2017-2018

Tracking PB&J clients and program outcomes in a live-data dashboard

May 15, 2018

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EXECUTIVE SUMMARY

An evaluation team composed of PB&J leadership and UNM Evaluation Lab staff and students targeted two goals in this evaluation. The first was to examine the organization's ability to track family stability and child safety from initial intake to most recent discharge. The second was to create an interactive dashboard in Tableau, a data visualization software, that will allow PB&J to view current information about clients in their programs.

To address the first goal, the team reviewed data extracts from the organization's Oracle data base. The team discovered that, because of decisions made before the current data management team came on board, the database was not set up to capture discharge data. Changes in the collection of this crucial data are underway, and the organization expects that all discharges will be properly recorded by the summer of 2018.

The team approached the second goal, to create an interactive dashboard, as a proof of concept project. Working with extracts of demographics, service ticket, and assessment tables from the PB&J database, the UNM team created Tableau dashboards that provide visualizations of client demographics, duration in PB&J programs, and "pre" and "post" assessments of family functioning, parenting skills and other predictors of child safety for clients at the start and end of their program participation.

The team was able to install a live version of the dashboard for client demographics and duration in PB&J programs. The team developed a protocol for readying the assessment data for Tableau and created dashboards that show the progress that clients make during their participation in PB&J programs. Both dashboards allow users to choose date ranges and specific programs. The assessments dashboard allows users to choose from 8 program outcomes:

1. Healthy attachment & Nurturing environment
2. Safe environment
3. Has social network
4. Family resilience
5. Access to concrete supports
6. Positive parenting skills
7. Understands child development
8. Healthy, resilient, and socially & emotionally competent

and 4 groups of clients:

1. All clients
2. Clients who participate for the therapeutic 120 days (~16 weeks) or more,
3. Clients who were facing challenges in a particular measure at intake, designated as "below baseline", and
4. Below baseline clients with 120 days or more at PB&J.

A common story emerged from the data: PB&J families show substantial improvement on all outcomes identified in the logic model. These changes are greater for families who first come to PB&J below baseline (defined by the assessments) and remain with PB&J for at least 120 days, compared to those who come in above baseline and stay less than that time frame.

PB&J should pay particular attention to the numbers of clients represented for each measure. These numbers provide feedback on how many clients arrive at PB&J below baseline, and how many continue to participate in programs for at least 120 days. In addition, measures that represent just a handful of clients should be interpreted cautiously and should prompt a review of whether the use of assessments that provide these measures has been adequately integrated into regular practice.

In adopting new procedures to ensure that data are routinely collected at intake and discharge, PB&J must prioritize accuracy over completeness. It is better to know that some information, such as a response in an assessment, was not provided or is unknown, than to make assumptions about what the response would have been. Staff should be trained to make a good faith effort to complete assessments, and to be supported when they record that information is not available, when that is indeed the case.

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Introduction

PB&J is a local nonprofit organization in Albuquerque whose mission is to create a community supportive of vulnerable families and children in the Albuquerque metro area. PB&J provides a wide range of services for children and their parents meant to prevent child maltreatment and promote optimal child development. For several years, the organization has worked with the Evaluation Lab to build its capacity for program evaluation. PB&J now routinely tracks family and child well-being through an array of social, emotional and developmental dimensions based on staff and client assessments.

The Evaluation Lab works in partnership with community organizations by forming teams of students, experienced researchers and evaluators, and organization staff. The members of the 2017-2018 PB&J Evaluation Team were:

- Susannah Burke, PB&J Executive Director
- Anita Harwood, PB&J Evaluation Coordinator and Program Director
- David Civetti, PB&J Data Base Administrator
- Lindsey Pittington, UNM Evaluation Lab Fellow and MS candidate in Statistics
- Melissa Binder, UNM Evaluation Lab team lead and Associate Professor of Economics

Matt Shriver of PB&J helped to get Tableau running and communicating with the database on the PB&J server. Chris Erwin, a graduate student in Economics, helped with exploring possible online connectivity with the database early in the project.

This year's evaluation had two main foci. The first focus was to track concrete measures related to family stability and child safety, including housing stability, income, participation in government support programs such as TANF (welfare), SNAP (food stamps) and Medicaid, and involvement with the criminal justice and child welfare systems. Tracking these measures would provide a useful complement to the already operating family assessments tracking. The Team found that modifications to the existing data collection system were needed to collect snapshots of family circumstances at intake and again at discharge. These modifications are already underway.

