCS. Aside from some routine tasks, the manager devoted most of her time to this project. Because she had no technical experience developing online trainings, she learned that process in conjunction with the curriculum development and coordination of delivering the training. This further complicated development and delivery. In

[1] "Cooperation" and "non-cooperation" refer to the requirement that TANF and medical assistance clients help DCS collect child and medical support when they receive TANF or medical assistance. Cooperation consists of the client naming the parent(s) of the child(ren), providing information to help find the parents, and helping to prove who the parent(s) of the child(ren) are. If a client does not cooperate with collecting child and medical support, his or her cash grant may be reduced by 25 percent. Clients are allowed to claim "good cause" not to cooperate if there is a chance of physical or emotional harm, if the child was due to rape or incest, or it adoption proceedings are underway. CSD staff provide applicants with the DSHS 18-334 form, which explains cooperation and good cause, and CSD social workers determine good cause. Clients have the right to ask for a fair hearing about DSHS good cause decisions.

particular, she received considerable technical support for the "Articulate" program (see below) from a CSD information technology staff person in Spokane.

CSD had a staff development and training manager with online training development experience, but severe staff reductions and workload increases meant that she was too busy to contribute to the project beyond providing some technical support, taking responsibility for rolling out the training to CSD staff, and administering the post-training survey.

SOFTWARE

The DCS training program manager built the training module primarily in Microsoft PowerPoint with an add-on program called Articulate that allows the addition of attachments, quizzes, narration, and animation. A character named "Becky," who was created in a program called Character Builder, guides the training module. Character Builder creates a Flash file for the animated character that is integrated into the PowerPoint slide show.

The training program manager learned to use Articulate and Character Builder as she was developing the training, which consumed a large proportion of her time on the project. Based on her experience, she recommended that an inexperienced training developer find a resource person with expertise in these programs. She also said that it would have been useful to learn more about the programs' capabilities before she began the project.

Washington's DSHS has an internal online training system, which serves as the portal for online trainings uploaded by individual departments. Managers can specify certain training programs as mandatory for certain employees. The system tracks each employee's progress and completion. Both employees and managers have access to employees' training records.

Figure 2.1 is a screen shot of the introductory slide showing how the PowerPoint slides, the Articulate add-ons, and the narrator character were incorporated into the training program platform.

Figure 2.1: Screen shot of the training introduction

CONSTRAINTS ON THE DEVELOPMENT PROCESS

The major constraint on the development of the CSD training was the lack of available expertise in developing online trainings. As described, the person at DCS with the most experience in this area left the organization, leaving the work to the DCS training program manager, who had no experience in this area. Budget constraints played a role to the extent that the CSD training manager did not have much time to help because of staffing shortages and increased workloads in that department. The 1115 grant provided adequate funding to allow the DCS training manager time to learn the necessary software programs, but the lack of expertise delayed the completion and rollout of the training.

TRAINING CURRICULUM

The curriculum for the training was based in large part on the recommendations from the process study. In addition, two departments made specific requests to add information about coding for tribal members and dealing with domestic violence issues. Both of these requests were incorporated into the training.

The CSD training module, which consists of 49 slides with a narrated soundtrack, covers the following topics:

- Introduction
- Child support as a resource
- Who is the non-custodial parent?
- What is e-referral?
- NCPS fields
- Coding the DEM1 screen
- IV-D coop, family violence, and good cause

- Critical fields for DCS
- Tribal coding on the NCPS screen
- Quality versus quantity
- Available tools
- Communicating with DCS

Three simple quizzes provide review during the training. The program also includes five attachments that provide more information: a detailed explanation of who is considered a non-custodial parent, how to complete the NCPS screen in ACES, SEMS web payment codes, and two commonly used DSHS forms related to non-custodial parents. The attachments are hyperlinked web pages and documents that can be viewed during the training and also downloaded for future reference.

The training session covers a wide range of general information about how the ACES system is related to DCS and SEMS. Below, we describe how the training addresses the specific recommendations from the process study and the two additional topic areas that were added upon request.

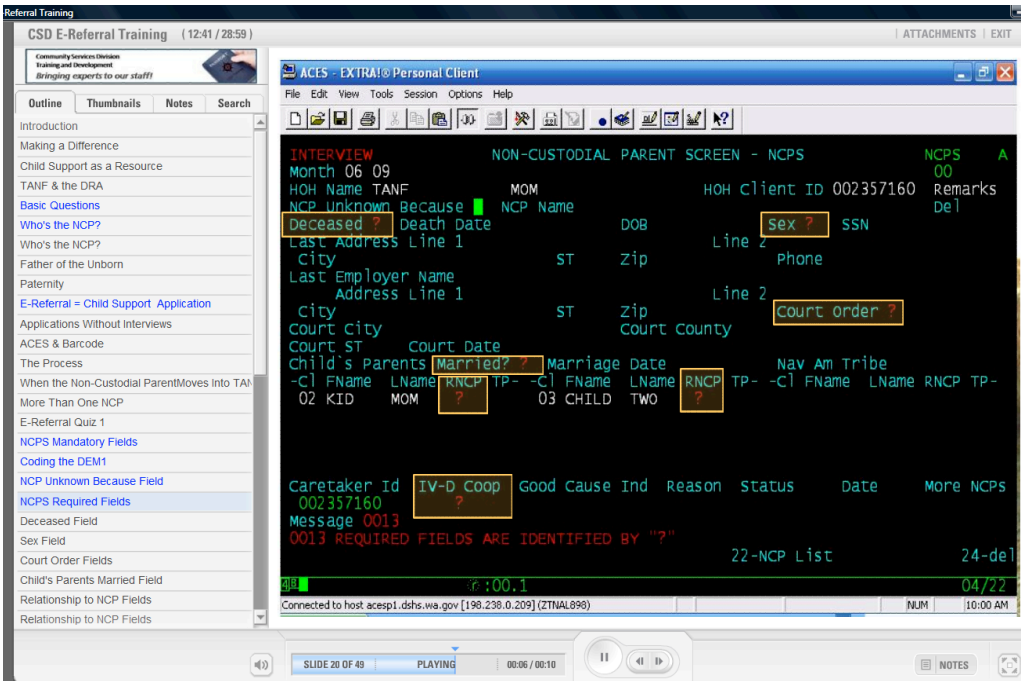
Objective #1: Identify the critical NCPS fields

Figure 2.2 is a slide from the training module that highlights the NCPS fields that are critical for DCS to effectively process child support e-referrals. Several NCPS fields are required:

- Whether or not the non-custodial parent is deceased
- The sex of the non-custodial parent
- Whether or not there is a court order for child support
- Whether or not the child's parents are married
- The name of each child in the household
- Each child's relationship to the non-custodial parent (presumed father [FA], alleged father [AF], mother [M], or no relationship [NO])[2]
- Whether or not the applicant has made a good cause claim for not referring the unknown non-custodial parent to the child support system[3]

[2] These codes are particularly important when, for example, there are several children in the household who have different fathers.
[3] Good cause claims are critical to ensuring the safety of families in cases where domestic violence may be involved.

Figure 2.2: Required fields on the NCPS screen in ACES



The narration describes the codes associated with each of these fields and the importance of each field in the child support enforcement process. It also stresses the importance of including other relevant information gathered during the interview, such as partial information about the parents' marriage date or other names by which the non-custodial parent is known, in the "Remarks" field.

Figure 2.3: NCPS fields identified by DCS as critical but not required

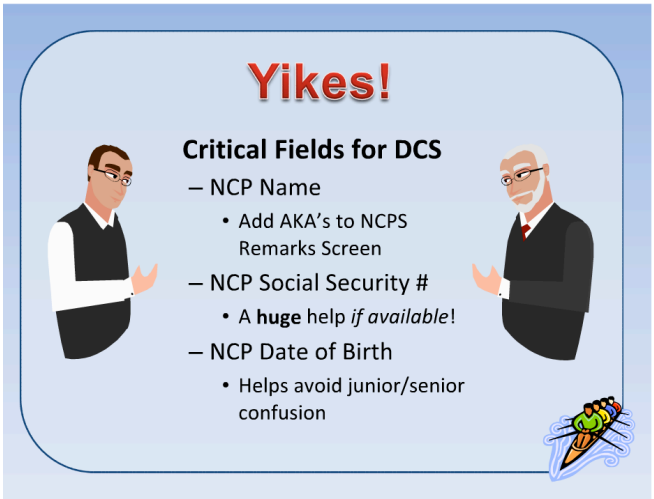


Figure 2.3 shows the fields that, while not required, are nevertheless of critical importance to DCS in correctly identifying and locating the correct non-custodial parent for each child in the household. The slide makes particular note of absent parents with alternate names (AKAs), which should be entered in the remarks screen.

Objective #2: Promote consistent use of ACES notes screens

Objective # 3: Emphasize that incorrect NCP information is worse than no information

These two objectives are addressed throughout the training session and in the discussion toward the end about the quality of information (see Figure 2.4). The narration states,

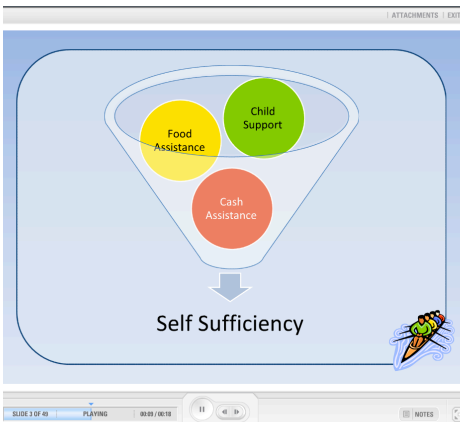
> *"Remember, quality is more important than quantity . . . At a minimum, wrong information on e-referrals can cause confusion, and delay support to families who need it. On the other end of the spectrum, the potential to endanger our clients if we move forward with the wrong information is too great to leave to chance. If you have doubts about the information that you are entering on the non-custodial parent screen, or NCPS, simply leave it off. DCS would prefer receiving less NCPS information that is correct than an NCPS that is full of information that could be incorrect."*

Figure 2.4: Documenting notes and ensuring quality

Objective #4: Refresh CSD staff's understanding of the relationship between TANF and child support enforcement

Another issue identified in the process study was a general lack of understanding among CSD workers about how TANF relates to child support enforcement. Using the slide shown in Figure 2.5, the training explains that cash assistance from the TANF program is one of three types of financial support that helps families in need; the others are food assistance and child support. If a family is not receiving the child support to which they are entitled, the family may receive TANF in lieu of child support, but the non-custodial parent becomes liable for repaying those child support payments to the state. This is why it is so important that CSD staff participate to the greatest extent possible in collecting information that helps to identify and locate the non-custodial parent. The

Figure 2.5: Types of family assistance



process study concluded that a better understanding of the nature and importance of this relationship will help CSD workers collect the most complete and accurate information possible.

Objective #5: Improve communications to TANF applicants about non-cooperation sanctions

The process study identified a knowledge gap among clients who are sanctioned for non-cooperation with DCS. Typically, these clients claim to be unaware of (1) the requirement to provide information about the non-custodial parent and (2) the fact that being coded as non-cooperative results in a reduction of their TANF grant. The process study found that some of these situations might be avoided if the training session refreshed CSD staff's understanding of the sanction process, encouraged them to explain the process to new TANF applicants, check for understanding, and provide applicants with ample opportunity and incentive to provide the relevant details. Figure 2.6 shows the slide used to address this objective.

Figure 2.6: Checking with the client for understanding about cooperation and good cause

The narration related to the "Unknown Because" field, where the custodial parent might decline to provide information about the non-custodial parent, explains the codes that CSD intake workers should use and what actions DCS will take based on each code.

Objective #6: Clarify tribal coding

When DCS was developing the curriculum for the training program, DCS staff requested that it include a section about coding for tribal affiliation. Tribal coding is apparently not well understood by CSD staff, but it is critical to DCS because it determines the proper jurisdiction for the child support case.

Based on the State of Washington's government-to-government agreements with tribes, some tribes are responsible for child support enforcement among their enrolled members.[4] Significant legal complications can arise when the state improperly pursues a child support case against a tribal member. E-referrals that involve a tribal affiliation are manually reviewed by DCS staff and referred to the appropriate tribal liaison.

[4] Seven of the 29 federally recognized tribes in Washington State have IV-D programs. Several others, but not all, have either formal or informal child support enforcement agreements with DCS.

The tribal code is most commonly left blank, indicating no known affiliation. However, if the intake interviewer knows of or has reason to believe there may be a tribal affiliation, DCS asks CSD workers to choose the proper code from a drop down list associated with that field, or to enter 9999 if they are unable to locate the correct code or do not know which tribe the non-custodial parent may be affiliated with (see Figure 2.7). Using the slides shown in Figure 2.8, the training explains the proper procedures and coding for tribal affiliation and also the potential consequences of improper coding.

Figure 2.7: NCPS screen in ACES with tribal coding field

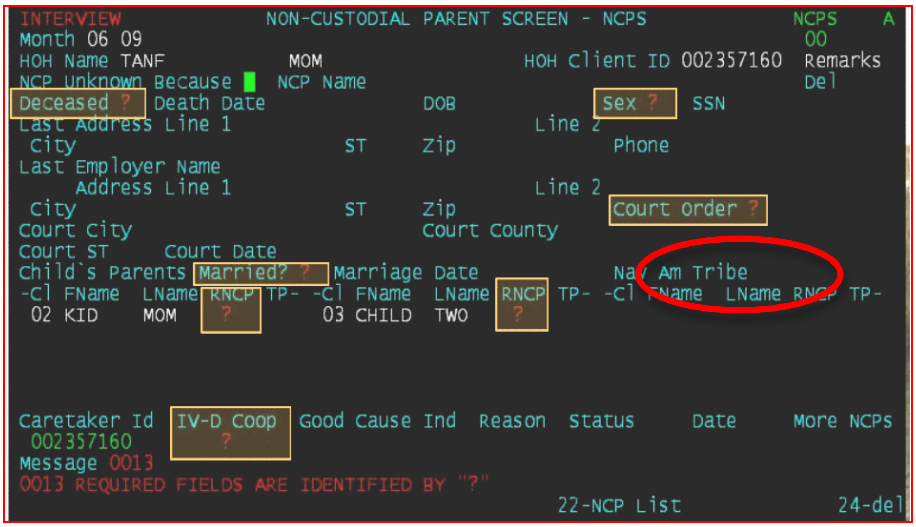
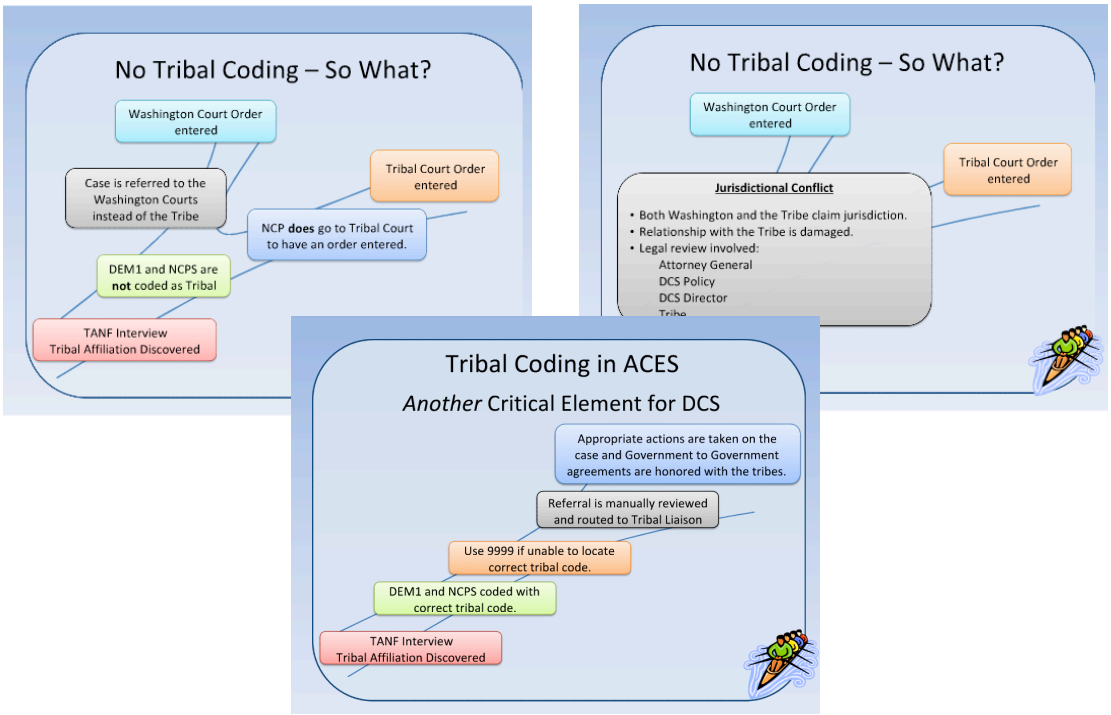


