Cost-Savings Evaluation of the Norman Program

Final Report to the Department of Children and Family Services

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Objective

This report was commissioned by the Director's Office for the purpose of estimating the fiscal impact of the Norman Program on the Department's annual budget. Previous estimates (based on an average family size of two children, a one-year prevention of placement, and a six-month reduction in placement length prior to reunification) have run as high as \$26 million for one sixmonth reporting period (Eighth Monitoring Report, 1997). The goal of the present analysis is to evaluate the accuracy of this assessment using administrative data on the Norman Program linked to CANTS and CYCIS information. Norman certified families are included in our costbenefit analyses, and comparisons are made between those children or families that received cash services and those that did not.

Summary of Findings

Based on an analysis of the administrative data, the following results on the cost-effectiveness of the Norman Program were found:

• Among families that received "Norman-eligible" allegations during the third quarter of FY96 and that also were certified to receive Norman services, those that received cash assistance were less likely to have at least one child placed in substitute care within a 15-month period than families that did not receive cash assistance (26.7% vs. 39.2%, respectively). Additionally, the overall average number of days in substitute care during this period was significantly lower for the children in the cash assistance group than for the children who did not receive cash assistance (80 vs. 211, respectively). The average net savings per family over a 15-month period was \$1,455.¹ Among families that received Norman-eligible allegations during this time period but were *not* certified to receive Norman services, the placement rate was 25.7% and the average number of days in substitute care was 165.

¹ This savings estimate is based on a comparison of the overall average number of days in care between the cash-assistance and no cash-assistance groups (as opposed to a comparison of these two groups among only those children who were placed in substitute care). It includes a deduction for average expenditures per family, which is calculated as \$584.05 for the group of families in this sample. The appendix details the calculations for this estimate.

• Among children who had or received a "return home" permanency goal during the third quarter of FY96 and whose families were also certified to receive Norman services, there was a higher rate of exits from substitute care among those who received cash assistance than among those who did not receive cash assistance (60.0% vs. 22.7%, respectively). The average number of days in substitute care was also significantly less for the certified/cash assistance group than for the certified/no cash assistance group (306 vs. 403, respectively, as counted from January 1, 1996), resulting in an average placement cost savings of \$1,798² per family over a 15-month period. Among children with return home goals who were returning to families that did *not* have Norman certification status, the reunification rate was 18.1% and the average number of days in substitute care was 408.

Shortcomings of Analytical Approach

There are several important drawbacks to the methods used here in assessing the costeffectiveness of the Norman Program.

- There is some question about causality in the evaluation of the "back-end" group. That is, the decision to return children home may be made first, and then followed by cash assistance from the Norman Program. This scenario leaves open the possibility that families receiving cash services at the back-end are more likely than families that did not receive these services to achieve reunification in the first place. The only way to remove this potentially confounding factor is through the use of an experimental design, in which families from the "experimental" (cash assistance) group and the "control" (no cash assistance) group are equally likely to achieve reunification (due to randomization of assignment into groups). Since ours is an observational study, we cannot be sure that the only differentiating factor between the assistance and no assistance groups was the provision of cash services.
- An additional complication with the back-end evaluation is that we did not have information on "expedited AFDC" receipt. Instead, we constructed cost-benefit calculations for the back-end using only cash assistance paid directly from Norman funds. The receipt of expedited AFDC may produce an added cost-savings that was not able to be captured here.
- These analyses did not control for other case or family characteristics. There may be certain types of families that benefit more than others from Norman services. Also, those families who actually receive cash assistance once they are certified into the Norman Class may be qualitatively different from certified families that do not receive cash assistance. For instance, the former group of families may have a higher risk of

 $^{^2}$ The average expenditures per family, calculated to be \$622 using this sample, is deducted from this savings estimate. A detailed description of the calculations for this estimate are in the appendix.

placement to begin with and may therefore represent more difficult cases.

- There is no verification that a return home goal was achieved among those children who left placement spells, so some children who left substitute care may have aged out or been adopted. Neither of these outcomes reflect the goal of expedited reunification for back-end certified families, and future analyses should adjust for this.
- Finally, not all Norman certified families are captured at the "front-end" and "back-end" as we have defined them below. Families can and sometimes do receive a Norman certification during other stages of their involvement with DCFS, and these families were not included in these analyses. Also, families that receive more serious allegations in addition to Norman-eligible allegations can be certified in some circumstances. These families were not included in the front-end evaluation because it was less clear that uncertified families with more serious allegation combinations constituted an adequate comparison group.

Methodology

To assess the cost-effectiveness of the Norman Program, two strategies were used.