The second focus was to find a way for nontechnical PB&J staff to query the Oracle database directly for client demographics and program outcomes. Currently, the data manager creates custom reports in response to requests from the PB&J leadership team. Both the data manager and the leadership team recognized that there could be a better way for staff to retrieve the information they needed.

Last year's Evaluation Team used Tableau, a data visualization software program, to illustrate changes in outcomes for clients at intake and discharge, based on an extract of PB&J data. This year's Team sought to develop a system that pulled directly from PB&J's Oracle data base, without the intermediate step of extracting the data into Excel, and, once established, without the need for UNM assistance.

This year's Team also sought to address the gap between PB&J's experience of dramatic client improvements with the relatively modest gains that the data visualizations showed. Effect sizes, although very encouraging based on the academic literature, were not a compelling way to show program effectiveness to a layperson. The Team grappled with the question of whether there might be a better way to show client transformations.

The Team successfully implemented a pilot Tableau dashboard that provides client demographics (age, race and Hispanic origin) and weeks of services. The dashboard directly queries the Oracle database, and users can view data by time-period and specific programs of their choosing.

The Team also demonstrated proof of concept for the more complex task of visualizing program outcomes by comparing assessments of family functioning and parenting over the time a client participates in PB&J programs.

Finally, the Team developed a series of data views that contrast the modest gains experienced by all clients, compared with the more pronounced improvements for clients who participate in PB&J programs for 16 weeks or longer, and who enter the program below an acceptable baseline on measures of family functioning or parenting. These views do a better job of capturing the remarkable progress that clients make in the areas where they are most at risk.

The remainder of this report describes the Team's work in detail, and outlines recommendations and next steps for enhancing evaluation capacity at PB&J.

1. Data system review: client circumstances at intake and discharge

PB&J notes client circumstances at intake and discharge that directly bear upon three program outcomes: Keeping the family together; Providing a safe environment for the child; and Concrete supports for the family, including access to health insurance and adequate income, housing and nutrition. For example, the Client Demographics Form, completed at intake and discharge, notes the client's involvement with Child Protective Services (which bears upon keeping children with their biological parents), and participation in entitlement programs such as SNAP and WIC (which bears upon concrete supports). (See Table 1 for a summary of measures and their relationship to program outcomes. See Appendix A for a reproduction of the Client and Child Demographics Forms.)

PB&J provided de-identified data to the UNM team in several excel tables covering housing, health insurance, program participation, etc. When the UNM team reviewed the data, we found that while the intake information for many clients was complete, there were relatively few discharge records. In discussions with PB&J, we learned that the current method for data entry was to only record the information on a discharge form if it represented a change from the most recent information for a client in the database. If there is no change, the data entry staff member simply listed the date of the discharge and did not capture any other information

from the form. This is problematic because there is no way to verify that data have been checked and found unchanged.

Moreover, after a review of the benefits fields, which shows whether a client participates in a variety of government support programs including Medicaid, found that fewer than 2% of discharged clients had any change in program participation. This statistic seems improbable given PB&J's strategy to connect clients with concrete supports.

In response to these findings, PB&J developed a plan to modify the data base and data entry protocols so that all information on a discharge form would be entered, whether or not it represented a change. Under this system, PB&J will be able to verify that a change did or did not occur, by comparing the data entered at intake and discharge.

Table 1. Intake and Discharge Form Fields and Logic Model Outcomes

		Outcomes from Logic Model			
Form	Field	Family Intact	Safe Environment	Concrete Support	Desired change
Caregiver Demographic Form	Health Insurance Coverage			X	More
	Living Situation, Housing Stability			X	More
	Pursuing education			X	More
	Employed			X	More
	Program participation (food stamps, etc.)			X	More
	Income			X	More
	Arrested/detained in past 6 months	X	X		Less
	CYFD/Tribal Social Services involvement	X	X		Less
Child Demographic form	Biological Parent Involvement	X			More
	CYFD/Tribal Social Services involvement	X	X		Less
	Health Insurance Coverage			X	More