Figure 2.8: Training screens for tribal coding in ACES

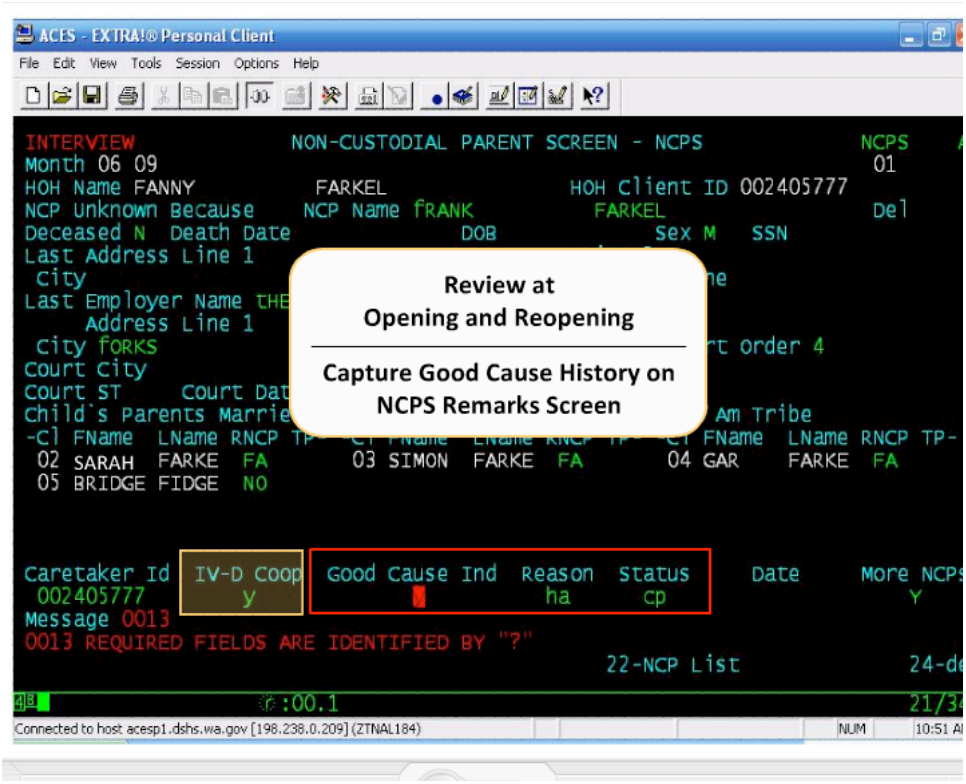


Objective #7: Review domestic violence issues in child support enforcement

Another topic that DCS was asked to address was domestic violence issues, specifically how they relate to good cause coding in ACES. The narration emphasizes the importance of protecting families from potential harm by completing the IV-D Coop field on the NCPS screen correctly (see Figure 2.9).[5] The training explains the codes and how to check for applicants' understanding of the right to claim good cause.

The training advises CSD workers, *"Please do not code this field as 'Unknown' without reason. If [SEMS] finds a case with the same custodian and child, the case may be reopened and establishment or enforcement action started. This could be a problem if there is a family violence issue."*

Figure 2.9: NCPS screen in ACES with good cause fields



[5] If there is good cause but it is not indicated in the IV-D Coop field, a letter will automatically be sent to the absent parent, which may put the family at risk.

TRAINING ROLL-OUT AND COMPLETION BY PHASE

As described above, the training module was implemented in three phases. Phase 1 consisted of four CSO pilot sites in regions 1, 2, 3, and 5. Phase 2 included the remainder of the CSOs in these four regions. Finally, Phase 3 covered all CSOs in regions 4 and 6. The original purpose of this staggered implementation was, in part, to aid in measuring the different effects of the automated data match and the CSD staff training. Ideally, DCS would have implemented the automated matches with DOH beginning in early January 2009, and staff training would have commenced in April 2009, roughly three months thereafter. The data match was never implemented, but the three-phase roll-out of the training module remained in place, albeit significantly delayed. Table 2.1 shows the number of CSD workers who completed the training in each region and phase:

Table 2.1: Number of CSD staff that completed the training module, by region and phase

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Other	**Total**
Phase 1	57	56	32	-	20	-	5	**170**
Phase 2	201	217	190	-	243	-	13	**864**
Phase 3	-	-	-	319	-	71	5	**395**
Total	**258**	**273**	**222**	**319**	**263**	**71**	**23**	**1,429**

Source: ECONorthwest analysis of Washington DCS data

When DCS had completed the draft for the training module, they sent it to CSD policy and field staff for review. CSD staff reviewed and approved the training, which was then sent to the managers at the pilot CSOs on June 15, 2009, for the first round of training. The DCS training manager felt that she had a sufficient number and diversity of reviewers, but this turned out not to be the case. CSD managers at the pilot sites had several specific complaints that caused DCS to remove the training from the website and revise it. The main concerns included the following:

- The original sound levels in the training fluctuated widely, and at some points the narration was inaudible on CSD computers. The training manager rerecorded the soundtrack, which solved the problem.

- CSD managers indicated that most of their computers did not have adequate speakers to allow them to listen to the soundtrack, so DCS used grant funds to buy 600 pairs of ear buds for CSD staff to further alleviate any sound issues that may surface with this or any other online training.

- Managers were concerned about the appropriateness of some of the fictional names and graphics used in the program. These names and graphics were changed in response.

- Two managers felt that nine attachments were excessive; if all attachments were opened and viewed during the training, the length of the training would double.

- Some felt that the training had a condescending tone toward CSD workers and focused too much on the benefits to DCS of collecting more complete information without emphasizing the need for teamwork between the two departments.

The DCS training manager changed the training to address nearly all of these issues and uploaded the revised training to the server in July 2009; targeted employees were given 30 days to complete it. According to the CSD training and development manager, about 10 percent of employees usually take the training by the deadline and another 80 percent take it within a few days after the deadline. Generally, CSD's goal is to have 90 percent of employees complete required trainings within 60 days.

Phase 2 began with an informational email to region managers in regions 1, 2, 3, and 5 on November 16, 2009. Only two CSD staff members in these regions had taken the training by the end of December 2009 because the CSOs were experiencing severe caseload increases and staffing shortages, making it nearly impossible for staff to devote time to training. DCS and CSD managers decided to make the training mandatory, and 97 percent of Phase 2 staff (850 out of 877) completed the training by April 14, 2010.

Phase 3 followed immediately, with staff in regions 4 and 6 required to take the training between May 1 and June 30, 2010. During this phase, 390 CSD workers completed the training. In all, 1,429 out of 1,502 CSD staff members took the training from June 2009 to July 2010, for a completion rate of 95 percent.

TRAINING EVALUATION

To evaluate the successes and challenges of the training implementation for this 1115 demonstration grant, we interviewed DCS and CSD staff members who developed the e-referral training module, surveyed and interviewed CSD supervisors and workers who completed the training, and interviewed DCS support enforcement officers (SEOs) and technicians (SETs) at DCS field offices who work with e-referrals. Each group had useful insights to share about their experiences with the demonstration project. This section describes the results of those interviews and surveys.

RESULTS OF INTERVIEWS WITH DCS AND CSD TRAINING DEVELOPMENT STAFF

We interviewed the DSHS grant manager, the DCS training program manager, and the CSD training and development manager about the training development process. The DCS training manager was primarily responsible for developing the training, and the CSD training and development manager advised DCS on the training development, helped implement the training in the CSOs, and administered the survey.

All three individuals agreed that e-training is an excellent way to deliver training. Online training is more flexible than classroom training and people can take the courses multiple times to refresh their knowledge. However, the DCS training manager recommended that a DCS liaison visit each CSO after staff completed the training to build relationships, reinforce the content of the training, and meet the needs of workers with different learning styles. She suggested a 45-minute session for feedback and questions and answers about the training or the general relationship between DCS and CSD. Regarding this relationship, the interviewees acknowledged some tension in the past but indicated that the partnership was better because of their collaboration on this project.

DELAYS DURING THE TRAINING DEVELOPMENT PROCESS

The progress on the grant project was slower than expected. The training requirements were generally challenging to fulfill because of CSD staff shortages and increasing caseloads resulting from the budget crisis. CSD staff stated that clients' immediate needs must come before training.

The DCS training manager said that the development process was a "bumpy ride." The DOH automation component of the grant was supposed to happen first, and waiting for that implementation caused a delay in the training project. DCS eventually decided to proceed with training development anyway. Another delay occurred when DCS staff requested that two topics be added to the training module: tribal issues and domestic violence issues. These topics were not included in the original recommendations from the process study. According to project staff, the complexity of and lack of awareness about tribal coding tends to shut down normal processes.

Upon completion of the initial draft training module, the DCS training manager thought that a large and diverse enough group of reviewers had given feedback on the training. However, she realized the module needed more work when the first phase of the training rollout resulted in some negative responses from trainees. This caused additional implementation delays while the training was revised.

LESSONS LEARNED FROM THE DEVELOPMENT PROCESS

Training development staff at both DCS and CSD met with some obstacles and frustrations, as well as successes, while developing and implementing the

online training module. What they learned from this process may prove useful for others undertaking similar projects:

- **Experience and expertise were important resources.** The development process could have been more efficient if the training manager had had more experience with online training development or greater access to expertise. She can now apply that knowledge to future projects, but the time she spent learning the necessary software and techniques increased the amount of resources used for this project.

- **Training time for CSD staff was a critical constraint.** The grant paid for the time necessary to develop the training module, but it did not fund additional staff time for training in the CSOs. The demand on CSD staff time came during a period of reduced staffing levels and increased workloads, reducing the time available to serve clients and meet immediate needs. The implementation may have proceeded more smoothly, with less stress on CSD staff, if the grant had included funding for training time in the CSOs.

- **To be most effective, the training had to be mandatory.** When CSD first attempted to implement Phase 2 in November 2009 it was not mandatory, and only two staff members had taken the training by the end of the year. By contrast, Phase 1 was mandatory and reached a completion rate of 96 percent within two months. Once Phase 2 was made mandatory, the completion rate reached 97 percent.

- **The collaboration between CSD and DCS staff was critical to developing a useful and credible training module.** The process study generated feedback from both CSD and DCS field staff and began a dialogue that helped frame the project as mutually beneficial. It may have also given the training more credibility among CSD staff because the training directly addressed many of their concerns. Also, when managers in the pilot CSOs expressed concerns about some of the content in the original training, DCS responded quickly by revising the training.

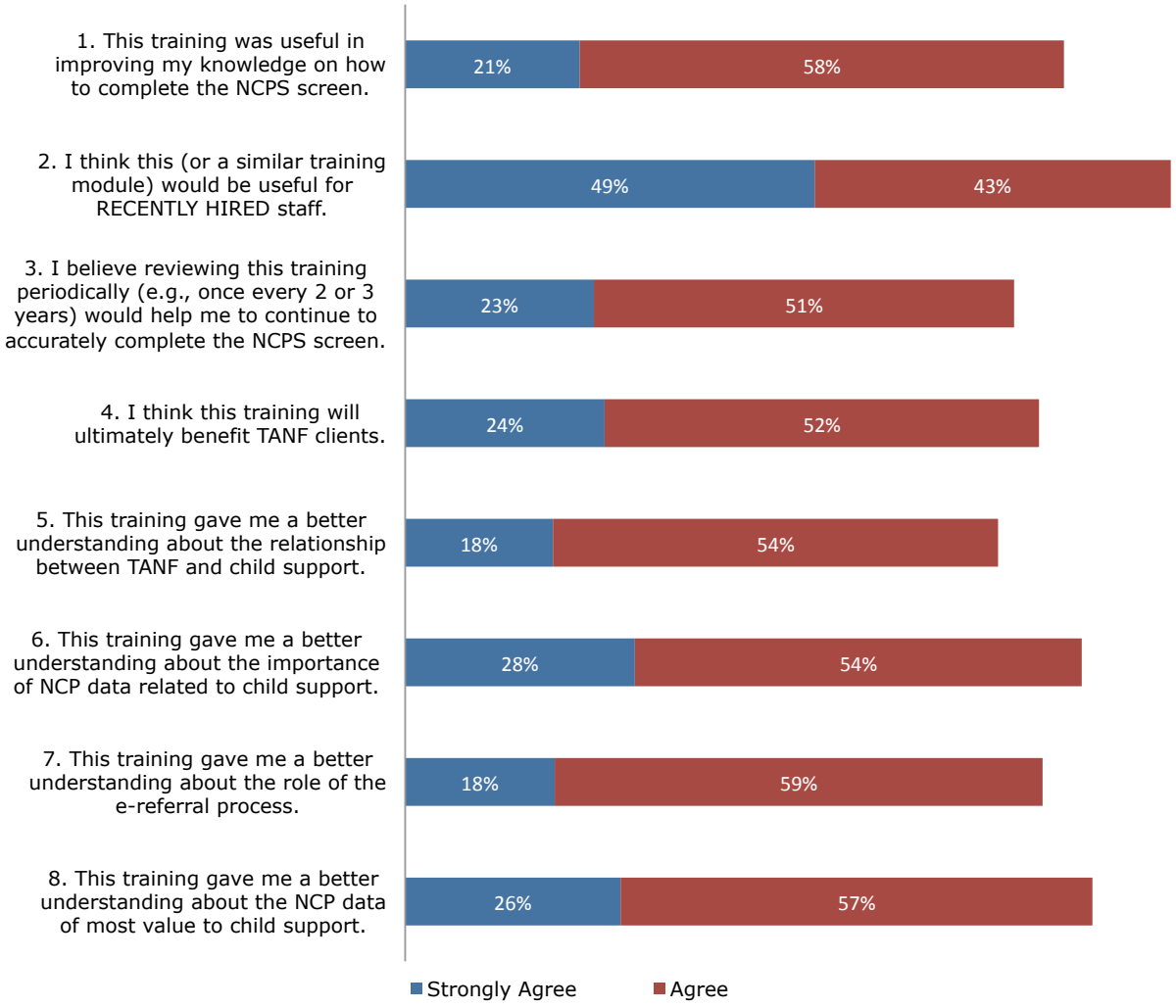
- **DCS and CSD can improve their communication in areas beyond those targeted by this grant.** In response to the section of the training about coding for tribal affiliation, including the potential political and legal consequences of incorrect coding, all of the interviewees expressed surprise and indicated that they had little or no knowledge about tribal issues. This knowledge gap may indicate a broader need for communication and cooperation between DCS and CSD on a variety of policy and procedural issues that can affect both departments.