- 1. In order to estimate the savings from placement prevention at the "front-end" of the system, the population of families that had only "Norman eligible" allegations during the third quarter of FY96 was identified. All of the children in these families were associated with indicated allegations of inadequate food, clothing, shelter or environmental neglect (in the absence of more serious allegations).³ This group was linked to the Norman certification information, and the study sample was pared down to include only families that became Norman certified or that received cash assistance from the Norman Program. For the cost-benefit analysis, families that received cash assistance were compared to families that did not receive cash assistance in terms of the rate of placement in substitute care and the average number of days in substitute care of their children. The children were tracked in the administrative data through March 31, 1997 to determine their length of stay in substitute care as of that date.
- 2. To assess cost-savings at the "back-end," a group of children was identified that had or received a "return-home" permanency goal in the third quarter of fiscal year 1996, and who were potentially returning to families that were certified to receive Norman services. Children in families who received cash assistance were then compared to the group of

³ The allegation file from the Chapin Hall Center for Children that was used to conduct these analyses had information on the most serious allegation only for each child and family. It is therefore possible that some of the children and families who were included in the analysis population had "risk-of-harm" or "other neglect" allegations in addition to the Norman-eligible allegations of inadequate food, clothing, shelter, and environmental neglect. None, however, had any allegations of physical abuse or neglect, sexual abuse, lack of supervision, or substance use (including SEI allegations).

children whose families did not receive Norman cash services in terms of the number of days until the substitute care placement ended (as of March 31, 1997).

Analysis and Discussion

Front-End Evaluation

For the front-end evaluation, 124 families were identified that were indicated for Normaneligible allegations (in the absence of other more serious allegations) during the third quarter of FY96 and that were also certified to receive Norman services. Thirty-five percent of these families had at least one child placed in substitute care before March 31, 1997. Of these 43 families, 12 (27.9%) received Norman cash assistance during the observation period.⁴

Among the Norman certified families in this sample, those that received cash assistance were less likely to have a child placed in substitute care prior to March 31, 1997 than families that did not receive cash assistance (26.7% vs. 39.2%, respectively). The average number of substitute care days was significantly lower among the children in the cash assistance group as compared to children from families that did not receive cash assistance (80 vs. 211, respectively). Comparing the days in placement among only those children that had a substitute care spell, those that receive cash assistance stayed an average of 174 days in care while those that did not receive cash assistance stayed an average of 324 days in care during the study's observation period. This demonstrates that families who receive Norman cash services enter substitute care less often, and also stay for shorter durations once in care.

Among the children placed in substitute care during the observed 15-month period, the average number of days until a first substitute care placement was slightly shorter (42 days) in the cash assistance group as compared to the group that did not receive this support (71 days). This suggests that while the receipt of Norman services may work to prevent placements altogether and shorten their duration once they occur, the onset of these placements occurs more quickly among children receiving Norman services.

It is significant to note that among families with Norman-eligible allegations that did *not* become certified into the Norman Class, the rate of having at least one child placed into substitute care was 25.7%. This rate is very similar to the rate of child placements from certified families that received cash assistance, and significantly lower than the rate of placement from certified/no assistance families. Such a finding suggests that families who become certified to receive Norman services constitute a higher risk group than uncertified families, and therefore face a greater likelihood of having a child placed in substitute care to begin with. In fact, the rate of placement for the certified group as a whole was 40.2%. It appears that the provision of cash services to Norman-certified families does, in fact, significantly reduce the chances of placement. Similarly, the average number of days in care for the children in uncertified families

⁴ Families with children that were placed in substitute care were coded as certified only if the certification occurred prior to the first placement of a child.

was 165. This average is midway between the averages for the children from the two certified groups, providing even stronger evidence that Norman cash assistance is extremely beneficial to families that become certified into the Norman Class.

Back-End Evaluation

For the back-end evaluation, 4,287 children in 1,760 families were identified who had or received a return home goal during the third quarter of FY96. Of these children, 1,253 (29.2%) had a substitute care spell end during the study observation period. Seventeen percent of these children (N=750) received Norman services in this time.

The analysis revealed that children from Norman certified families that received cash assistance were more likely to exit substitute care than children from Norman certified families that did not receive cash assistance (60% vs. 22.7%, respectively). To assess the extent to which the Norman program expedites reunification, the average number of days until a substitute care exit was calculated for children from the two groups using January 1, 1996 as the starting date. Children from cash assistance families stayed in placement an average of 306 days, while the children from uncertified families stayed in substitute care an average of 403 days. This difference generates a placement cost savings of \$1,798 per family.

Since the majority (70.8%) of the children from the families included in the back-end evaluation were still in substitute care as of March 31, 1997, it was not possible to calculate the final average difference in placement days between the cash assistance and no cash assistance groups. However, comparing the number of days in care for the 20th percentile between these groups, it was found that children from families that received cash assistance were in care 150 days or less, and children from the remaining families stayed in care 386 days or less. This provides some preliminary evidence that the difference in average placement days between these two groups will remain substantial as these families are tracked over time.

In a survey of Norman Liaisons conducted by the Office of Litigation Management (OLM), it was estimated that among reunification cases receiving Norman services, placement spells would have been prolonged an average of six months in the absence of services. If the results from the present analysis are viewed as a conservative assessment of placement outcomes for families with reunification goals, and the OLM finding represents a less conservative estimate, placement spells could be shortened anywhere from three to six months when Norman assistance is provided to families.