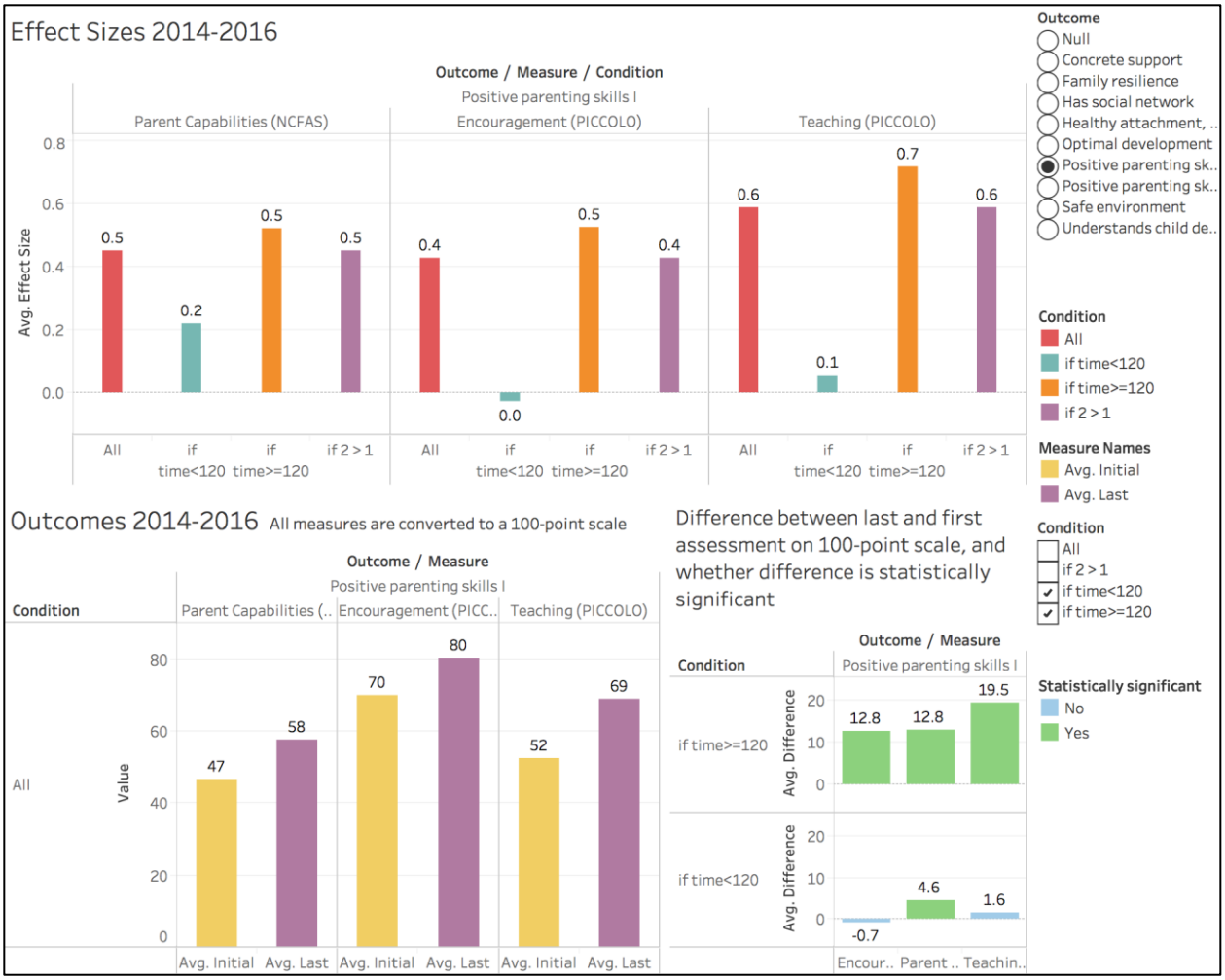
2. Demographics and outcomes dashboards

Last year's Evaluation Team produced a Tableau dashboard that showed changes in family characteristics that were captured by staff-administered and self-administered assessments over the period that clients worked with PB&J. Users could choose the outcome of interest but were restricted in the time periods available. Moreover, the summary measures shown in Tableau were the result of programming in Stata, a statistical software package used by academics, and the

only way to update the data would have been to get another extract from PB&J and run it through Stata again.

The graphics presented, although visually interesting, did not convey a clear story to a lay audience. (See Figure 1.)