RESULTS OF TRAINING RECIPIENT SURVEYS

The CSD training and development office distributed a survey to all training recipients. Of the 1,429 CSD staff members who completed the training module, 466 completed the online survey—a completion rate of 33 percent. Overall, CSD

employees found the training useful and reported increased efforts to gather accurate NCP information. Questions 1 through 8 asked respondents to what degree they agreed with each statement. Figure 2.1 illustrates that most respondents strongly agreed or agreed with each statement.

Figure 2.1: Survey results for training module recipients at all CSOs (number of respondents: 466 out of 1,429)



Source: ECONorthwest analysis of Washington DCS data

Question 2 received the highest percentage of strong positive responses, with half of respondents strongly agreeing that the training module (or one like it) would be useful for recently hired CSD staff. None of the questions had a large number of negative responses; Question 3 had the most, with 8 percent disagreeing or strongly disagreeing with the statement, "I believe reviewing this training periodically (e.g., once every 2 or 3 years) would help me to continue to accurately complete the NCPS screen." Finally, Question 5 received the most

neutral responses: one quarter of survey completers neither agreed nor disagreed that the training gave them a better understanding of the relationship between TANF and child support.

Question 9 was open ended; more than one third of respondents (173 out of 466) provided an answer. Nearly all of these optional comments were positive and indicated that the training was helpful and informative. Most respondents said that they learned about why it is important to enter correct information and how to do so. One trainee said, "It was one of the best online trainings I have taken." Other respondents said that the training was a good reminder, that they would use what they learned on a daily basis, and that the training was clear and brief. More examples of responses to Question 9, and a table summarizing the survey results, are included in the appendix.

Even individuals with decades of experience as CSD or even DCS employees said that they learned from the training. Several trainees mentioned specific information in the training that caught their attention: paying attention to whether a "Jr." and "Sr." is needed with the NCP name, entering information about the parents of unborn children, indicating tribal affiliation, accessing SEMS, contacting DCS, and checking on child support payments.

Some survey respondents were less positive about the impact of the training module. A few said that they "weren't sure" whether it would affect their work, whereas others said that they are already doing exactly what the training says to do. Some trainees' comments were in contrast with each other: one already understood e-referrals but learned about the NCPS screen, whereas another already understood the NCPS screen but learned about the e-referral process. The less positive feedback fell into the following categories:

- *The training wasn't necessary for experienced workers.* Several respondents indicated that they did not learn from the training because they have decades of experience and already understood the topics covered. One said that the training was "too elementary for experienced staff" and several agreed that the training is more appropriate for new workers.

- *The training wasn't necessary for certain jobs.* A few respondents, including a social worker, indicated that they don't use NCPS screens very often or at all in their current responsibilities.

- *The training needs to be in written form or given in person.* Some trainees suggested that the training be delivered differently or in multiple forms, such as in print or in person.

- *There is not sufficient time, training, or incentives to gather and enter NCP information.* Some comments provided a sense of the ongoing frustrations some CSD workers feel about their coworkers, staffing shortages, and the relationship between CSD and DCS. One person said, "we are so busy trying to get help to needy people, I don't know where we are going to find time to do all this work for DCS too." Another felt that

NCP data provision would not improve until an incentives system was put in place.

- *There was too much time between the training and the survey.* A few individuals said that the survey should been given with the training or immediately following it because they could not remember the training very well by the time they took the survey.

- *Miscellaneous suggestions.* One person recommended that keyboard shortcuts be added to the training (e.g., Shift-F10), and another asked for more information about leaving notes for DCS staff. The survey comments also included a request that the 18-334 be automated, a complaint about the names used in the training, and a suggestion that the NCPS screen include additional fields.

In sum, the survey revealed that nearly all trainees felt that they learned about how and why DCS field offices need accurate NCP information. Most trainees expressed appreciation for the training and indicated that they would be able to use what they learned to collect and record higher quality NCP information.

SITE VISIT INTERVIEWS

To further evaluate the perceptions surrounding the training module, we conducted site visits with CSD supervisors and workers who had recently taken the online trainings. At the end of Phase 1, we interviewed four CSD staff members at the Pierce North CSO, one of the pilot sites. At the end of Phase 3, we met with CSD staff and DCS field office workers at six CSOs in the Kennewick, Tacoma, and Yakima DCS regions. Interviewees included WorkFirst and financial intake workers, WorkFirst case managers, and supervisors, although we did not interview every staff classification at every site.

Interview questions addressed e-referrals and the training module specifically, as well as more general questions about DCS and CSD cooperation and data sharing. Below, we describe representative responses to the main questions asked of CSD staff.

1. Was the training useful / did it help you understand DCS's needs/process? Did it make a difference in your work?

Almost all CSD interviewees indicated that the training was useful and taught them or reminded them why collecting NCP information was important to their clients and DCS. Interviewees reported that the training increased their understanding of (a) the relationship between TANF and child support, (b) the importance of NCP data to DCS, (c) the NCP data of most value to DCS, and (d) the role of the e-referral process and how to communicate with DCS.

Some employees had completed the training up to a year before the interview, whereas others had taken it the morning of the interview. This resulted in a range of ability to remember the main concepts presented in the training. For some the training was more of a refresher. For others there were specific functions and

codes, introduced by the training and available through their ACES screens, that interviewees were not familiar with (e.g., codes regarding determined versus alleged paternity, co-op and non-coop status, and tribal issues).

One person said the training was "pretty good for not being interactive" and liked the training "cheat sheets." Several mentioned it was good to be reminded why DCS needs the NCP information:

> "I didn't know that partial information is better than none. We don't realize how important our role is to DCS, how important a few more minutes of our time might be. I didn't know that certain information doesn't go to parents depending on the NCP entry (e.g., 'M' or 'U'). I thought that everything went to parents no matter what."

One worker said he did not really remember the training, and another felt that the training wasn't "especially germane." Others discussed the challenges of increased caseloads, limited time for the intake interview, and clients' reluctance to share information.

2. Would the training be useful to repeat? How often? For all staff or new staff only?

Most interviewees agreed that it would be beneficial to repeat the training every year or every few years as a refresher. One said, "People have a tendency of getting lax or into a rut. It's always good to get a refresher." Another pointed out that the trouble workers had remembering the training topic during the interviews demonstrated that they needed to repeat the training periodically.

There were also some who felt it would not be necessary to repeat the training unless there were significant changes in the processes. These interviewees indicated that their concern was the time required for the training and agreed that it should be mandatory for new staff.

3. Did the training raise any questions? Is there anything you would add to the training?

Several people remarked on the difficult nature of asking the custodial parent for sensitive personal information about the NCP (e.g., about recent sexual activity with potential fathers). Some said that they don't have time to delve into the subject, whereas others expressed concern about the sensitivity of the subject and the custodial parent's resistance to the questions. A few trainees said that DCS's requests are unreasonable. One said that CSD staff's "priorities, scope, and comfort level don't involve asking the client a bunch of personal questions. . . . When will the responsibility shift back to DCS for gathering non-eligibility-related information?"

Thus there is clearly a range of opinions on the necessity of filling out the NCP information completely. Some see it as mandatory, others as unnecessary, with most recognizing its importance but demonstrating varying levels of ability to obtain the information in a timely manner.

A few interviewees said that CSD workers might just not know what questions to ask to get the necessary information, implying that staff might benefit from training on how to interview custodial parents. According to one worker, "you can usually get the parent to tell you something" by asking the right questions and explaining how the information will benefit their situation. A couple of workers said that they encourage the client to provide the information by telling them that they're going to get a letter from DCS asking for it anyway.[6] Many mentioned putting details about non-custodial parents in the remarks screen or looking at the child's birth certificate, SEMS screens, and previous applications to gather the NCP information.

A couple of interviewees asked if it would be possible to eliminate the duplicate NCP screens that result when a child is enrolled in multiple programs (i.e., cash and medical). The solution to this problem, as pointed out by one interviewee, is to use "Shift-F10" to auto-fill the NCP screens for each program.

Other questions included the following:

- Why isn't the training in writing anywhere, such as in the ACES manuals?
- Does DCS really look at the comments in the "Remarks" area?
- Could there be an FAQ section at the end of the training?
- Do changes that result from yearly eligibility reviews generate e-referrals?
- Could the NCPS screen be updated when paternity establishment information is updated in other systems?

4. What is your overall relationship with DCS staff? Do you get answers to your DCS questions in a timely manner? What could improve?

Most CSD workers described good relationships with DCS, with the two agencies working "hand-in-hand" to serve the public. Many interviewees reported communicating regularly with DCS contacts, and getting answers to their questions in a timely manner. But others reported infrequent contact. Frequency of interaction seems to depend in part on whether a DCS worker is co-located in the CSO. Regarding communication overall, one worker said, "If payments are being received, you just assume [DCS] has all the information they need."

CSD workers who don't contact DCS very often said it's not necessary because they have access to SEMS. One worker indicated that now that the co-located DCS worker is on a different floor (in Puyallup), interaction is much less convenient.

Interviewees who regularly email, call, or approach co-located DCS workers cited the following reasons for doing so:

[6] When DCS receives e-referrals without NCP information, they send information to the household based on how the "NCP Unknown Because" field is coded. If "M," meaning the application was mailed in, DCS sends information regarding cooperation and good cause. If the code is "U" for unknown, DCS gives the e-referral processor the option to send out the 14-57, which asks for basic child support information. On the rare occasion that the "NCP Unknown Because" field is coded with "D" (the custodial parent declines to provide information), DCS does not suggest that the e-referral processor sends any forms.

- When they need explanations of what they see in SEMS
- When a client is not in cooperation or does not agree with CSD's coding
- With questions about pass-through payments
- To verify child support amounts
- When the client indicates that they are no longer receiving child support
- To follow up if CSD is waiting for DCS to update non-coop information

DCS liaisons sometimes attend CSD meetings, and DCS occasionally contacts CSD workers with questions or other concerns:

- With questions about specific cases (e.g., Is the NCP is in the home?)
- Regarding good cause
- To notify CSD of non-coop cases
- To share information they have about a client

Several interviewees noted that CSD staff would benefit from a better understanding of what exactly DCS does, what information they can readily access through SEMS and other sources, and how they interact with client families. One Yakima CSD worker expressed interest in resuming the quarterly meetings they once had with DCS.

5. What is the impact or desirability of co-location/job shadows? Would job shadowing for CSD staff at DCS offices, and vice versa, be helpful?

Of the CSOs visited, Puyallup, Tacoma, Yakima, and Kennewick had co-located DCS workers.[7] All interviewees indicated that they appreciate having access to co-located DCS workers: "Clients are often confused about their child support rights, so having a DCS worker here to talk to clients immediately is really important. The primary benefit is being able to refer clients immediately for services."

Staff from the Sunnyside CSO indicated that DCS co-location would be very helpful: they currently receive packets from DCS but often do not have enough time to review the information with families or facilitate a call to DCS. They noted that they might produce improved results if clients knew a DCS worker was at the CSO. However, in Wapato, one interviewee's interest in co-location was less enthusiastic: "We don't have people coming in on a daily basis asking about child support issues."

Workers in Puyallup and Wapato expressed interest in job shadowing at DCS to learn more about their process, and a Tacoma worker reported that someone from DCS job shadowed him a few years ago. It was helpful and informative for both sides.

[7] DCS field offices are in the same buildings as CSOs in Yakima and Kennewick.

6. How is intake performance measured? Are there any performance benchmarks (e.g., length of time for intake interview)?

CSD staff described office performance metrics related to intake interview times and the accuracy of case eligibility information entered into ACES (e.g., income types, expense deductions, family members). Performance metrics for all programs are based on participation rates; none of the CSOs visited track the extent to which staff collect quality NCP information.

CSD staff reported that it is challenging to meet performance benchmarks. One worker noted that because the office ultimately works with everyone that comes each day, workers might rush through interviews on busy days. She said that the NCPS screen is the most common area to rush because of the belief that DCS will gather the information if necessary. She also noted that WorkFirst intake interviews, which tend to be longer than TANF and Medicaid workers, allow more time for asking about the non-custodial parent.

But again, perspectives varied between workers: "You fill in what you can but you're not going to spend much time when the client has to go through many different components" versus "the option is always there to spend time with the client to get it correct the first time."

7. Would information on e-referral completeness and accuracy be helpful?

All CSD interviewees said that it would be helpful to receive information on e-referral completeness and accuracy from DCS. One person said, "We're here to help each other. If we don't know we're doing it wrong we can't change it." Another felt that feedback would be useful for training purposes and for identifying whether NCP information input problems might be with just one or two workers.

RESULTS OF DCS STAFF INTERVIEWS AND SITE VISITS

Regarding the success of the e-referral training, DCS field office workers were less positive than the CSD supervisors and workers we interviewed. The centralization of the e-referral process in late 2009 and early 2010 affected e-referral quality and DCS communication with CSD staff, and heavy caseloads and other pressures, particularly at CSOs, may have lessened the potential impact and relevance of the training. As described below, our interviews suggest that a variety of external forces, such as the state's current fiscal crisis and DOH reorganization, stalled progress at critical junctures.

RESULTS OF INTERVIEWS WITH CO-LOCATED DCS STAFF

We interviewed DCS staff co-located at one of two CSOs: Puyallup (7/14/10) and Tacoma (7/20/10).

1. Are you familiar with the training? Do you think it's useful?

The Tacoma DCS worker had seen the training online and, though it was basic

for him, he said it seemed helpful. In his 19 years of experience he has noticed that some CSD workers believe that gathering NCP information is DCS's job. He reiterated that quality of information matters more than quantity; a name, SSN, and idea of paternity are the most important pieces to gather.

2. What is your interaction with CSD staff?

Because these DCS workers are co-located at CSOs they have frequent opportunities for interaction with CSD staff. They both said that co-location works well and is important. One said that "it puts a human face on the other agency" and that "CSO staff know where we are and that they can ask questions (and they do)." Being co-located has helped the other worker understand "what CSO staff are looking at and working with" and "the huge amount of work required to establish eligibility for medical benefits." Both reported that being co-located has "improved relationships/communication generally."

The Puyallup worker said that the largest share of the child support work at CSOs is changing non-coop to co-op status. Doing this when co-located is more efficient than having the client contact the SEO. The next largest share of work is dealing with order modifications. There is a range in the volume of questions from day to day; the Tacoma worker said that he sometimes goes weeks without anyone asking him any questions (he is at the CSO one day a week). In general, he works with CSD staff whenever they have questions.

3. Do you do or have you done training for CSD staff about DCS?

Neither of these workers reported doing any specific training for CSD staff, but both would be willing to if asked.

4. Is there anything else that would help data sharing/ communication?

The Puyallup worker recommended that a formal introduction to DCS be part of new worker orientation: "Right now, new staff have to discover that I am there and how I can help." The Tacoma worker also noted that CSD staff might not even know he's there.

Cooperation among those in leadership positions at both agencies is another important factor. The Tacoma worker had been located at another site where DCS and the CSO were in the same building and described how the leadership in the two agencies there had a much more difficult time getting along, which had a negative effect on all the workers.

RESULTS OF DCS FIELD OFFICE SITE VISITS

We interviewed SEOs, SETs, office administrators, and CSD liaisons at four DCS field offices (we did not interview every class of worker at every site): Spokane, Everett, Kennewick, and Yakima.

1. Please describe the current system for e-referrals and what has changed over the last year. What are the advantages or disadvantages?

All DCS interviewees expressed frustration with several aspects of the CSD service delivery redesign (SDR):

Incorrect e-referral information coming from CSOs and headquarters: Nearly everyone mentioned that central DCS workers are not performing the necessary research for e-referral information (regarding paternity, children's relationships to guardians, etc.). The DCS field offices frequently send case setup corrections back to the central office for more research. Field office SETs used to do this research by looking through ACES, Barcode, and DOH records. Staff recognized that much of the missing or incorrect information come from CSOs. The lead SET in Spokane expressed the general feeling: "Headquarters is setting up the case but not doing the research."

