Report to the Office of Child Abuse Prevention Summarizing the Findings from Family Development Matrix and Pathway to the Prevention of Child Abuse and Neglect , September 2012

For additional information: Details can be seen at Matrix Database/Evaluation Reports 2011 & 2012: http://matrixoutcomesmodel.com/matrixdb.php

The FDM/Pathways project is comprised by two program components: The Family Development Matrix (FDM), and the Pathways to Prevent Child Abuse and Neglect Model (Pathway). Even though the conjunction of these two components serves a common purpose and objective, our evaluation design considered each component separately to evaluate different aspects of the overall program as they relate to how agencies contribute to the betterment of children and families. To achieve this we began from the original objectives for each of the program components. The FDM, for instance, was created as a tool that agencies use for programmatic strategic planning, quality improvement activities and as an information system that helps justify the establishment of new programs. The Pathways Model, on the other hand, was conceived as a tool that could be used by agencies to assist families in the assessment of their strengths, growth, outcomes, and the achievement of their goals. The Pathway Model was specially conceived for families facing risk of child abuse/neglect as part of a case management approach that empowered and supported families.

The FDM data from this report demonstrates that families engaged with family resource centers achieve positive outcomes. The topic of family engagement in child welfare services is included. The FDM Pathway project's ingredients for evaluation includes:

- A theory of change for family development assessment that includes a standard core set of outcome measures across participating agencies;
- Measurement of interventions in relation to case management activities and family participation as an essential catalyst for outcome change;
- Evaluation of the FDM as a service tool for data information and retrieval of client outcome results.
- Prevention planning to integrate the Pathway interventions into case management practices;
- An expanded web-based information and data system to accommodate the capacity and performance needs of FRCs.
- A panel of experts from child welfare, research and family resource centers to guide evaluation

Finding 1. The FDM component was assessed in terms of its initial goal: *To serve as a multi-level (county and agency) information system tool for evaluative and planning purposes as well as increased agency efficiency*.
For this purpose, the evaluation used a survey questionnaire designed to capture how agency directors assessed their own agencies' information systems in three areas:
(1) Their system capabilities for collecting and sharing information within the agency
(2) Their system capabilities to input and retrieve valuable information about families' and workers' activities
(3) Their system capabilities to serve as an information system that allows them to evaluate their work
In summary, the results of our quasi-experimental study show that FDM users increased their scores much higher than comparable agencies in the control group in each of the three evaluation measures. The greatest positive gains were experienced by agencies that implemented the FDM for the first time and had an entire year to use it. In conclusion, our results show that FDM system increases the perceptions of agency managers in regards to their own information and evaluation systems. Our results also show that time plays a significant role in the way the FDM increases agency perceptions of effectiveness of their information and evaluation systems. As agencies input data in their systems and are able to track client outcomes, they seem to have increased their positive perceptions of their information systems significantly.

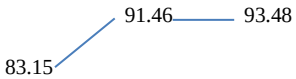
Finding 2. The FDM/Pathway analysis of at-risk and differential response referred family progress from their baseline through a third assessment.
This report presents a series of analyses using data from all FDM clients that had a first assessment between January of 2009 and December 7th of 2011. For tables and graphics that present changes over time from first to third assessment we used data from clients who have at least 3 assessments. Between January of 2009 and December 7th of 2011, there were 6,765 clients that had a first assessment. Further, 4,233 of them had a second assessment, and 1,029 of them received a third assessment. Specifically, this report focuses on 3 general areas regarding the type of change experienced by clients over a 6-month period: a) The overall trajectory patterns across indicators, b) the differences in client score's trajectories across referral types (DR and non-DR), and (c) the changes in family engagement over three assessments. Additionally this report presents a preliminary exploration on the hypothesis of whether clients experience a regression in status due to an increased level of trust with a case manager over time.