Figure 1. Dashboard created for the 2016-2017 PB&J Report



This year's team sought to create a dashboard that would connect directly with the PB&J database. PB&J leadership recognized that it was frequently asking for custom reports that the Data Manager would have to program anew. For example, a grant report might require the demographics of families served by a particular program during a specific time. The dashboard would allow the leadership team to query the database for this basic information directly, without need for the Data Manager to create a custom report. Creating the "Demographics Dashboard" was relatively straightforward, as there was very little additional data processing needed.

The team also wanted to create an outcomes dashboard that would represent the PB&J experience more directly. Creating the "Outcomes Dashboard" proved to be much more complicated.

The Demographics Dashboard

Tableau can take the information it needs for the demographic dashboard directly from three tables in PB&J's data base: The Service Ticket table, the ClientID table, and the race table.

The Service Ticket table contains records of every service provided to clients. Every record includes client and family id numbers, date of service, number of minutes of service, program (South Valley core, Bernalillo home visiting, etc.), and service type (case management, group session, etc.). Tableau has a built-in function that counts unique clients. Thus, it doesn't matter that a client appears multiple times in the service ticket file, since Tableau will count him or her just once. A date filter allows a user to select the clients who received services within a chosen time-period. And a program filter allows a user to select a particular program or group of programs.

We "Joined" the Client Id table, which contains date of birth and Hispanic origin, and the race table, which has a separate record for each race the client identifies. Tableau automatically links the tables by "Client Id", which is a shared field in all the tables.

We used calculated fields in Tableau to generate the age of each client and to assign clients to age groups, and to assign one race group to each client. We also calculated the number of weeks that each family received PB&J services.

Finally, we created a dashboard that allows a user to get counts of ages, race and Hispanic origin, and length of time at PB&J for any time-period and choice of programs. (See Figures 2 and 3.)

The Outcomes Dashboard

The demographics dashboard was relatively easy to link with PB&J's database, because the data format conforms both to what Tableau likes and what PB&J wanted. Tableau likes repeated records of clients, and it is good at counting unique clients and performing simple queries, such as time between first and last record.

The outcomes dashboard was more complicated for three reasons. First, the underlying data points for assessments are responses to individual questions that need to be reverse-coded in some cases, and that almost always need to be grouped into meaningful categories. Second, Tableau needs data in "long" format, where there are multiple records for each client assessment, and one record per category. The PB&J data are in "wide" format, with one record per client assessment that includes scores for all categories. (See Figures 4a and 4b for illustrations of "wide" and "long" format data.) Although Tableau can "pivot" fields to create the "long" format, we were only able to pivot on one data source, and therefore we would not be able to show outcomes measured by more than one

assessment. Finally, we wanted the outcomes to show the change from the earliest possible assessment with the latest possible assessment, and filtering on