An Everett worker indicated they have held training sessions with CSOs but there has not been sustained improvement in the quality of e-referrals: "At least 20 percent of e-referrals have the wrong parent, wrong child, or no address when it's clearly been given." The Everett office also reported that their collection rates are going down because of the extra time they have to spend on research. The central office is spending the allotted 18 minutes on set-up but the regional SET has to spend an extra 10 minutes checking their data. The challenge is in the "subtleties" of cases—the little things you learn to notice with experience. One Kennewick worker noted that the DCS field offices could also do a better job at showing CSD headquarters what needs to be corrected instead of simply correcting it themselves.

Many complications reportedly arise when a child needs to be added to an existing case. CSD is supposed to report this to DCS; one worker wondered if CSD workers think that these changes automatically generate new e-referrals. Another problematic area that was brought up in several interviews is how non-coop notifications are handled.

Lack of direct communication access to CSD staff: DCS field office workers felt that they have lost direct access to CSD workers—they can no longer contact specific workers, which means they have to call the call center, leading to potentially being on hold for up to 20 minutes and waiting up to 3 days to hear back. There is also a lot of turnover at the call centers and confusion among new workers. Some of the offices reported that they usually just "start from scratch" instead of calling CSD staff. One worker pointed out that these issues can ultimately result in money being given to people who don't qualify.

2. Have you noticed any difference in the completeness of the information you receive since the CSD workers took the training?

None of the interviewed DCS workers reported a significant difference in e-referrals since CSD workers completed the training. One Kennewick worker said they might be receiving more NCP names but they "don't know if the names are

any good." Another interviewee had not seen the training and expressed interest in doing so.

3. Describe your working relationship with the CSO.

DCS field office workers expressed several frustrations with CSD staff; most were related to the centralization issues noted above. One said that "CSOs are a large truck and DCS is a small bicycle—we're very unequal partners." Another indicated that the time constraints and lack of performance metrics at CSOs are a major barrier to progress. A worker who used to work at a CSO felt that "the priorities are so different between the two agencies; at worst, they are adversarial." Sometimes "this causes people to not get their child support and others to get TANF when they shouldn't."

The Yakima office has held quarterly meetings with CSD staff in the past but stopped doing so because not enough workers were coming. The other issue they noted is that other cities can't easily send their staff to Yakima. A Spokane worker said that he is looking forward to attending CSD meetings to learn about the challenges they face.

4. Are you co-located? Does that work well?

The co-located Spokane worker said that she sometimes doesn't see the point of being co-located but hopes the relationship will improve with time. She once asked a CSD worker for help contacting someone about a non-coop case that didn't appear in ACES and she was given the 1-800 call center number to call. She thinks it would be great to have a CSD worker co-located at DCS.

Everett's co-located worker gets a lot of questions from CSD staff. He sees the pressures they're under and is more sympathetic to their plight—they are always behind and he can see why they don't ask the extra questions. Sometimes when they ask him for help they want to know how to code things to avoid child support. Another issue that frequently comes up involves what he sees as the overused method of removing the custodial parent from the grant for non-coop cases. He feels that workers should simply try calling the custodial parent.

At the time of the interview, the Kennewick office was about to be co-located with the CSO. Even though co-location will presumably simplify staff contact with the other agency, one worker said it wouldn't change the process much because the process is not local-to-local anymore. Another said she would be happy to have a CSD worker in their office, but is worried it wouldn't help: there's no time, contact is difficult, and the programs aren't streamlined (particularly in terms of performance metrics).

The DCS worker in Yakima said that being co-located eases communication and benefits non-coop clients but indicated that co-location does not really benefit DCS.

5. What do you think could be done to improve the relationship and information flow?

DCS field office workers made the following suggestions for improvement:

- Introduce incentives for managers to cooperate with each other and for workers to gather information
- Implement worker-to-worker training instead of supervisor-to-worker training
- Establish job shadowing
- Grant DCS staff access to images of documents
- Investigate how CSD workers phrase NCP questions
- Combine agencies under DSHS
- Distribute tribal cases around the state (the Yakima office currently processes them all)

E-REFERRAL VERSUS PAPER PROCESS

During the interviews with both CSD and DCS workers, individuals made various comments, both positive and negative, that compared the e-referral process to the old paper process. The appendix includes a summary of this feedback.

SUMMARY OF PROGRAM IMPLEMENTATION FINDINGS

This chapter described the development, implementation, and qualitative evaluation stages of the 1115 demonstration project. Although the DOH data match was never implemented, an e-referral training module was deployed toward the end of the second grant year. Of the 1,429 training recipients, 466 completed an online survey about the training module. Survey responses were largely positive, with about 75 percent of respondents agreeing with each positive statement about the training. Many respondents also answered the open-ended question at end of the survey. Most, but not all, of these comments were positive.

The project team also interviewed DCS training development staff, CSD workers who completed the training, and DCS field office staff. These interviews and site visits (a) resulted in a list of lessons learned during the training development process, (b) confirmed that the training module was well received by CSD trainees, and (c) allowed DCS workers to describe the benefits of being co-located at CSOs as well as voice their concerns about the e-referral centralization process that occurred in early 2010.

Chapter 3

Final Data Analysis

INTRODUCTION

The evaluation framework for the e-referral grant included a detailed analysis of data from both e-referrals and the DCS data warehouse. The combination of the 2008 baseline data in the midterm report and the post-training data in this chapter provide a profile of e-referral cases and subsequent child support outcomes. Because the DOH data match was not implemented, there are no post-implementation data regarding this intervention. Based on responses to a post-training survey and other staff feedback, the training appears to have been welcomed and successful, but surveys and interviews cannot determine whether the quality of e-referral data has improved. This chapter describes the measured outcomes, the pre- and post-training data, and the results of the analysis for all of Washington and smaller regions.

Because both of the demonstration's planned interventions sought to improve the quality of NCP information received by DCS through e-referrals, we hypothesized that impacts would be similar for both interventions, although of different magnitudes for each outcome. Below is a list of the eight outcomes that we had originally planned to evaluate. We hypothesized that improving data quality would accomplish the following:

1. *Reduce* the share of e-referrals that require manual support enforcement technician (SET) intervention. Data entry errors can greatly increase the time that DCS workers spend identifying a non-custodial parent and establishing an order for support; the e-referral training module reiterates that not providing any information can be better than providing bad information. At the same time, when CSD intake workers submit more complete, accurate data, processing time is likely to fall. In some cases, more accurate information might reduce duplicate e-referral submissions or allow the DCS information management system to process an e-referral without requiring any staff intervention.

2. *Reduce* the elapsed time from e-referral to case opening. Better data quality will improve processing speed and order establishment. More accurate and complete NCP information increases the likelihood that the legal father will be identified within a given amount of time.

3. *Reduce* the elapsed time from e-referral to paternity establishment. For newly created cases in which a child's paternity has not been established, better NCP information will expedite NCP location and formally recognized paternity establishment. If paternity is already established at the time of e-referral, better quality data will also reduce the likelihood of conflicts about paternity between data from e-referrals and other sources.

4. *Increase* the share of e-referral cases with paternity established through an administrative process. Improved e-referral processes will reduce

the number of paternity cases referred to the courts. Better NCP data on the e-referral will save court resources and reduce burdens on parents by allowing administrative paternity establishment on cases that would otherwise be transferred to county prosecutors for paternity proceedings.

5. *Reduce* the elapsed time from e-referral to current support order establishment. Reduction in case processing time in Outcome 3 will increase the likelihood that a current support order is established within a given amount of time after NCP identification.

6. *Increase* the share of e-referral cases with a current support order established through an administrative process. By expediting case processing and other actions, better NCP data will also facilitate administrative order determination rather than the judicial alternative.

7. *Reduce* the average arrearage at the time an order is established. Better NCP information will accelerate paternity and order establishment, thereby resulting in smaller accumulated amount of arrears at the time of order establishment.

8. *Increase* the share of current support paid as due. The reduced arrearage resulting from better NCP information will allow non-custodial parents to devote more income to current support payments. As a practical matter, we planned to evaluate the share of current support paid during the first six months after order establishment.

Some of the outcomes, such as the share of e-referrals requiring SET intervention, are easily measurable at the time that an e-referral is transmitted to DCS. Others, such as the share of current support paid as due, are only measurable with a lag at least as long as the time to order establishment plus a suitable follow-up period (e.g., six months). Thus, the timing of the demonstration's only implemented intervention, the training module, played a critical role in determining the extent to which we could investigate each outcome. For the training, we were able to assess the effects of referral data quality on most of these outcomes, but the delays in the training implementation prevented a full evaluation of these outcomes.

DATA SOURCES

DCS provided a set of data files with information about all e-referrals from January 2008 through April 2010. They also provided data warehouse files that contain child support (IV-D) case information related to any e-referral resulting in a newly opened case. The case data included child information, case status indicators and dates, and order payment information. For e-referrals with an associated IV-D case, the IV-D case number and NCP individual identifier provided the links across data sources. Tables 3.1 and 3.2 identify the key elements in the provided data files.

Table 3.1: Key e-referral data elements

Data element
Referral displayed to SET or not
New referral or modification
Referral date
Referral CSO
DCS region assigned
IVD case number
Custodial parent gender
Custodial parent date of birth
Number of children on referral
Relation of child/children to head of household
NCP identification number
NCP gender
NCP date of birth
DCS classification of referral
Indicators for whether the e-referral included NCP:
First name
Last name
Social security number
Phone number
Address
Employer
Employer address
Employer phone number

Source: ECONorthwest analysis of Washington DCS data

Table 3.2: Key IV-D data elements

Data element
Child data
Child identification number
IVD case number
Child gender
Child date of birth
Paternity status indicator
Paternity status date
Type of paternity establishment
Order status and payment data
IVD case number
Type of order
Order date
Current payment due
Arrears due
Payment dates
Current amount paid
Arrears amount paid
Case data
IVD case number
Case type
Case creation date
Case status (open or closed)
Case closure reason
Good cause status
Interstate case indicator
NCP identification number

Source: ECONorthwest analysis of Washington DCS data

ANALYSIS

CSD caseloads drive the volume of e-referrals in each DCS field office, but the DCS information management system automatically processes most e-referrals without the need for human intervention. Only e-referrals that cannot be processed automatically—those that involve a new case or that have errors or missing data—are displayed to DCS field office staff. This has led to the perception that e-referrals contain low-quality data. But larger numbers of such e-referrals do not necessarily indicate that CSD staff necessarily submit more problematic data; all else being equal, more e-referrals require more staff resources to process.

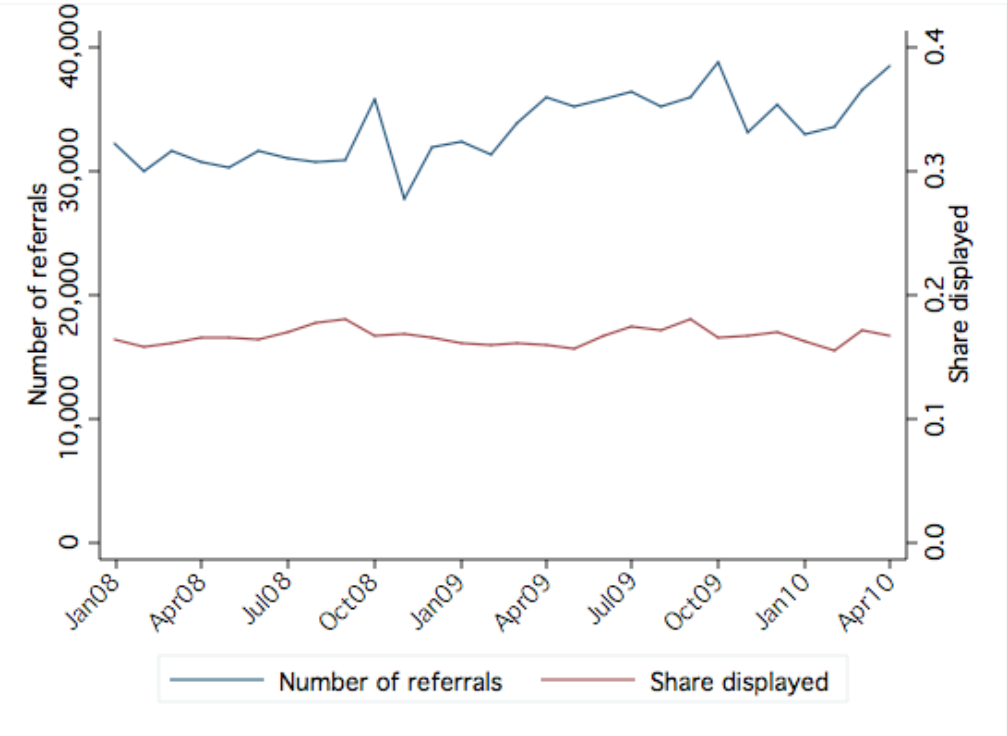
In addition, the types of e-referrals, quality of e-referral data, and characteristics of parents and children identified on e-referrals vary significantly across regions and can affect the child support outcomes listed earlier. This variation can also affects field office workloads. Our midterm report illustrated this variation in great detail. Understanding the source of variation in e-referral quantity and quality is critical to any effort that seeks to improve office efficiency. Below, we highlight selected trends in e-referral quality, e-referral case characteristics, and potential effects of the training module on child support outcome measures. A description of our regression analysis follows.

SHARE OF E-REFERRALS THAT REQUIRE MANUAL INTERVENTION

Figure 3.1 illustrates the number of e-referrals received by DCS field offices each month from January 2008 to April 2010. Overall volume of e-referrals has increased over time, most likely due primarily to the rapid increase in caseloads at CSOs during 2009. DCS field offices received about 30,000 e-referrals per month in early 2008; by the end of 2009 they were receiving up to 8,000 more e-referrals per month.

The figure also shows the share of e-referrals that were displayed to DCS staff and required SET intervention. From January 2008 to April 2010, this statewide percentage did not change appreciably over time at the state level.

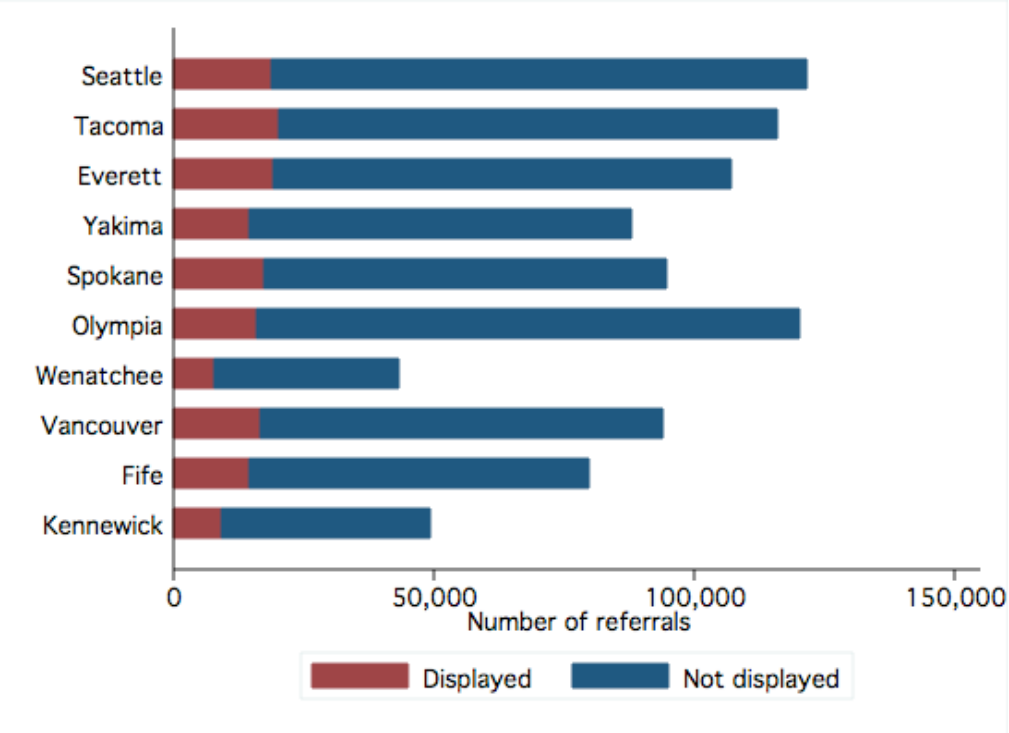
Figure 3.1: E-referrals by display status and month, January 2008-April 2010



Source: ECONorthwest analysis of Washington DCS data

Figure 3.2 shows the geographic variation in the number of e-referrals received by each DCS field office from January 2008 to April 2010 as well as the share of those referrals requiring SET intervention. The Olympia and Seattle offices received the most e-referrals but had the lowest percentage of e-referrals requiring manual intervention (13 percent and 15 percent, respectively). The Wenatchee and Kennewick offices received the fewest e-referrals during this period but had relatively high percentages of referrals displayed to DCS staff (18 percent and 19 percent). The Spokane field office also had a high percentage of e-referrals requiring SET intervention: 18 percent. Thus, overall, caseload correlates with display status, but it does not explain all of the regional differences.