Table 1: Percent of clients (with 3 or more assessments) at stable or self-sufficient status by NON Differential Response vs. Differential Response cases

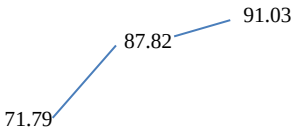
NON DR			
Indicator	**1st**	**2nd**	**3rd**
Resource Knowledge NON DR (N=746)	66.22	89.81	95.58
Budgeting NON DR (N=746)	72.12	84.18	89.14
Support System NON DR (N=746)	77.35	87.67	91.02
Clothing NON DR (N=746)	78.82	87.40	92.90
Emotional WB NON DR (N=746)	80.16	89.95	92.49

DR			
Indicator	**1st**	**2nd**	**3rd**
Resource Knowledge DR (N=282)	54.61	90.07	93.97
Budgeting DR (N=282)	66.67	77.30	83.69
Support System DR (N=282)	63.48	79.79	86.17
Clothing DR (N=282)	69.86	82.98	90.07
Emotional WB DR (N=282)		82.98	88.30

Child Care
NON DR (N=445)

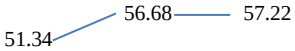


Child Care
DR (N=156)

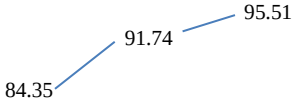


Employment
NON DR (N=452)

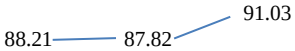
Employment
DR (N=187)



Child Insurance
NON DR (N=690)



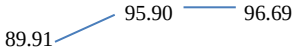
Child Insurance
DR (N=280)



Family Communication
NON DR (N=746)

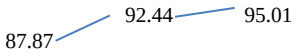
Family Communication
DR (N=282)

Abuse Risk
NON DR (N=634)



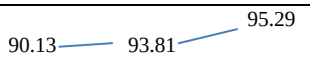
Abuse Risk
DR (N=265)

Parenting
NON DR (N=701)

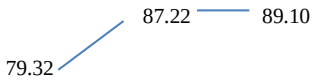


Parenting
DR (N=280)

Child Development
NON DR (N=679)

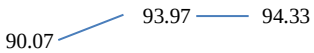


Child Development
DR (N=266)

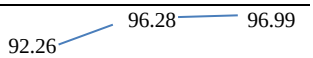


Transportation
NON DR (N=746)

Transportation
DR (N=282)

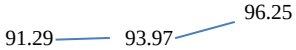


Nurturing (child)
NON DR (N=698)

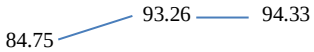


Nurturing (child)
DR (N=280)

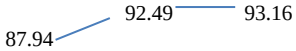
Health Insurance
NON DR (N=746)



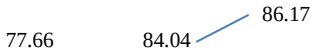
Health Insurance
DR (N=282)