Figure 2. Demographics Dashboard, 2015-2017, All Programs

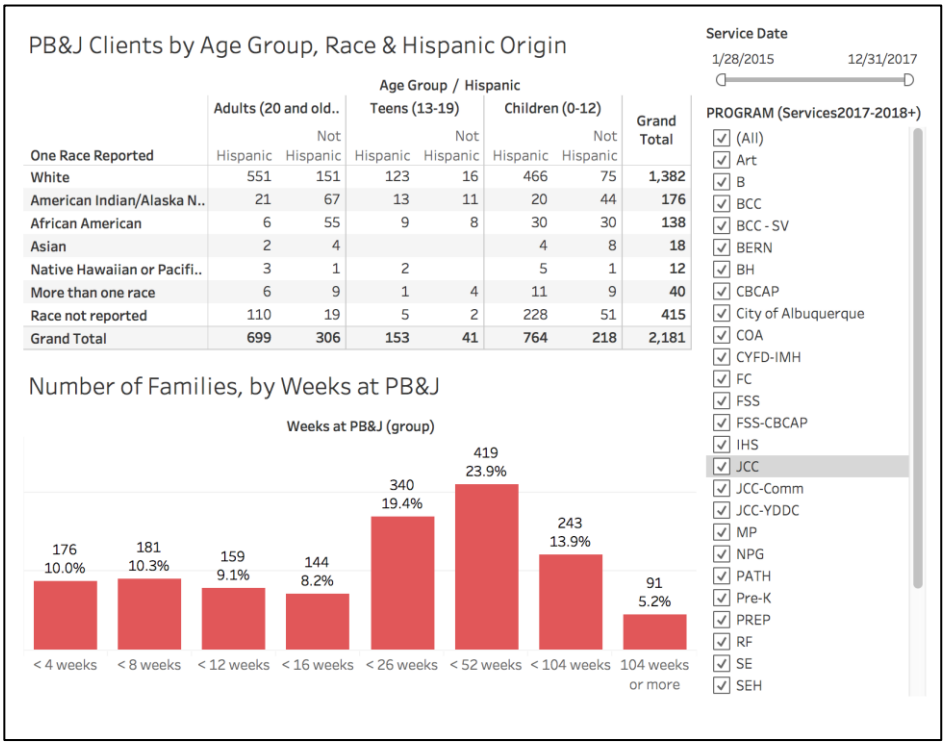
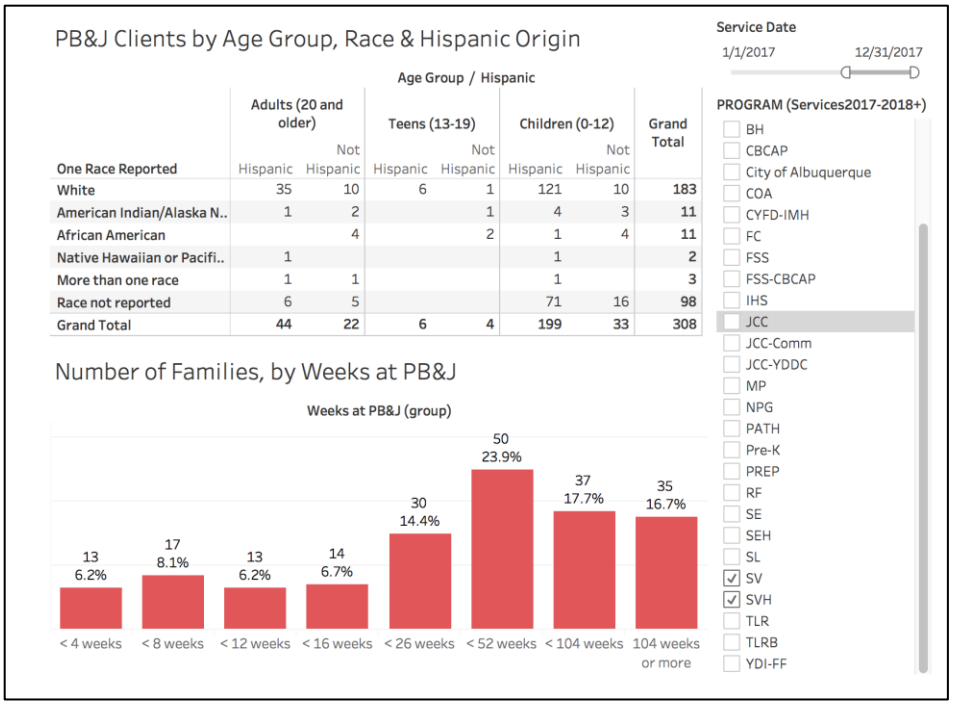


Figure 3. Demographics Dashboard, 2017, South Valley Programs



dates would result in some comparisons using intermediate assessments, which would not capture true program outcomes. The solution is to process the data into objects that Tableau can manage. We processed the data with programs in Stata and R. The PB&J data manager will need to do similar programming in Oracle. (See complete programming steps in Appendix B.)

The outcomes data come from three sources: the North Carolina Family Assessment Survey (NCFAS), the Protective Factors Survey (PFS) and the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO).

Staff members complete the NCFAS within several weeks of intake, ideally after they have established some trust with the family and again at discharge. Sometimes an intermediate NCFAS is also completed. The NCFAS consists of 50 measures, scored on a scale from +2, indicating a "Clear Strength" to -3, indicating a "Serious Problem." A zero score indicates that the family is "Baseline/Adequate."

The measures provide information in eight domains:

1. Environment
2. Parental Capabilities
3. Family Interactions
4. Family Safety
5. Child Well-Being
6. Social/Community Life
7. Self-Sufficiency
8. Family Health

As an example, the factors in the "Environment" domain are:

- Housing Stability
- Safety in Community
- Environmental Risks
- Habitability of Housing
- Personal Hygiene
- Learning Environment

(See Appendix C for the NCFAS instrument.)

The Protective Factors Survey collects a parent's self-assessment of strengths and challenges. Parents respond to 20 questions on a scale of 1 to 7, indicating either "Strongly Disagree" to "Agree," or "Never" to "Always." The 20 questions provide information about four protective factors and five "Child Development/Parenting Knowledge" areas.