Figure 3.2: E-referrals by display status and DCS field office, January 2008-April 2010



Source: ECONorthwest analysis of Washington DCS data

Table 3.3, below, and subsequent tables and figures in this section refer to e-referral data grouped into four time periods, each of which is four months long:

- Period 1 is December 2008-March 2009
- Period 2 is April 2009-July 2009
- Period 3 is August 2009-November 2009
- Period 4 is December 2009-March 2010

Roughly, Period 2 corresponds to the period just prior to the beginning of Phase 1 training, Period 3 to the Phase 1 training, and Period 4 to the available post-training time period.

Table 3.3 compares the shares of e-referrals displayed to DCS staff in Period 1 and Period 4: the first column is the share of e-referrals displayed during Period 1 and the second column is the percentage point change from Period 1 to Period 4. During the baseline period, the percentage of e-referrals needing SET intervention ranged from 12 percent in the Olympia field office to 18 percent in the Wenatchee office. Every DCS field office experienced an increase in the percentage of e-referrals requiring SET intervention. The increase was smallest in the Seattle office (0.3 percentage points) and largest in the Spokane office (4 percentage points). The change for all field office regions together was 1.5 percentage points.

Table 3.3: Share of e-referrals displayed and 1-year change in share, by DCS field office

DCS field office	% displayed in Period 1	Percentage point change by Period 4
Seattle	15.4	+0.3
Tacoma	16.6	+2.0
Everett	17.1	+2.0
Yakima	15.8	+0.7
Spokane	16.9	+4.5
Olympia	12.4	+1.2
Wenatchee	18.2	+1.4
Vancouver	17.2	+1.7
Fife	17.6	+0.6
Kennewick	17.3	+1.9
Washington total	16.2	+1.5

Note: Period 1 is Dec. 08-Mar. 09, Period 4 is Dec. 09-Mar. 10

Source: ECONorthwest analysis of Washington DCS data

These higher percentages of e-referrals needing SET intervention in early 2010 compared with early 2009 could reflect an increase in the number of new child support cases resulting from the spike in caseloads entering CSOs, a decrease in the quality of e-referral data, or both. However, as illustrated in our midterm report, offices with a higher share of displayed e-referrals also tend to have relatively fewer new e-referral cases, which is contrary to expectations if new case creation were the only important driver for the number of displayed e-referrals. Below, we further investigate variation in data quality across DCS field offices and CSOs, and case characteristics that might drive regional trends in the e-referral flow.[8]

CHANGE IN E-REFERRAL DATA QUALITY OVER TIME

The NCPS screen that CSD staff complete for an e-referral contains many data fields, but as the process study interviews revealed, there are two NCP identifiers that are most important to DCS staff when processing e-referrals: NCP name and NCP SSN. Consistent with this finding and earlier analysis by DCS, we focused on these fields as most indicative of an e-referral's data quality. In fact, e-referrals that lack both an NCP name and SSN have very little other data that could aid in locating the NCP.[9] We assign e-referrals to one of three categories: those with no NCP name or SSN, with NCP name but no SSN, or with data for both NCP name and SSN.

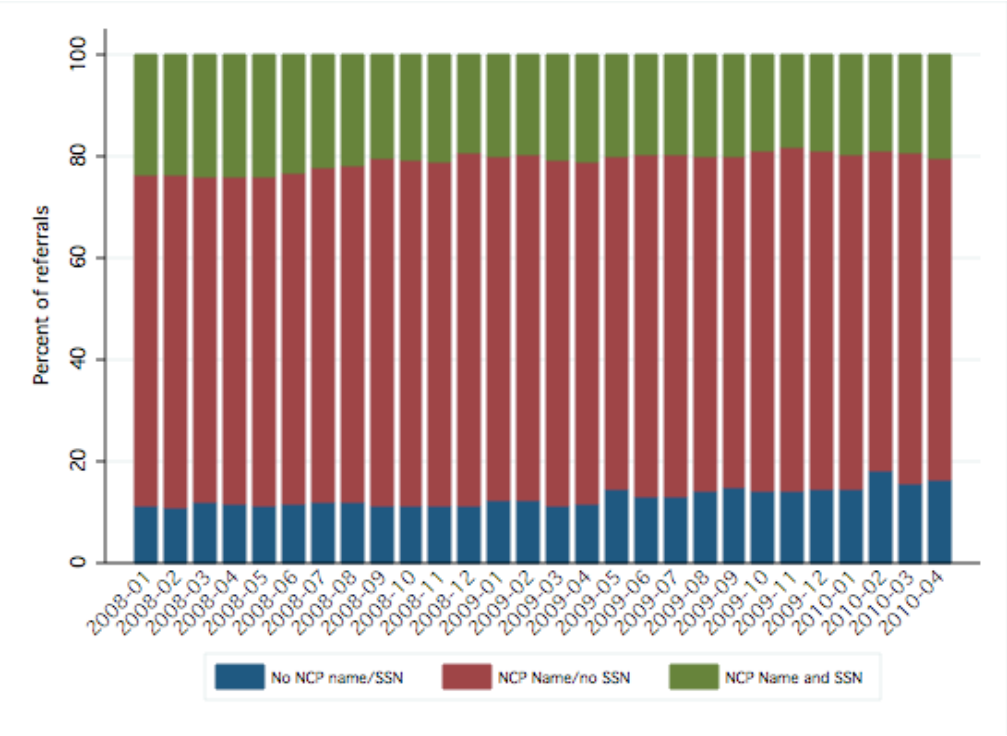
Figure 3.3 illustrates the change in e-referral data quality from January 2008 to April 2010. As shown by the growth in the blue portion of the bars, the quality

[8] As discussed in the midterm report, each DCS field office receives e-referrals from multiple CSOs, and the variation in the share of displayed e-referrals is greater among CSOs than across DCS field offices.

[9] Complete information is not necessarily accurate information. Interviewees stated that incorrect information is worse than no information. Our data did not allow us to assess the accuracy of data submitted with an e-referral.

or completeness of e-referral data declined during this time period, most likely because of increases in CSD caseloads and changes in other caseload characteristics (discussed below). Over the entire analysis period, 13 percent of referrals did not have an NCP name or SSN, 66 percent had an NCP name but no SSN, and 21 percent had both an NCP name and SSN. The share with neither piece of data increased from 12 percent in 2008 to 16 percent during the first four months of 2010.

Figure 3.3: E-referral data quality by month, January 2008-April 2010



Source: ECONorthwest analysis of Washington DCS data

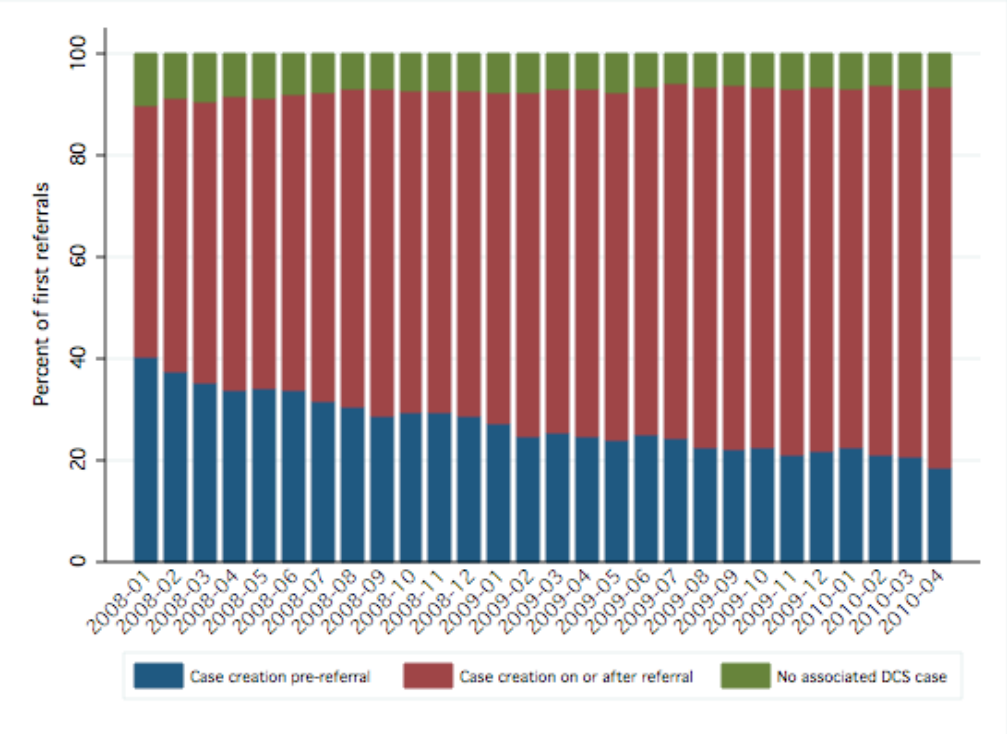
CLASSIFYING REFERRALS

CSOs frequently submit multiple e-referrals related to the same clients. For the remainder of this chapter, we focus on the first referral associated with an individual child support case, as we consider this the first contact with the referral system. From January 2008 to April 2010, the data include 116,473 first referrals. Not all first referrals are associated with new child support cases, however, as illustrated in Figure 3.4.

For each month during the analysis period, Figure 3.4 shows the percentage of e-referrals with IV-D cases created before referral (blue), on or after the referral date (red), and the percentage of e-referrals that do not have an associated IV-D case (green) in the available data. Over time, the share of *all displayed referrals* associated with a child support case that was created prior to the referral has remained almost constant over time, at about 41 percent. However, the share of *first referrals* associated with pre-existing cases appears to have decreased over time. This trend is largely an artifact of limits in the

available data—referrals from early in the analysis period are more likely to be wrongly identified as first referrals when they are in fact associated with referrals submitted before January 2008. These "false" first referrals are also more likely to have an established child support case, because case opening typically occurs very quickly after the first referral, and drive the apparent trend displayed in Figure 3.4. They might also create other trends in the first-referral data that could confound our analysis. To mitigate the impact on our analysis, we omit the early months of data from most of the following analysis. In addition, the time trends included in our regression analysis also help to mitigate this effect.[10]

Figure 3.4: E-referrals and the creation of child support cases, January 2008-April 2010



Source: ECONorthwest analysis of Washington DCS data

To highlight changes in e-referral data that might derive from the training, many of the figures and tables in this section also divide the data into three categories based on when the workers at each CSO completed the training module:

- Phase 1 CSOs (Pierce North, Everett, and Kennewick)[11]
- Phase 2 CSOs (all CSOs in DCS regions 1, 2, 3, and 5)

[10] An alternative to analyzing only first referrals, including all displayed referrals in our analysis, could also skew our results.

[11] During the training implementation, there was a fourth Phase 1 CSO: Spokane Valley. In 2009, this CSO was merged into the Spokane ACCESS CSO and we were not able to identify post-training data that originated from Spokane Valley specifically. Thus, Spokane Valley baseline data is included in the Phase 2 CSOs category.

- Phase 3 CSOs (all CSOs in DCS regions 4 and 6)

Table 3.4 shows how the CSO groups differ in the number of first referrals received by DCS field offices from CSOs in each group during each time period. Phase 1 represents about 10 percent of all first referral activity, Phase 2 about 58 percent, and Phase 3 the remainder. Period 4 is the first of the four-month periods that shows a decline in first-referral activity.

Table 3.4: Number of first referrals by CSO group and time period, December 2008-March 2010

Group	Time period				Total
	1 Dec 08- Mar 09	2 Apr 09- Jul 09	3 Aug 09- Nov 09	4 Dec 09- Mar 10	
Phase 1 CSOs	1,405	1,560	1,658	1,421	10,249
Phase 2 CSOs	9,004	9,852	9,854	8,795	64,572
Phase 3 CSOs	5,098	5,488	5,697	5,152	37,434
Washington total	15,507	16,900	17,209	15,368	112,255

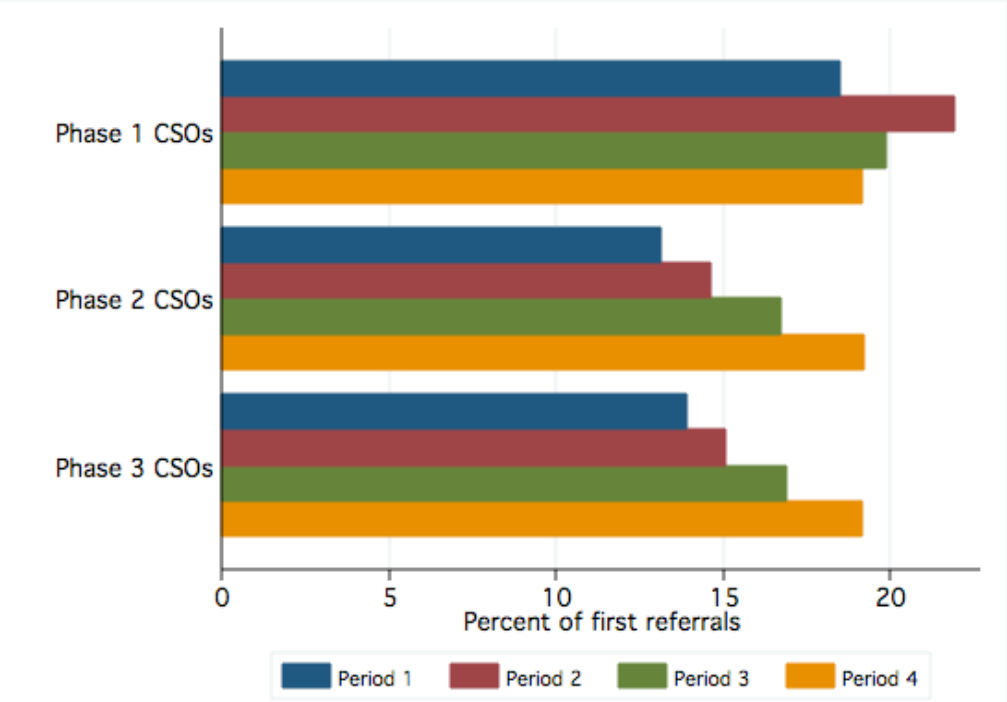
Note: Period 1 is Dec. 08-Mar. 09, Period 2 is Apr. 09-Jul. 09, Period 3 is Aug. 09-Nov. 09, and Period 4 is Dec. 09-Mar. 10

Source: ECONorthwest analysis of Washington DCS data

REGIONAL VARIATION IN E-REFERRAL DATA QUALITY

The completeness of e-referral data varies across phases. Figure 3.5 shows the percent of first referrals with no NCP name or SSN by period and phase. E-referral data quality deteriorated in each CSO group (i.e., the percent of first referrals with no NCP name or SSN increased between Periods 1 and 4). However, the pattern of change for Phase 1 CSOs differed from that for Phase 2 and Phase 3 CSOs, a difference that is potentially attributable to the training module. The completeness of the data in Phase 1 CSO first referrals was worse to begin with but did not deteriorate as it did for Phase 2 and 3 CSOs.