It should be emphasized, however, that it is very difficult to know whether our estimates are confounded by the observational design of the study and the lack of information about the provision of expedited AFDC benefits.

Cost-Effectiveness of the Norman Program

To estimate the average cost-savings per family, separate calculations were done for front- and back-end samples. The average estimated savings in placement costs for the "front-end" was

\$2,039 per family. However, this figure does not include a deduction for Norman expenditures. A cost benefit analysis conducted by OLM reports that the average Norman Program expense was \$814.81 per family in FY96. The average cash expenditures calculated for this sample were \$584.05. If the latter figure is deducted from the average placement cost savings generated with this sample, the result is a \$1,455 savings to the Department per family. It should be noted, however, that \$584 figure does not include any administrative expenses incurred per family.

For "back-end families," savings are more pronounced. This analysis found the average savings in placement costs per family to be \$2,421. If the average expenditures per family calculated with our sample (\$622) is deducted from this figure, the net savings to the Department per family is \$1,799.

It should be noted that these savings could change as families are followed over time. The current analysis tracked families only through March 31, 1997. Since the majority of the children placed in substitute care during this observation were still in care as of March 31, 1997, the true savings to the Department are not yet known. However, these analyses strongly suggest that the differences observed here are not likely to significantly alter the reported findings.

It should also be stressed that the families included in the present analysis do not represent the entire population of families who were certified into the Norman Class following an indicated Norman-eligible allegation or a reunification goal during the third quarter of FY96. Families that were not reported to DCFS for only Norman-eligible reasons during this quarter were excluded from the cost-benefit calculations presented in this report, as were families from this group who did not receive Norman certification status. Again, only families that had Norman-eligible indicated allegations (and were Norman certified) during that quarter were included in the front-end evaluation and only families with children who had or received a reunification goal (and were Norman certified) during that quarter were included in the analyses.

Recommendations

- 1. Continue tracking the families identified for this evaluation for a longer period of time to determine whether the savings reported here continue to be reliable.
- 2. Conduct more rigorous analyses of placement outcomes at the front and back ends of the system (controlling for case and family characteristics as well as type and value of Norman services received and specifying a study population that captures more of the Norman families that are certified at alternative stages of their involvement with DCFS).
- **3.** Incorporate information about the Norman Application Program (or expedited AFDC) into cost-benefit calculations at the back-end. An internal DCFS report prepared for the Norman Monitor (authored by John Cheney-Egan, Lori Moreno, and Debra Dyer Walker) details the methodology that would need to be applied for this to be

Appendix: Cost-effectiveness calculations

	Average number of days in care 1/1/96 -3/31/97	Average cost per day, per child (based on average monthly placement cost (\$350) divided by 30.5 days			Total placement costs for one child in placement spell of this length
Cash assistance group (N=61 children in 45 families)	80	*	\$11.48	=	\$918
No cash assistance group (N= 137 children in 79 families)	211	*	\$11.48	=	\$2,422
Uncertified group (N=280 children in 183 families)	165	*	\$11.48	=	\$1,894

To calculate the placement cost savings at the front-end, the following formulas were used:

Difference in cost between no assistance and assistance groups: \$2,422 - \$918 = \$1,504 (\$1,504 represents the estimated cost per child in the Norman cash assistance group)

\$1,504 * 61 (children in Norman cash assistance group) = 91,744

91,744/45 families = 2,039 (this represents the average placement savings per family during the observation period. In other words, families that did not receive cash assistance cost an average 2,039 more in placement expenditures than families that did receive this assistance.)

If the average Norman expenditures per family (\$584.05) is subtracted from \$2,039, the result is a \$1,454.95 average savings to the Department per family, over a 15-month period.

To calculate the placement cost savings at the back-end, the following formulas were used:

	Average number of days in care 1/1/96 -3/31/97	Average cost per day, per child (based on average monthly placement cost (\$350) divided by 30.5 days			Total placement costs for one child in placement spell of this length
Cash assistance group (N=750 children in 345 families)	306	*	\$11.48	=	\$3,513
No cash assistance group (N=3,537 children in 1,415 families)	403	*	\$11.48	=	\$4,626
Uncertified group (N= 13,435 children in 6,965 families)	408	*	\$11.48	=	\$4,683

Difference in cost between non-assisted and assisted groups: \$4,626 - \$3,513 = \$1,113 (\$1,113 represents the estimated savings per child in the Norman cash assistance group)

\$1,113 * 750 (children in Norman certified group) = \$834,750

834,750 / 345 families = 2,419.57 (this represents the average placement cost savings per family during the observation period)

If the average Norman expenditures per family (\$622) is subtracted from \$2,419.57, the result is a \$1,797.57 average net savings to the Department per family, over a 15-month period.