The four protective factors are:

1. Family Functioning/Resiliency
2. Social Support
3. Concrete Support
4. Nurturing and Attachment

An example of a “Family Functioning/Resiliency” question is, “My family pulls together when things are stressful.”

An example of a “Child Development/Parenting Knowledge” question is “My child misbehaves just to upset me.”

(See Appendix C for the NCFAS instrument.)

Staff members in home-visiting and core programs complete the PICCOLO based on observations of how a parent interacts with his or her child, in the following four domains, by scoring behaviors as 0—for “Absent,” 1—for “Barely” demonstrated, and 2—for “Clearly” demonstrated.

1. Affection
2. Responsiveness
3. Encouragement
4. Teaching

An example of a Responsive behavior is “Parent changes pace or activity to meet child’s interests or needs.”

(See Appendix D for the PICCOLO instrument).

We followed the guidelines for each assessment to calculate area scores in Stata or R. We then converted the scores from each separate assessment to a 100-point scale. Most people are familiar with 100-point scales from school, and have a good sense of individual scores. For example, an improvement from 50 to 75, would be analogous to moving from an F to a C grade, a significant improvement. Conversion to a common scale also facilitates comparisons between measures from different assessments.

We then dropped clients with only one assessment and kept the first and last assessment for clients who had more than two assessments.

Finally, we converted the format from “wide” to “long,” and exported the data into Excel. The field names were the same for each assessment: Survey Date, Family ID, Client ID, Firstlast (indicating whether score was from a first or last assessment for a client), Assessment Name (PFS, PICCOLO or NCFAS), Domain Name (Environment, Parenting Capabilities, etc.), and, finally, the Score. (See above for an explanation of wide and long data formats, and figures 4a and 4b below for examples. See Appendix B for a complete list of the data processing steps.)

Figure 4a. Example of Data in Wide Format Illustrated with PICCOLO Data

	A	B	C	D	E	G	H	I	J
1	Surveydate	Familyid	Clientid	Firstlast	Assessment	AFFECTIONTOTAL_100	RESPONSIVETOTAL_100	TEACHINGTOTAL_100	ENCOURAGETOTAL_100
2	2/1/2011	8192	2142	First	PICCOLO	85.71428571	50	6.25	28.57142857
3	1/5/2012	9027	2456	First	PICCOLO	64.28571429	71.42857143	68.75	71.42857143
4	2/1/2012	9025	3593	First	PICCOLO	92.85714286	64.28571429	68.75	78.57142857
5	7/24/2012	8813	2364	First	PICCOLO	50	50	50	50

Figure 4b. Example of Data in Long Format Illustrated with PICCOLO Data

	A	B	C	D	E	F	G
1	Domain	Score	Surveydate	Familyid	Clientid	Firstlast	Assessment
2	AFFECTIONTOTAL_100	85.71428571	2/1/2011	8192	2142	First	PICCOLO
3	ENCOURAGETOTAL_100	28.57142857	2/1/2011	8192	2142	First	PICCOLO
4	RESPONSIVETOTAL_100	50	2/1/2011	8192	2142	First	PICCOLO
5	TEACHINGTOTAL_100	6.25	2/1/2011	8192	2142	First	PICCOLO
6	AFFECTIONTOTAL_100	64.28571429	1/5/2012	9027	2456	First	PICCOLO
7	ENCOURAGETOTAL_100	71.42857143	1/5/2012	9027	2456	First	PICCOLO
8	RESPONSIVETOTAL_100	71.42857143	1/5/2012	9027	2456	First	PICCOLO
9	TEACHINGTOTAL_100	68.75	1/5/2012	9027	2456	First	PICCOLO
10	AFFECTIONTOTAL_100	92.85714286	2/1/2012	9025	3593	First	PICCOLO
11	ENCOURAGETOTAL_100	78.57142857	2/1/2012	9025	3593	First	PICCOLO
12	RESPONSIVETOTAL_100	64.28571429	2/1/2012	9025	3593	First	PICCOLO
13	TEACHINGTOTAL_100	68.75	2/1/2012	9025	3593	First	PICCOLO
14	AFFECTIONTOTAL_100	50	7/24/2012	8813	2364	First	PICCOLO
15	ENCOURAGETOTAL_100	50	7/24/2012	8813	2364	First	PICCOLO
16	RESPONSIVETOTAL_100	50	7/24/2012	8813	2364	First	PICCOLO
17	TEACHINGTOTAL_100	50	7/24/2012	8813	2364	First	PICCOLO