Figure 3.5: Percent of first referrals with no NCP name or SSN, by CSO group and time period



Note: Period 1 is Dec. 08-Mar. 09, Period 2 is Apr. 09-Jul. 09, Period 3 is Aug. 09-Nov. 09, and Period 4 is Dec. 09-Mar. 10

Source: ECONorthwest analysis of Washington DCS data

REGIONAL VARIATION IN CASE CHARACTERISTICS

Many factors outside of a CSD worker's control could explain the variation in e-referral data quality discussed above by affecting custodial parents' willingness and ability to divulge NCP information to CSD workers. These factors include number of children, age of children, family structure (e.g., whether a parent is the head of the household), and case complexity (e.g., good cause status).[12] Tables 3.5-3.6 show the share of first referrals with these characteristics in Period 1 and the percentage point change in the share of first referrals with these characteristics from Period 1 to Period 4.

Table 3.5 shows that in Period 1, 26 percent of first referrals had more than one child listed. This is about four percentage points higher than the share of first referrals with multiple children in 2008. The changes from Period 1 to Period 4 were slight across all three CSO groups.

[12] Other demographic characteristics, such as race, likely correlate with case outcomes, if not e-referral quality, but the available data included very little useable demographic data beyond birthdates and geographic location.

The statewide share of referrals with the youngest child on the associated IV-D case being one year old or younger also increased slightly between 2008 (45 percent) and Period 1 (48 percent). However, as Table 3.5 shows, during the year between Period 1 and Period 4, this percentage decreased slightly in all three CSO groups, with a larger decline among Phase 3 CSOs.

Table 3.5: Share of first referrals with certain characteristics and the 1-year change in share, by CSO group

	Multiple children		Youngest child is 1 year old or younger	
Group	% in Period 1	Percentage point change by Period 4	% in Period 1	Percentage point change by Period 4
Phase 1 CSOs	27.1	+1.2	50.4	-0.2
Phase 2 CSOs	26.6	-0.9	48.2	-0.9
Phase 3 CSOs	25.0	+1.0	46.7	-1.9
Washington total	26.1	-0.1	47.9	-1.2

Notes: Period 1 is Dec. 08-Mar. 09, Period 4 is Dec. 09-Mar. 10. Age of child is as of the date of IV-D case creation.

Source: ECONorthwest analysis of Washington DCS data

The midterm report identified the variation in these characteristics across CSOs, but across individual e-referrals but we found no strong statistical correlation between these case characteristics and whether the NCP name or SSN was included in those data. A later section includes results from a more robust regression analysis of more data that quantifies the impact of these characteristics on e-referral quality and suggests that the characteristics do explain a significant amount of variation in e-referral data quality.

Family structure might also play a role in determining the quality of e-referral data. For example, a head-of-household (HOH) who is not the child's biological parent may know relatively less about a non-custodial parent. Alternatively, this may increase the individual's incentive to identify the non-custodial parent or parents. The share of first referrals with a parent as the HOH was about 70 percent in 2008 and increased to 75 percent in Period 1. As Table 3.6 shows, the change in shares from Period 1 to Period 4 were slight, with Phase 1 CSOs experiencing the largest increase in e-referrals with the custodial parent as HOH.

Good cause status might also affect the data in an e-referral by influencing a custodial parents willingness to identify the NCP. Table 3.6 displays the prevalence of good cause status across phases. The share of first referrals with good cause status in 2008 was 1.6 percent; this share in Period 1 was 2 percent. The share dropped then slightly over the next year. Although prevalence of good cause referrals has remained relatively low, the change between Period 1 and Period 4 represents a large relative change in prevalence.

Table 3.6: Share of first referrals with certain characteristics and the 1-year change in share, by CSO group

	Parent is head of household		Good cause status pending or approved	
Group	% in Period 1	Percentage point change by Period 4	% in Period 1	Percentage point change by Period 4
Phase 1 CSOs	76.7	+1.2	2.1	-0.9
Phase 2 CSOs	74.3	+0.1	1.8	-0.3
Phase 3 CSOs	75.8	-0.3	2.3	-0.7
Washington total	75.0	+0.1	2.0	-0.5

Note: Period 1 is Dec. 08-Mar. 09, Period 4 is Dec. 09-Mar. 10
Source: ECONorthwest analysis of Washington DCS data.

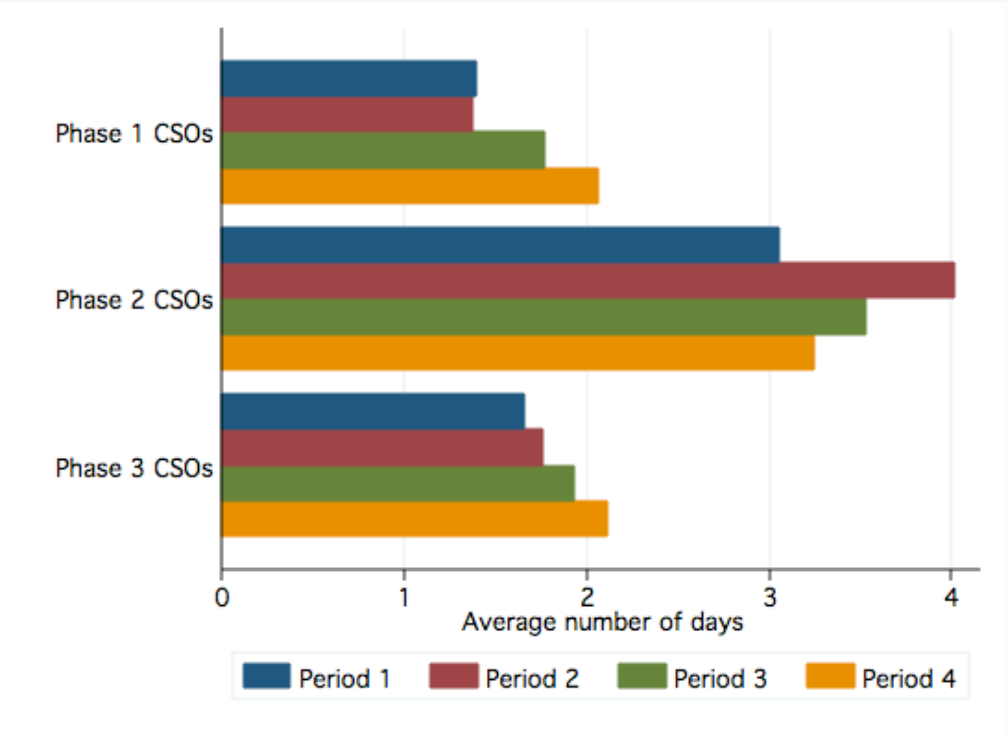
TRENDS IN CHILD SUPPORT OUTCOMES

Child support outcomes associated with first referrals vary more dramatically across regions than do case characteristics, as illustrated in this section.

ELAPSED TIME FROM E-REFERRAL TO CASE OPENING

Figure 3.6 illustrates the differences in elapsed time between e-referral and case opening for clients not already associated with a child support case, across phases and time periods. Phase 1 CSOs and Phase 3 CSOs experienced similar changes in this outcome between Period 1 and Period 4: the average elapsed time from e-referral to case opening increased from about 1.5 days in Period 1 to 2.1 days in Period 4. First referrals from Phase 2 CSOs, on the other hand, were associated with more days to case creation in every time period, but the pattern over time was different for Phase 2 CSOs, with a large jump from an average of 3.1 days to case creation during Period 1 to 4.0 in Period 2 and a subsequent decline during the training and post-training periods, Period 3 and Period 4, to an average of 3.2 days.

Figure 3.6: Time from e-referral to IV-D case creation, by CSO group and time period



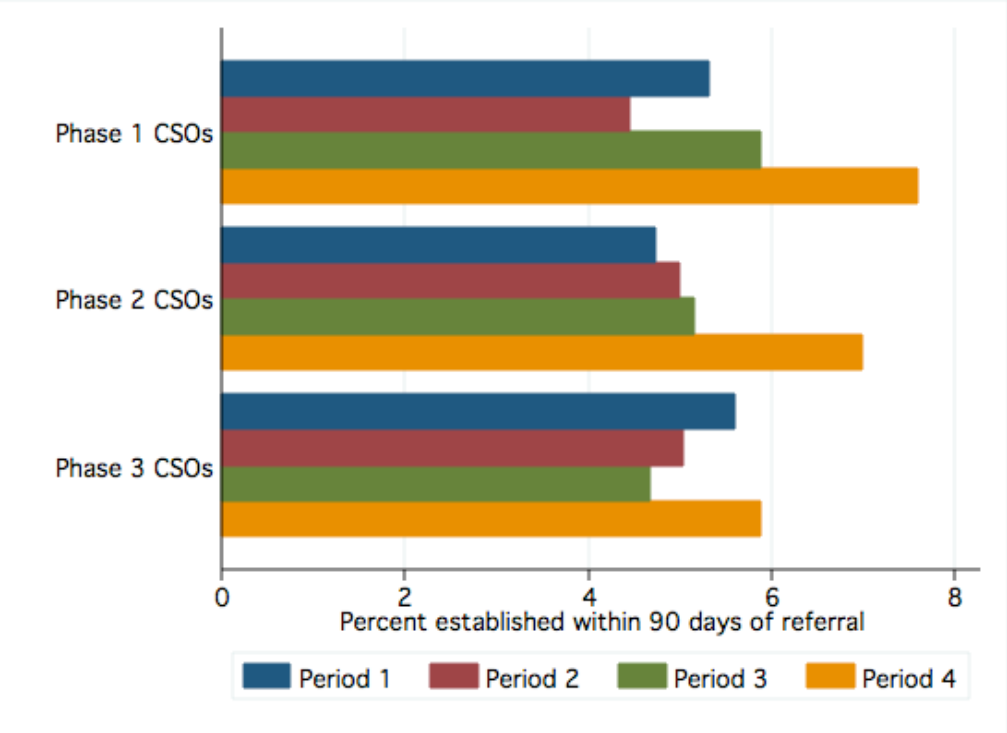
Note: Period 1 is Dec. 08-Mar. 09, Period 2 is Apr. 09-Jul. 09, Period 3 is Aug. 09-Nov. 09, and Period 4 is Dec. 09-Mar. 10

Source: ECONorthwest analysis of Washington DCS data

ELAPSED TIME FROM E-REFERRAL TO PATERNITY ESTABLISHMENT AND TYPE OF PATERNITY ESTABLISHMENT

In theory, better e-referral data could also improve paternity establishment by promoting earlier establishments through administrative processes rather than the more costly and time-consuming judicial processes for establishment. Of course, improving e-referral processes can only affect these outcomes for e-referrals where paternity had not been established at the time of referral. From Period 1 through 4 there were 41,146 such first referrals, or 59 percent of the total. Figure 3.7 illustrates the change in the share of these referrals for which a paternity establishment occurred within 90 days of referral.

Figure 3.7: Share of first referrals that required paternity establishment for which paternity establishment occurred within 90 days of referral, by CSO group and time period



Note: Period 1 is Dec. 08-Mar. 09, Period 2 is Apr. 09-Jul. 09, Period 3 is Aug. 09-Nov. 09, and Period 4 is Dec. 09-Mar. 10
Source: ECONorthwest analysis of Washington DCS data

In Period 1, 5.0 percent of first referrals had paternity established within 90 days of referral. By Period 4, this share had increased to an average of 6.7 percent—a 34 percent increase. Phase 1 CSOs showed the largest gain (2.3 percentage points), followed by Phase 2 CSOs (2.2 percentage points). The average for Phase 3 CSOs changed little, increasing by a mere 0.3 percentage points. Most of the increase occurred between Period 3 and Period 4 across the state, so training cannot be the only explanation. The number of referrals that needed paternity establishment dropped by one third between Periods 1 and 4, suggesting underlying changes to caseload characteristics that affect paternity establishment. Nonetheless, regions receiving training during our analysis period showed strong gains during the relevant training period and thereafter.

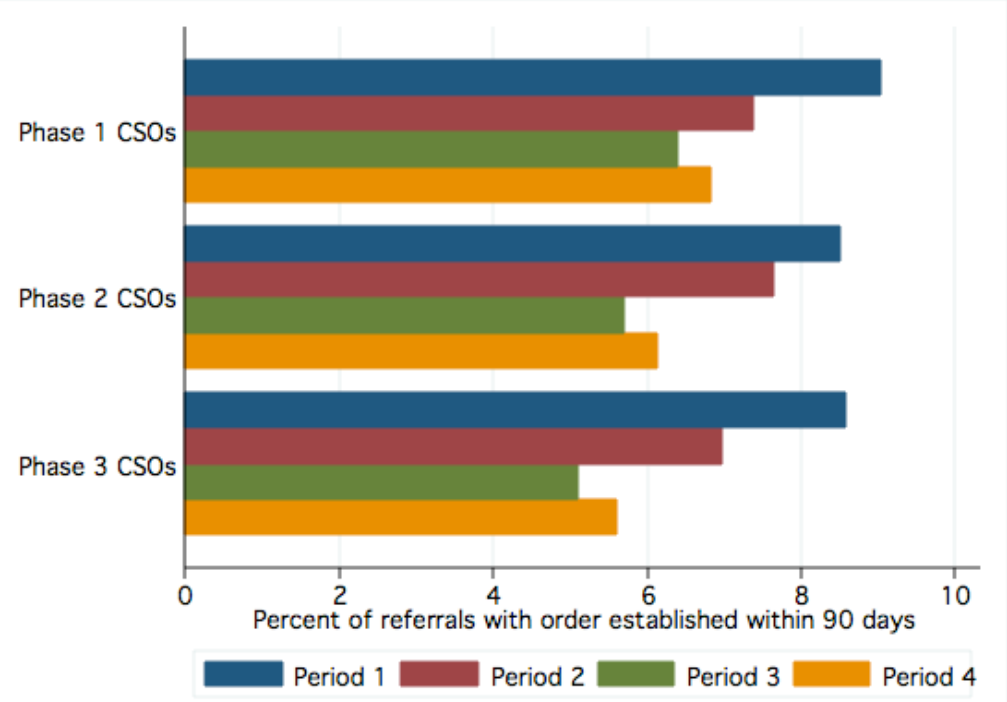
Increases in paternity establishment within 90 days of referral translate almost directly into increases in administrative establishment—most administrative establishments occur within 90 days of referral, if they occur at all, while most court-based establishments take at least six months from the date of referral. As a result, any significant increase in establishment near the time of referral also suggests a relative increase in administrative establishment. We do not have enough post-training follow-up data to adequately quantify changes in administrative establishments relative to court-based establishments.

ELAPSED TIME FROM E-REFERRAL TO ESTABLISHMENT OF AN ORDER FOR CURRENT SUPPORT AND TYPE OF ORDER ESTABLISHMENT

We examined two outcomes that pertain to order establishment. Our midterm analysis suggested that more and better e-referral NCP data correlates with moderately shorter time to support order establishment. Those data showed that fewer than 10 percent of first referrals across the state have an order established within 90 days, and Figure 3.8 shows that this indicator deteriorated over time: in Period 4, only about 6 percent of first referrals had a support order established within 90 days. However, in all CSO groups, the measure improved slightly during Period 4.