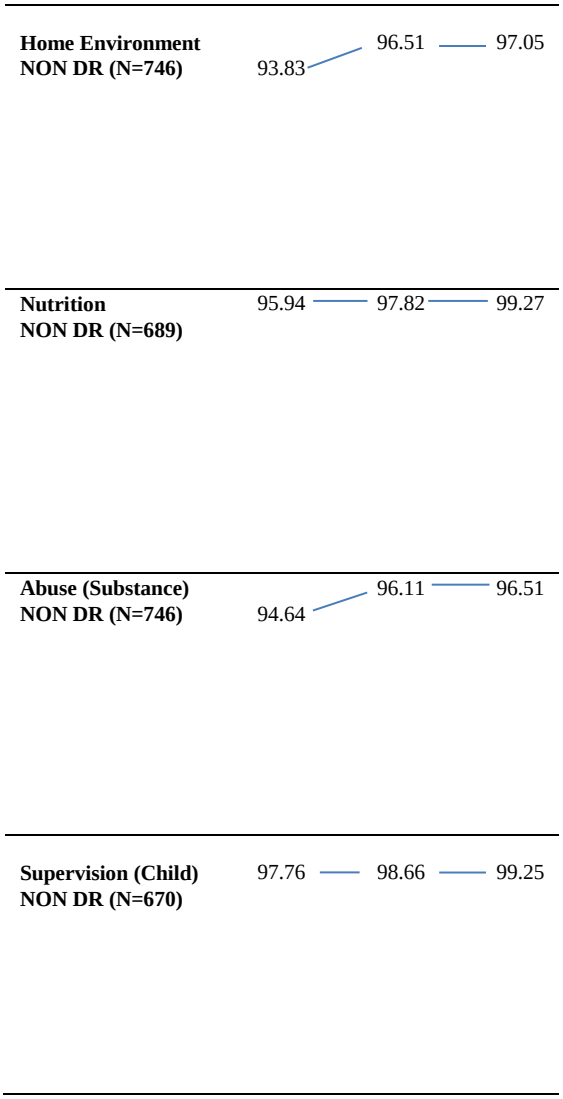


Shelter Stability
NON DR (N=746)



Shelter Stability
DR (N=282)





Change in scores over a 6-month period (3 assessments)

A) Change from first to third assessment: As table 1 above shows, there was an increase in the percentage of clients assessed as "stable" or "self sufficient" from first to third assessment in all indicators. The "Resource Knowledge" indicator presented the greatest change in the percentage of clients "stable" or "self sufficient" from first to third assessment. While only 63% of clients who had at least 3 assessments were at a "stable" or "self sufficient" status at the first assessment, 95% were at this level by the third assessment (a gain of 32 percentage points). The indicators of "Budgeting," "Support Systems," "Clothing," "Emotional Well Being," Child Care," "Employment," "Child Health Insurance," and "Family Communication" experienced gains in the percentage of clients at the "stable" or "self sufficient" of 10 percentage points or greater in the 6-

month period between the first and third assessments. The rest of the indicators experienced positive change but the relative gains were not as large.

B) Effect of baseline scores on possible change: The indicators that had the lowest percentages of clients at the "stable" or "self sufficient" levels were those of "Employment" and "Resource knowledge" (with 56% and 63% respectively). Table 1 also reveals that indicators for which the percentage of clients at the "stable" or "self sufficient" level was lower tend to have the greatest changes from first to second assessment. Conversely, indicators in which most clients started at a "stable" or "self sufficient" level (e.g. "Supervision," "Substance Abuse," Nutrition") experienced the smallest changes.

C) First trimester vs. second trimester: Perhaps the most interesting finding in table 1 is the difference between the change that occurs during first and second assessment and the change that occurs during second and third assessments. As the slopes for the lines connecting the percentages across assessments within indicators show, most of the change for families takes place between first and second assessments (in the first trimester). There is still positive change between the second and third assessments but the magnitude of these changes is relatively smaller than those taking place in the first three months of case management.

Differences in score trajectories across referral types (DR vs. non-DR)

Family resource centers provide services for cases under Differential Response (DR) referrals as well as other types of referrals. In this section we explore if clients under DR referrals (regardless of their path) experience different trends in the changes experienced between first and third assessments than non-DR referrals. Table 1 presents a table-graphic that compares changes in percentages of clients assessed as "stable" or "self sufficient" in first, second, and third assessments for each indicator and by referral type. In order to facilitate visual comparisons, non-DR cases are on the left panel and DR cases are on the right panel.