In the Data Source pane of Tableau, we connected to all three assessment Excel files and combined them with a "Union" join. A Union join appends all files by adding the records of the second file at the end of the first, and the records of the third file at the end of the second. We then created the following new calculated fields:

1. **Assessment Taker** is the variable which extracts the identification number used for each assessment to uniquely identify a client which was used for conditioning when creating other variables. For PICCOLO and PFS, this number is the Client ID number but for NCFAS this is the Family ID number.
2. **First Date and Last Date within client** were created by recording the first and last assessment dates for each assessment taker for each score. This allows Tableau to filter on either the first or last date. If the user sorts on the last date, the record with the first score can be retrieved, since the last date is available on all records. The same is true for filtering on the first date. Users can then see the first and last scores for any client who had a first or last assessment during a specified period.
3. **Days Between** was calculated by subtracting the first date from the most last date and the difference for each assessment taker in each assessment was recorded in days.
4. A **Therapeutic** indicator was created to distinguish assessment takers who had a length of time 120 days or more from those with less than 120 days are not. 120 days is the minimum length of time identified by the organization for participants to experience the full benefit of their programs.
5. A **Nonmissing Score** indicator was created to identify if an assessment taker had a missing score in an assessment.
6. **Nonmissing for both First and Last** indicates if the assessment taker has complete information on the first and last assessment for a given question. This

allows us to limit visualizations to clients with nonmissing scores in both the first and last assessments.

7. **Below Baseline** flags a score if it is below a defined baseline.
   - For the NCFAS assessment, the baseline is defined on the assessment itself as an overall score of zero (on a -3 to +2 scale) for each question area. This converts to a 66 on the 100-point scale.
   - For the PFS assessment, the Lab defined a baseline at an average score of 5.5 out of 7 which converts to a 78 on the 100-point scale.
   - For the PICCOLO assessment, the Lab defined a total sum of 10.5 for the Affection, Responsiveness, and Encouragement areas as baseline and a total sum of 12 on the Teaching area as baseline. These convert to a 75 on the 100-point scale.
8. **Below Baseline in First Assessment** flags assessment takers if they had a score for a question area that was below the identified baseline in the initial assessment. Viewing changes for clients who were below baseline in a given measure at intake was a way to bring out the dramatic changes that PB&J staff observe. Clients come to PB&J with a mix of strengths and challenges. It makes sense to see how clients do over time in their areas of challenge.
9. **Outcome.** This variable was created by grouping measures according to the outcomes identified in PB&J's logic model. (See Table 2 for a list of outcomes and measures.)

After the creation of these nine variables, the UNM team constructed the dashboard.

The following figures show the four visualizations that we created to construct the preliminary dashboard for the assessment data. For illustration purposes, only the "Healthy Attachment, Nurturing Environment" outcome is shown. All outcomes are provided in Appendix E.

In the first figure, the scores for all assessment takers that have both a first and last score for the relevant measure. First and last scores are displayed side-by side for easy comparison. The figure also includes four filters which allow the user to select (1) dates for the first score, (2) dates for the last score, (3) any or all of the measures from each assessment (NCFAS, PFS and PICCOLO), and (4) the logic model outcome. (See Figure 5.)

The first and last date choices are provided to allow the user to choose clients who had their first assessment during a given period, even if the last assessment was outside of that period. This choice answers the question: what were outcomes for all clients who participated in PB&J programs in a given period? Alternatively, a user could choose a client whose last assessment fell in a given period, even if the first assessment occurred earlier. This choice answers the question: What were the outcomes for clients who were discharged during the given period?[1]

[1] Technically, these are clients who had a second assessment during the given period. The UNM team is still working to create a choice for true discharges in given periods.