Unfortunately, because of the small share of orders established in a short period of time, conclusions about the impact of training on this outcome based on the data available for our analysis are likely to be misleading—almost half of orders established post-referral in 2009 took four or more months for order establishment, with court-based order establishment taking about two months longer, on average, than administratively established orders.

Figure 3.8: Share of e-referrals with no order established at referral for which an order was established within 90 days of referral, by CSO group and time period



Note: Period 1 is Dec. 08-Mar. 09, Period 2 is Apr. 09-Jul. 09, Period 3 is Aug. 09-Nov. 09, and Period 4 is Dec. 09-Mar. 10
Source: ECONorthwest analysis of Washington DCS data

AVERAGE ARREARAGE AT ORDER ESTABLISHMENT AND CURRENT SUPPORT PAID AS DUE WITHIN SIX MONTHS OF ORDER ESTABLISHMENT

Because of the project delays, we did not have access to sufficient data for a credible evaluation of these outcomes post-training.

REGRESSION ANALYSIS

In our midterm report, we discussed the relationship between the case characteristics described above and the statistically significant correlations found between case characteristics and data quality. Above, we illustrated trends in data quality and child support outcomes over time and across three groups of CSOs, defined by when e-referral training occurred. In this section we present and discuss results from our regression analysis of the data that ties these trends together. The regression analysis provides a more robust look at the relationships in question. But, as noted, the significant delay in implementation of the demonstration left us with relatively little post-implementation outcome data to analyze.

We received sufficient data to adequately address two central evaluation questions:

- Do client or case characteristics affect e-referral data quality?
- Did the e-referral training affect the quality of e-referral data?

Our results suggest that the answer to both questions is yes. Our findings can inform the creation of regularly updated e-referral performance reports for review by CSD staff. We used our regression findings and e-referral data from the first quarter of 2010 to create a summary performance report, presented below, as an example.

We also had enough post-implementation data to provide suggestive evidence about the extent to which the training, by improving data quality, might affect the time from e-referral to DCS case creation and from e-referral to paternity establishment. Even so, we hesitate to draw firm conclusions because of data limitations and the centralization of e-referral processing that roughly coincided with the trainings (see Table 3.7). Some of the included case characteristics have a statistically significant impact on every outcome. However, we omit most discussion of most of these impacts because we cannot adequately evaluate the impact of the training on most outcomes.

Table 3.7: Transition dates for centralization of e-referral processing, by DCS field office

DCS field office	E-referral transition date
Wenatchee	08/04/2009
Kennewick	12/07/2009
Yakima	01/04/2010
Fife	01/19/2010
Olympia	02/01/2010
Vancouver	02/16/2010
Spokane	03/01/2010
Seattle	03/15/2010
Tacoma	03/29/2010
Everett	04/12/2010

GENERAL METHODOLOGY

For our analysis of e-referral data quality, we evaluated referrals submitted between July 1, 2008 (one year prior to the first training) and April 30, 2010 (the most recent available data). In total, these data span 22 months, a few months longer than the period covered in earlier charts. Analyses of other outcomes involve subsets of these data. We employed both probabilistic and survival time regression models as appropriate to the outcome of interest. Probabilistic models estimate the impact of a program (e.g., e-referral training) or other variable (e.g., number of children identified on the referral) on the likelihood that an outcome (e.g., that a referral has complete NCP data) will occur. Survival time models estimate the impact of a program or other variable on the length of time expected for a given outcome (e.g., time from referral to paternity establishment).

All models include the case characteristics discussed earlier: whether a referral identifies multiple children, whether the custodial parent is the legal mother or father, whether the youngest child on the referral is less than one year of age on the referral date, and good cause status. We included a time trend in the models to capture the effect of statewide long-term trends in conditions over time that affect the outcome of interest but that are not reflected in the data (e.g., changes in in-migration to the state), as well as additional controls to capture statewide changes that may have occurred during the training and post-training periods. Finally, we included controls for unobserved regional characteristics. These controls capture the impact of site-specific characteristics of a caseload not reflected in the data (e.g., whether a CSO is geographically close to the population served).

DO CLIENT OR CASE CHARACTERISTICS AFFECT E-REFERRAL DATA QUALITY?

To answer the question of whether case characteristics affect e-referral data quality, we estimated a model that predicts the likelihood that a referral has at least one of an NCP name or SSN. The training highlights the importance of data

quality over quantity, and our modeling approach to some extent uses data quantity as a proxy for quality. Unfortunately, the data do not tell us whether a referral includes *correct* information, only whether specific data elements are included.[13]

Given this caveat, our results suggest a strong correlation between case characteristics and data quality (see Figure 3.9, below). The impact of each characteristic was statistically consistent at conventional levels (all had $p<0.001$). E-referrals with multiple children identified were 7.8 percentage points more likely to include an NCP name or SSN, while e-referrals associated with good cause status were 6.7 percentage points more likely to include one or both NCP data elements. In both cases, a reasonable conclusion is that these case characteristics are associated with increased custodial parent interest in identifying the non-custodial parent and receiving child support payments.

E-referrals where the custodial parent was the legal parent were 1.4 percentage points less likely to include NCP name or SSN, perhaps because this population of custodial parents, primarily mothers, is relatively more reluctant to share information about the putative father, whereas grandparents or other relatives might have relatively less reluctance and a greater relative interest in securing support payments. E-referrals identifying at least one young child were associated with a 4.1 percentage point-lower probability of having an NCP name or SSN. This last finding is not terribly surprising—families with young children was one of the populations for which the automated DOH data match was expected to yield benefits.

In light of the variation across regions in the prevalence of these characteristics, our findings suggest the importance of accounting for these differences when developing performance benchmarks related to e-referral data quality.

BENCHMARKING CSO PERFORMANCE

During our site visits, we heard several CSD interviewees affirm that receiving information from DCS about e-referral data quality would help them better understand where DCS would like to see improvement. Our regression analysis, by controlling for aspects of a CSO's caseload outside the control of intake workers, provides a natural foundation for building performance benchmarks that supply this type of information. We benchmarked our summary measure of data quality against predictions, based on our regression analysis, that a CSO would perform somewhat above the average in terms of e-referral data quality. We compared the actual share of "low quality" first referrals transmitted during the first quarter of 2010 to the share predicted by our model. The difference is our estimate of a CSO's performance.

[13] DCS also identified NCP date of birth as a key piece of information. Our preliminary analysis suggested that the training might have increased the share of e-referrals with NCP date of birth, but primarily because many referrals that would have lacked NCP name and date of birth before the training included both after the training. Thus, we do not separately examine the impact of training on whether an e-referral includes NCP date of birth.

We constructed this performance measure as follows: First, we calculated the share of first referrals with no NCP name or SSN. Next, we estimated CSO "effort." For these purposes, we defined effort as any residual deviation from average performance that remains *after* controlling for the characteristics of a CSO's caseload. In other words, we attributed to effort the impact of *all* CSO-specific unobservable characteristics, including possibly irrelevant factors such as proximity to client population. For this reason, our performance measure is not a definitive statement on performance, but it does at least suggest areas of potential improvement.

To benchmark performance, we selected the CSO with estimated effort at the 75th percentile—the office for which about 75 percent of e-referrals are transmitted by CSOs with lower estimated effort and about 25 percent by CSOs with higher estimated effort. Finally, we predicted the performance of each CSO during the first quarter of 2010, assuming effort at the 75th percentile. In theory, DCS could apply this method to assess the performance of individual intake workers, assuming access to data that link CSD staff to specific e-referrals.

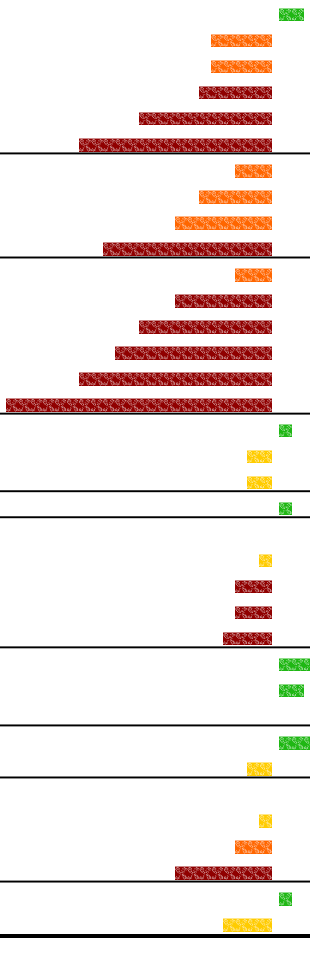
Table 3.8 provides the results for CSOs with 90 or more first referrals during the benchmark period. We omitted smaller CSOs because performance is more variable and a small number of low-quality referrals can significantly affect data from a single quarter. One possible way to include these offices would be to use an annual average for small offices.

The table includes the number of first referrals transmitted by each CSO, actual share of these referrals with no NCP name or SSN, the 75th percentile benchmark, and a graphical representation of the difference between the two. Green bars identify CSOs performing above benchmark, yellow bars identify CSOs performing below benchmark but above the 50th percentile in actual performance, orange bars identify CSOs performing below the 50th percentile but above the 25th, and red bars identify CSOs performing below the 25th percentile.

As with other data indicators, there is striking variation in performance across regions. With one exception, Seattle-area CSOs all perform very poorly on our data quality measure, while Eastern Washington and Vancouver offices generally perform much better. As suggested earlier, it is possible that there are important differences in caseloads across DCS catchment areas driving these trends. If so, benchmarking offices on a regional, rather than statewide, basis might be more appropriate.

Table 3.8: 2010 Q1 performance benchmarks for selected CSOs

DCS Field Office	CSO Name	Number of first referrals Jan.-Mar. 2010	Share with no NCP name and no SSN	Benchmark	Actual less benchmark
Seattle	Rainier	206	12.1%	14.3%	*-2.2%*
	King Eastside	202	19.3%	14.1%	*5.2%*
	White Center	338	21.6%	15.7%	*5.9%*
	Renton	271	22.9%	16.5%	*6.4%*
	King North	134	26.1%	15.1%	*11.0%*
	Capitol Hill	105	33.3%	17.1%	*16.2%*
Tacoma	Puyallup Valley	380	18.9%	15.2%	*3.8%*
	Pierce South	411	21.7%	15.3%	*6.3%*
	Pierce North	275	22.2%	13.5%	*8.7%*
	Lakewood	391	31.7%	16.9%	*14.8%*
Everett	Alderwood	134	18.7%	14.7%	*4.0%*
	Bellingham	255	23.5%	15.3%	*8.2%*
	Everett	249	24.9%	13.1%	*11.8%*
	Friday Harbor	217	30.0%	16.3%	*13.7%*
	Smokey Point	188	31.4%	14.7%	*16.7%*
	Skykomish Val.	91	41.8%	19.2%	*22.6%*
Yakima	Sunnyside	199	14.1%	15.2%	*-1.1%*
	Wapato	185	17.3%	15.3%	*2.0%*
	Yakima	435	17.5%	15.0%	*2.5%*
Spokane	ACCESS Spokane	763	12.7%	14.1%	*-1.4%*
Olympia	Aberdeen	187	14.4%	14.5%	*-0.1%*
	Chehalis	216	16.2%	14.7%	*1.5%*
	Olympia	382	19.4%	16.3%	*3.1%*
	Port Angeles	107	19.6%	16.4%	*3.2%*
	Shelton	114	21.9%	17.2%	*4.7%*
Wenatchee	Wenatchee	174	10.9%	15.4%	*-4.5%*
	Moses Lake	224	13.4%	15.8%	*-2.4%*
	Okanogan	99	16.2%	15.8%	*0.4%*
Vancouver	Kelso	284	11.3%	15.3%	*-4.0%*
	Columbia River	755	17.9%	15.3%	*2.6%*
Fife	Auburn	211	15.2%	16.0%	*-0.9%*
	Bremerton	345	17.1%	15.6%	*1.5%*
	King South	241	19.1%	15.4%	*3.7%*
	Federal Way	217	25.8%	16.9%	*8.9%*
Kennewick	Walla Walla	100	14.0%	15.5%	*-1.5%*
	Kennewick	537	15.8%	11.8%	*4.0%*

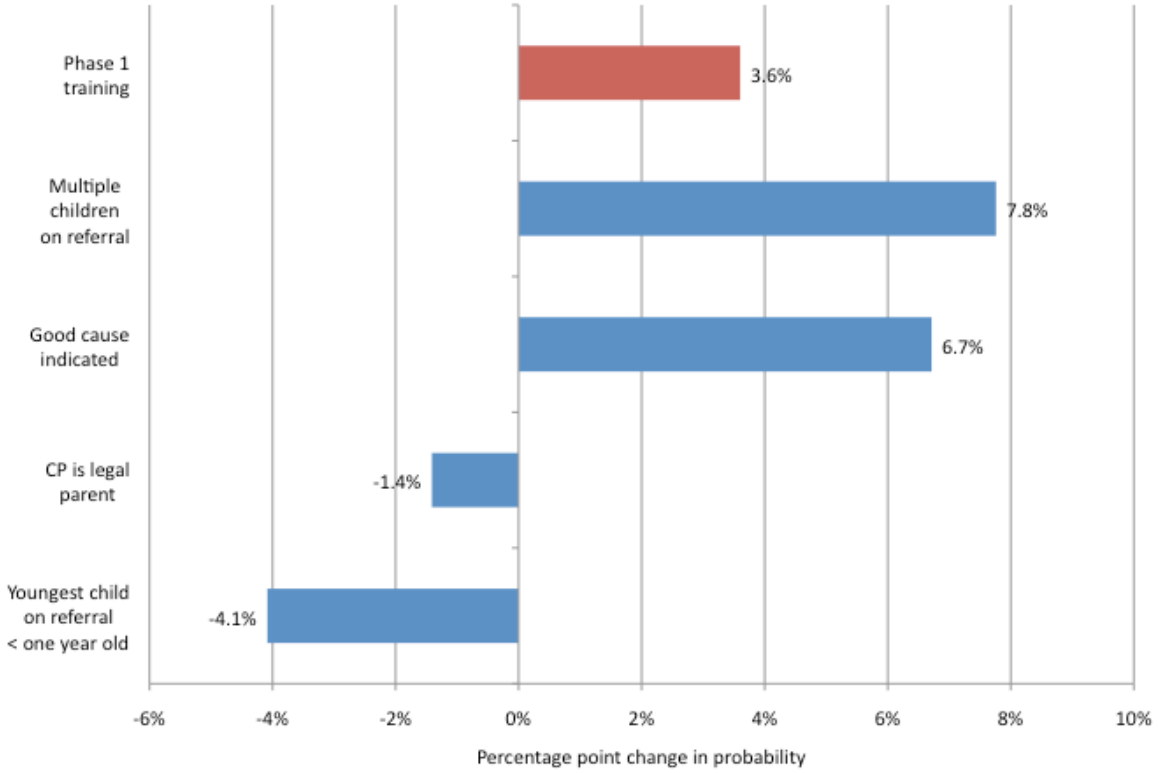


Source: ECONorthwest analysis of Washington DCS data

DID THE E-REFERRAL TRAINING AFFECT THE QUALITY OF REFERRAL DATA?

We also found compelling evidence that e-referral data quality improved after training, at least for the Phase 1 offices (we have no data for referrals transmitted after Phase 2 ended). As noted above, changes in data coding and other factors limited us to observing post-training data for e-referrals originating from only the Phase 1 CSOs other than Spokane Valley. We had data for e-referrals transmitted during training for Phase 1 and Phase 2 CSOs but found no statistically significant difference in e-referral data between the pre-training and training periods. Figure 3.9 displays the estimated impact of Phase 1 training on e-referral data, along with the estimated impacts of case characteristics.