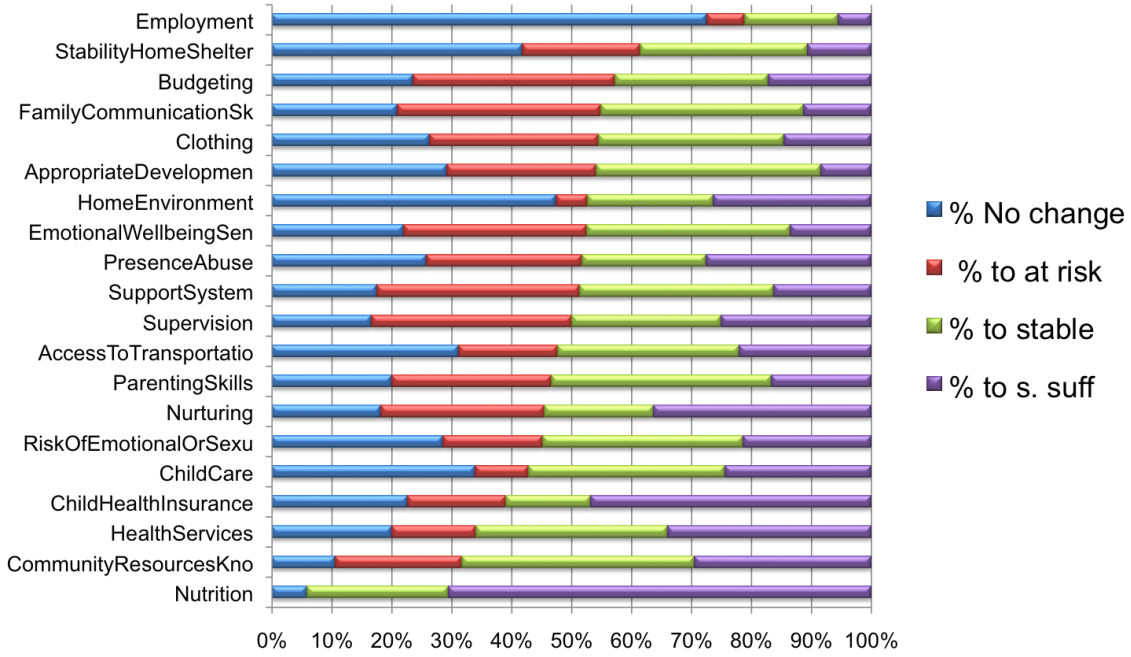
D) Overall gains over a 6-month period: The data shows that in several indicators DR cases are able to catch up to their non-DR counterparts over a 6-month period. As table 1 shows, for some indicators gains in scores for DR cases are substantial and greater than their non-DR counterparts' gains. This difference in gains causes DR clients to get close to their non-DR counterparts that started at a higher status level in some indicators. This difference in gains can be observed more prominently in the indicators of Resource Knowledge and Support Systems and to a lower degree in other indicators. It is important to note, however, that significant differences remain across referral type in the key indicators of Employment, Risk of Abuse, or Child Development, at the third assessment despite the overall gains achieved by DR clients.

E) Gains for cases with a baseline of "at risk" or "in crisis"

Table 1 shows the percentage of clients at a "stable" or "self-sufficient" level across assessments, but because many clients start at that level, this measures mask the gains

made by those who started at an “at risk” or “in crisis” level and remained the same or had positive change.

Table 2: Percentage of families with three assessments and movement to a new status level from an in-crisis status level



Growth for cases that start “in crisis:” Table 2 shows that, with the exception of employment, the majority of clients that started at an “in crisis” position are able to move to a “stable” or “self-sufficient” level by the third assessment. Further the overall gains for these clients are similar to those of clients that start at an “at risk” position (with the exception of clothing, budgeting, resource knowledge, and parenting). This suggests that, in general, clients that start “in crisis” tend to catch up to those that start “at risk” by the third assessment. For some indicators this “catching up” takes place as soon as the second assessment.

The regression hypothesis

The potential for clients to experience a regression in their scores is possible as they disclosed additional information to their case managers as a result of a more trustful relationship developed over time between client and case manager. With 3 assessments and large number of cases we explored this hypothesis by looking at the percentage of clients that experience a regression in scores going from a “stable” or “self-sufficient” status to an “in crisis” or “at risk” level between assessments. Table 3 presents these distributions by indicator and assessment.

As table 3 shows, about 4.9% of clients experienced a drop in status (going from a “stable” or “self-sufficient” status to an “in crisis” or “at risk” level) from first to second assessment. This was the largest drop across indicators and assessments. For the rest of

the indicators the drops in status are smaller with between 1 and 4 % of clients changing their status downwards. Sensible indicators where families would tend to withhold information such as risk of abuse or substance abuse, the drops in status are pretty consistent across assessments and fairly low (around 2% of cases). Interestingly, this data show that regression in scores is not that common. Further, it does not offer evidence that the regression hypothesis is true at least for the vast majority of cases.