Figure 3.9: Impact of case characteristics and Phase 1 training on the probability that an e-referral includes NCP name or SSN



Notes: Estimates based on e-referrals received during the post-Phase 1 period Dec. 2009-March 2010
Source: ECONorthwest analysis of Washington DCS data

Our estimates imply that, after controlling for case characteristics, time trends, and other factors, the Phase 1 training increased the share of e-referrals with an NCP name or SSN by 3.6 percentage points. This increase is substantial and corresponds to a 28 percent reduction in e-referrals with neither piece of information, relative to what would have been predicted without the training. For Phase 1 CSOs, e-referral data quality was similar in the post-training period to that observed prior to the e-referral grant, while overall quality deteriorated across the rest of the state, as demonstrated earlier in this chapter.

DID TRAINING AFFECT CHILD SUPPORT OUTCOMES?

In this section, we summarize our findings regarding the impact of training on selected child support outcomes. Where data availability allowed for reliable statistical modeling, we included an additional set of control variables in the regressions. First, we added controls for unobserved factors at the level of DCS catchment area. We included these controls because child support outcomes are affected not only by case characteristics and e-referral data quality but also by the effectiveness of DCS staff. Finally, we included controls that identify when e-referral centralization occurred in each region. Based on staff comments regarding centralization made during our site visits, it seems possible that centralization itself could affect outcomes.

Our findings include the following:

- **Elapsed time from e-referral to case opening.** Nearly all cases created after an e-referral are opened within a few days of the referral—75 percent within three days after the referral date. All else equal, this fact suggests that we should have had adequate data to evaluate training impacts on this outcome, although our regression analysis provided *no evidence* that training significantly affects the time to case opening. Case characteristics affect this outcome to a statistically significant degree.

- **Elapsed time from e-referral to paternity establishment.** Regression results from our survival time analysis suggest that training *reduces* the time from e-referral to paternity establishment, but we did not find a corresponding impact on the share of paternities established within 90 days of referral. Additional data are required to draw stronger conclusions. Case characteristics affect this outcome to a statistically significant degree.

- **Share of paternities established through an administrative process.** Somewhat consistent with the findings discussed for the previous outcome, regression results suggest a *positive* impact of training on the share of first referrals for which paternity was at issue that had paternity established administratively within 90 days. However, results were not consistent across different model specifications. Additional data are required to draw stronger conclusions. Case characteristics affect this outcome to a statistically significant degree.

- **Elapsed time from e-referral to order establishment and share of orders established through an administrative process.** Preliminary analysis of these outcomes *suggests* no impact of training. We believe that these findings result from the fact that so few orders are established in the available post-training follow-up period. Court-based orders typically take significantly longer than those established administratively. Additional data are required to draw stronger conclusions. Case characteristics affect this outcome to a statistically significant degree.

- **Average arrearage at order establishment.** We did not evaluate this outcome. Order establishment typically takes several months. As a result, available follow-up data could have led to erroneous conclusions because arrearage is determined in large part by the length of time it takes to establish an order.

- **Share of current support paid as due during the first six months after order establishment.** We did not evaluate this outcome. Order establishment typically takes several months, and we did not have sufficient follow-up data for reliable calculations of this outcome for post-training e-referrals.

CONCLUSIONS OF FINAL DATA ANALYSIS

In summary, our final data analysis resulted in the following general findings regarding child support outcomes over the analysis period:

- The share of e-referrals that require manual intervention increased.
- The elapsed time from e-referral to case opening increased.
- The elapsed time from e-referral to paternity establishment decreased.
- The elapsed time from e-referral to order establishment increased.

Most of these trends were present in the e-referral data regardless of which group of CSOs a referral came from, and delays in program implementation and the resultant limit in post-implementation referral data prevent strong conclusions about the training's impact on child support outcomes. We found no evidence that the training affected the one outcome for which we had adequate follow-up data—elapsed time from e-referral to case opening. Because DCS can open a case even without complete NCP information, however, our finding of no impact does not necessarily mean that the training was ineffective. To the contrary, we found suggestive but not conclusive evidence that the training had positive effects on paternity establishment. These suggestive findings are somewhat encouraging and are consistent with our findings regarding data quality and the reported receptivity of CSD staff to the training.

We did not conclusively identify the reason for the relatively large changes observed for several outcomes during the final few months of the analysis period. There were, however, two external factors that likely had a negative impact on the child support outcomes.

First, the economic downturn resulted in a sharp increase in CSD caseloads and a severe staffing shortage. This affected the project in two ways: the training development and implementation were delayed because CSD staff needed to attend to the needs of clients, and the increase in caseloads might have affected the quality of e-referral data provided to DCS during this time period.

Second, in late 2009 and early 2010, the e-referral processing system changed dramatically. Instead of being sent to DCS field offices, e-referrals are now sent to a central office, thus changing several of the steps in the e-referral process that this project set out to examine. The centralization of e-referrals affected the demonstration project, may have independently affected child support outcomes to a significant degree, and certainly complicated our efforts to evaluate the effects of the e-referral training module.

SUMMARY OF FINDINGS

The purpose of this demonstration project was to increase cooperation between DCS and CSD. Through the proposed demonstration, DCS committed

to invest in a focused, three-year project to revamp and reinvigorate its e-referral process. The original project plan consisted of two key interventions:

- **Expansion of data sharing with vital records and full automation of the data exchange**. DOH—Washington State's vital records department—currently shares birth, death, marriage, and divorce records with DCS. DCS contracted with DOH to automate the sharing of these records to eliminate the need for cumbersome case-by-case record checks. Ultimately, because of a divergence of understanding about project goals and the requirements for successful implementation, this part of the project was not completed.

- **Statewide training of TANF/Medicaid and DCS staff on the process of referring new cases.** In 2004, a DCS/TANF workgroup identified staff training on e-referrals as a critical need throughout the state. The group found that DCS and TANF/Medicaid workers have different interpretations of the data fields on the NCPS screen in the CSD computer system, and no systematic training was available. Through the demonstration project, DCS documented existing e-referral processes, identified strengths and weaknesses across the state, and built a training curriculum with the goal of sharply improving the quality of data transferred by TANF/Medicaid staff to DCS field offices.

The theory behind these interventions is that better information about non-custodial parents will lead to better child support outcomes for families and the state. It was believed that these two project components could together result in better e-referral data and improve the relationship between DCS and CSD.

The data-sharing component of the project was not completed, the training intervention was delayed, and there were external factors that had a negative effect on the project. However, the training was well received and many lessons were learned along the way. A post-training survey, multiple interviews, and the final data analysis point to important conclusions about the success of this project.

LESSONS LEARNED DURING TRAINING DEVELOPMENT

During the initial process study, CSD and DCS staff identified several areas of weakness that could likely be improved through a focused training session for CSD staff. These recommendations formed the basis of the curriculum for the online training sessions developed by DCS:

- Identify the critical NCPS fields.
- Promote consistent use of ACES notes screens.
- Emphasize that incorrect NCP information is worse than no information.
- Refresh CSD staff's understanding of the relationship between TANF and child support enforcement.
- Improve communication with TANF applicants about non-cooperation sanctions.

At the end of the training development process, development staff highlighted several lessons learned:

- Experience and expertise were important resources for developing the online training.
- Training time for CSD staff was a critical constraint.
- To be most effective, the training needed to be mandatory.
- The collaboration between CSD and DCS staff was critical to developing a useful and credible training module.
- DCS and CSD can improve their communication in areas beyond those targeted by this grant.

EFFECTS OF THE TRAINING IMPLEMENTATION

The training was implemented in three phases from July 2009 to July 2010. By the end of Phase 3, a total of 1,429 CSD workers had completed the training, for a completion rate of 95 percent. Responses to a post-training survey were largely positive, with about 75 percent of survey respondents agreeing with several positive statements about the training, although some trainees provided negative feedback and suggestions for improvement.

The project team also interviewed DCS training development staff, CSD workers who completed the training, and DCS field office staff. These interviews and site visits (a) resulted in a list of lessons learned during the training development process, (b) confirmed that the training module was well received by CSD trainees, and (c) allowed DCS workers to describe the benefits of being co-located at CSOs as well as voice some of their concerns about the e-referral centralization process that occurred in early 2010.

RESULTS OF FINAL DATA ANALYSIS

The final data analysis indicates that the training module positively affected data quality, at least for referrals originating from Phase 1 CSOs. In theory, this increase in data quality should translate into improved child support outcomes. However, implementation delays and limited data availability significantly restricted our ability to evaluate program impacts on selected child support outcomes. While we found no impact of training on the time from referral to case creation, we did find suggestive evidence that the training ultimately results in improved paternity establishment outcomes. Analysis of additional data might help to strengthen this conclusion. We did not have access to data that would allow a credible evaluation of the order establishment or payment outcomes as initially planned.

Finally, the results of the data quality analysis suggest a method for creating performance benchmarks that would provide CSD staff a summary of their performance in submitting e-referrals from the DCS perspective–something many CSD employees identified as potentially useful when we broached the topic during our site visits.

RECOMMENDATIONS

This 1115 demonstration grant had the stated goal of improving Washington State's e-referral process. In spite of the implementation challenges, the demonstration ultimately produced many positive outcomes from which Washington, and other states, can learn:

- The DOH data matching efforts initiated important conversations about the needs and interests of both DCS and CSD. These discussions should continue and will inform the two agencies as they continue to work toward greater data sharing.

- The e-referral training was well received and should continue, as should curriculum development consistent with staff suggestions. Requiring new CSD intake staff to view the training, possibly in conjunction with additional training by co-located DCS staff, will improve CSD staff understanding about DCS data needs and the benefits to CSD clients of supporting DCS efforts.

- DCS has ready access to data necessary for performance benchmarks that can help DCS and CSD target outreach and training efforts. DCS should convene agency staff to further develop this concept.

- The process of collaborating and discussing project goals opened important channels of communication between DCS and CSD. The evaluation process raised several ideas regarding how the two agencies could work together in the future:
  - DCS should provide the training in written form so that it can be accessed by CSD workers on a regular basis.
  - DCS and CSD should consider developing an incentive system that rewards CSOs for providing complete and high-quality NCP information. This could include periodic feedback to CSOs about the relative quality and completeness of their e-referrals (e.g., as would be found in a performance report such as that outlined earlier).
  - Although outside the scope of this grant, both DCS and CSD staff reported that ACES could use a significant upgrade—many CSD workers had ideas about how ACES could be improved, to the benefit of both agencies.

Appendix

RESULTS OF TRAINING RECIPIENT SURVEY

In Chapter 2, we summarized the results of the survey administered to all training recipients after they had completed the training module. Figure A.1 presents the full results for Questions 1-8 of the survey.

Figure A.1: Survey results for training module recipients at all CSOs (number of respondents: 466 out of 1,429)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. This training was useful in improving my knowledge on how to complete the NCPS screen.	21%	58%	17%	2%	1%
2. I think this (or a similar training module) would be useful for RECENTLY HIRED staff.	49%	43%	6%	1%	1%
3. I believe reviewing this training periodically (e.g., once every 2 or 3 years) would help me to continue to accurately complete the NCPS screen.	23%	51%	19%	6%	2%
4. I think this training will ultimately benefit TANF clients.	24%	52%	21%	2%	1%
5. This training gave me a better understanding about the relationship between TANF and child support.	18%	54%	25%	2%	1%
6. This training gave me a better understanding about the importance of NCP data related to child support.	28%	54%	16%	2%	1%
7. This training gave me a better understanding about the role of the e-referral process.	18%	59%	19%	3%	1%
8. This training gave me a better understanding about the NCP data of most value to child support.	26%	57%	15%	2%	1%

Source: ECONorthwest analysis of Washington DCS data

RESPONSES TO OPEN-ENDED SURVEY QUESTION

Most comments were positive like these:

> "I was surprised at a lot of the things I didn't know, even though I thought I was very up to date on the process."
>
> "I now write remarks behind the NCPS screen, inform clients of the child support obligation for particular programs, and use the Quick Cash option in the SEMS system."
>
> "I am a WorkFirst program specialist and have been doing TANF applications for years. I learned things that I did not know. This should be given as a refresher every year or so."
>
> "I did not know how important the e-referral was until I took the training."

Negative comments fell into the following categories:

The training wasn't necessary for experienced workers.

> "I've been working the NCPS/DCS connection for quite some time, from pre-e-referral, paper packet days. The current process is so much more worker (and customer) friendly. Not to sound like I'm patting myself on the back, but the training didn't offer me any new learning or insights. It's great for new folks though!"
>
> "This is a process that we have been doing all along. It will be great for new hires but seasoned workers get frustrated having to take time away from processing or intakes to complete a training that they are already doing."

The training needs to be in written form somewhere or given in person.

> "I need visual references for training I take and then don't use for a while—is there some way you can put that information on Sharepoint? Could we have the option of printing [the training]?"
>
> "When I tried to update an NCPS screen not long after [taking the training], I felt I would have benefited from reviewing the training. I wasn't able to get into the course again."
>
> "It would be nice to have it available in printed form somewhere for reference."
>
> "I learned very little. This is best taught in-person by a knowledgeable worker on the job."
>
> "It would be better to have in-person training every 2-3 years."

There is not sufficient time, training, or incentives to gather and enter NCP information.

> "Even with the training, staff are still not entering all of the information on the NCPS screen."

> "It is really mind-boggling that there are not periodic training updates, office meetings, etc. in which [training] information . . . is reviewed to ensure that workers got the information correctly when originally trained, have not forgotten how to do less frequent procedures, have not missed important pieces of the endless and significant modifications of procedures, and/or have not been mistaught. . . . Unless this information is reviewed with staff periodically, preferably in large groups where everyone gets the same information, we will continue to have significant inconsistency in process and procedures."

> "Maybe DCS needs to go back to doing their own intake so they get the info they need, how they want it and we can focus on providing the benefits our customers are applying for. It would also help customers understand the DCS cooperation requirements."

> "There is no buy-in for financial staff to do the best job possible in completing the NCPS screens. Until there is some sort of reward/incentive to entice financial staff to do a better job in completing the NCPS screens, no amount of training will ever accomplish the goal of making the NCPS screen and e-referral process a more valuable tool for DCS workers."

Miscellaneous suggestions

> "Having viewed the training module twice, I felt [it] was informative but slightly confusing, as if I was presented with some irrelevant information or the information could have been presented in a more concise manner. Also, using names such as 'Fanny Farkel' and 'Gar Farkel' seems distracting to me and makes it hard to follow the examples presented; using more common names might make it easier to follow for some."

> "Including the shortcuts (e.g., Shift-F10) for finding the NCP information that is already included on other [screens] would be helpful for staff."

> "It would be helpful if the NCP screen had a field for aliases, employer's phone number, or listing an alternate source of income such as unemployment or [disability benefits]."

E-REFERRAL VERSUS PAPER PROCESSES

During the interviews with both CSD and DCS workers, various comments compared the e-referral process to the old paper process. Some prefer the e-referral process:

> "I like how the electronic part [of e-referral] saves staff time."
>
> E-referral is better because "we deal with the custodial parent, so we can talk face to face about the NCP. We can see their facial expressions and add remarks about what we see."
>
> "E-referrals are more timely; not as many kids fall through the cracks. We know right away when a child is added to a grant. And it's easier to track than with paper."

But others miss certain aspects of the paper process:

> "When clients are sitting there, they don't always remember the information. The paper referral captured more information because the client had the forms and more time to fill them out. It's only going to be as good as what the client says during the interview. "
>
> "Some parents don't want to provide information face to face. It's personal; they don't want to be as open. With paper referral it was easier because they don't have to talk about it."
>
> "There was better data from the paper files because the client had to sit and complete it. There was tons of data on that 4-page file. I don't want more paper, but . . . the data is getting thinner."
>
> "With paper referral you could tell the details of payments and what kind of order there might have been. On the new referral, they either don't put it on there, or don't know where to put it. The responsibility for the information used to be the parent's; now it's on DCS to ferret out the information. DCS has to send out more paperwork to the custodial parent, which delays child support and a lot of other things."