Table 3: Percent of clients going from a "stable" or "self-sufficient" to an "in crisis" or "at risk" status

Indicator	1st to 2nd (%)	2nd to 3rd (%)	1st to 3rd (%)	N
Clothing	4.86	2.82	2.82	1028
Family Communication	4.57	3.99	4.09	1028
Budgeting	4.47	3.79	3.50	1028
Employment	3.60	4.69	4.38	639
Emotional WB	3.60	3.70	4.47	1028
Development	3.28	2.65	2.43	945
Support System	3.21	4.18	3.99	1028
Parenting	3.06	1.33	2.45	981
Health	2.63	1.36	1.95	1028
Child Insurance	2.58	1.86	2.27	970
Transportation	2.43	2.04	2.14	1028
Home Environment	2.33	0.97	1.65	1028
Shelter	2.24	3.89	3.79	1028
Abuse	2.14	2.14	2.43	1028
Resource Knowledge	2.04	2.24	1.65	1028
Abuse risk	2.00	2.56	2.45	899
Childcare	2.00	2.66	2.83	601
Nurturing	1.84	1.74	1.74	978
Supervision	0.96	0.43	0.64	936
Nutrition	0.93	0.21	0.52	965

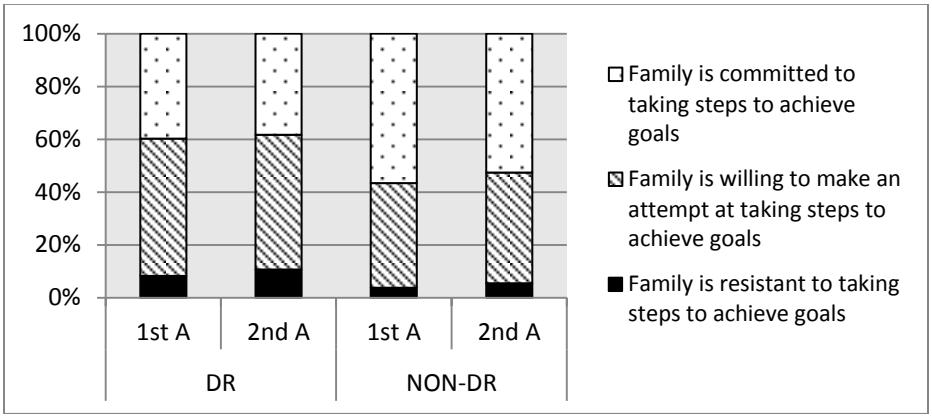
Family engagement over a 6-month period

The last evaluation report presented evidence that family engagement varied across referral types (DR vs. non-DR) while controlling initial assessments and demographic variables. In this report we are able to observe family engagement over a 6-month period and 2 assessments. Case managers are asked to evaluate family engagement in all assessments after the initial empowerment plan is completed. In this report we present data from case managers evaluating family engagement at two points in time at 3 and 6 months after the initial empowerment plan.

A) Families' level of commitment: Figures 1 through 3 show relative frequency distributions for each of the family engagement indicators by referral type (DR vs. non-

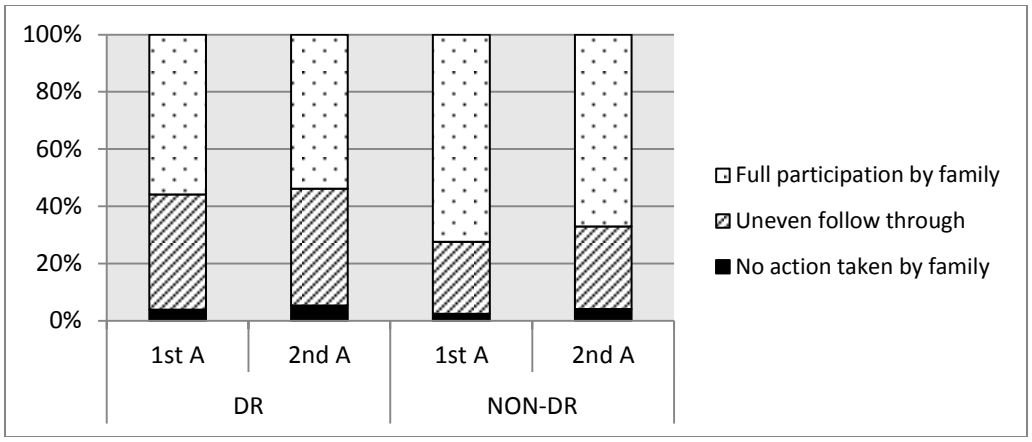
DR). As figure 1 shows, after 3 months case managers rated 40% of DR and 57% of non-DR clients as being "committed to taking steps to achieve goals." Three months later these percentages decreased slightly to 38% and 53% for DR and non-DR clients respectively. The percentages of clients rated as "resistant to taking steps to achieve goals" increased slightly by about 2 percentage points from second to third assessment as well. These findings suggest that family engagement remains fairly stable over time (6 months later). Differences in the families' "level of commitment to taking steps to achieve goals" as perceived by case managers across referrals persist over a 6 month period, and the slight changes that take place over time are similar across referral types.

Figure 1: Family engagement by assessment and referral type (commitment to achieve goals)



B) Families' level of participation: Figure 2 presents the distribution of case mangers' perceptions of families' "level of participation with the empowerment plan" by the third month case managers rated 72% of their non-DR clients and 55% of DR clients as showing "full participation" on activities set at the empowerment plan. Three months later these percentages decreased slightly to 67% and 54% for non-DR and DR clients respectively. These findings suggest similar conclusions than those of figure 1: there are minor changes in the families' level of participation and the differences across referral types remain over a period of 6 months.

Figure 2: Family engagement by assessment and referral type (Follow through on empowerment plan)



C) Families' use of strategies to overcome barriers: Figure 3 shows the distribution of case mangers' perceptions about how families approach barriers across referral types at 2 points in time. As the figure shows, three months after the first assessment, 30% of non-DR cases and 22% of DR cases were perceived as "using strategies to overcome barriers." These percentages increased by the next assessment to 36% and 27% for non-DR and DR clients respectively. The percentages of families that "did not experience any barriers" were stable over time so the change represents a slight shift from families identifying barriers to actually using strategies to overcome them over a period of 3 months.

Figure 3: Family engagement by assessment and referral type (Barriers)

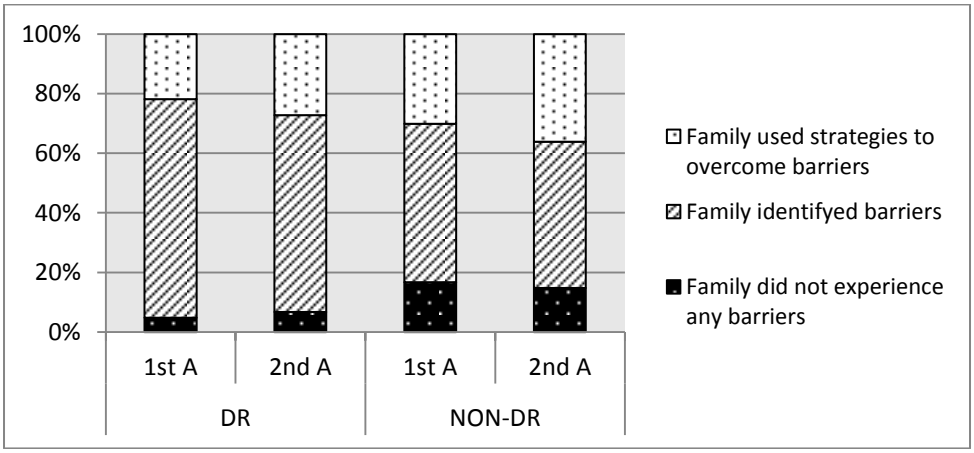


Table 4: **% of cases that started "in crisis" or "at risk" and moved up at least**

one level from first to second assessment by family's follow through on empowerment plan