Table 2. Outcomes and Corresponding Assessment Measures

Unit	Outcome	Measures
Family	Healthy attachment & Nurturing environment	PFS: Nurturing and Attachment NCFAS: Family Interactions PICCOLO: Affection, Responsiveness
Family	Safe environment	NCFAS: Environment
Family	Has social network	PFS: Social Support NCFAS: Social/Community Life
Family	Family resilience	PFS: Family Functioning & Resiliency
Family	Access to concrete supports	PFS: Concrete Support NCFAS: Self-sufficiency
Parent	Positive parenting skills	NCFAS: Parent Capabilities PICCOLO: Encouragement and Teaching
Parent	Understands child development	PFS Parenting Knowledge (5 separate questions)
Child	Healthy, resilient, and socially & emotionally competent	NCFAS: Child Well-Being

Figure 5. Healthy Attachment & Nurturing Environment for All Participants

The second figure is identical to the first except that it has been filtered to only include individuals who were at PB&J for at least the therapeutic length of time of 120 days or more. (See Figure 6.)

The third image keeps only the individuals who had scores that were below baseline on the first assessment they took. (See Figure 7.)

Finally, the fourth image displays individuals who were flagged both as being below baseline initially and remaining with PB&J for at least the therapeutic length of time of 120 days or more. (See Figure 8.)

All four of these snapshots tell us the same thing: families at PB&J experience increases in their assessment scores which map to positive changes in family functioning and child wellbeing. Figures 7 and 8 are especially impactful as they show that people with the greatest challenges at intake gain from 14 to 24 points on each measure.

Finally, Figure 9 contains the dashboard that was built for displaying and interacting with the assessment data. It contains all four of the previous figures combined in one window. All of these are filterable on the date range, the specific assessment, and the logic model outcome. (See Figure 9.)

Figure 6. Healthy Attachment & Nurturing Environment outcome for Families Who Participated for Therapeutic length of time (120 or more days)

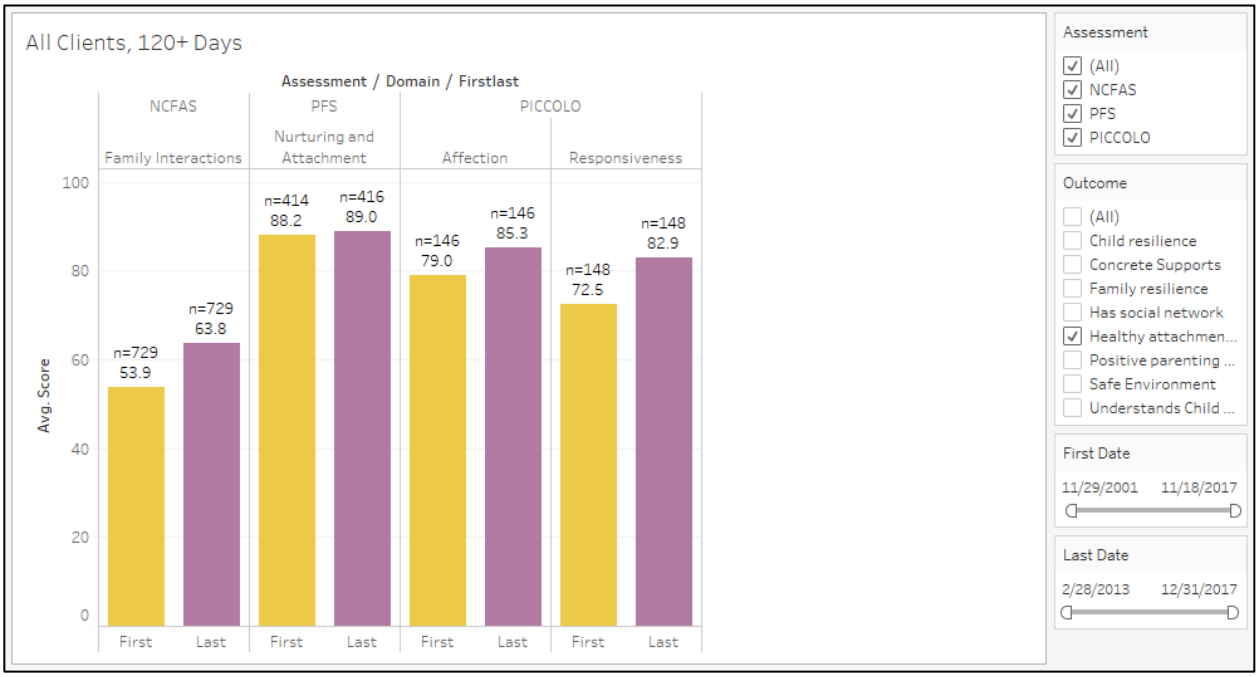


Figure 7. Healthy Attachment & Nurturing Environment for All Families with Initial Scores Below Baseline

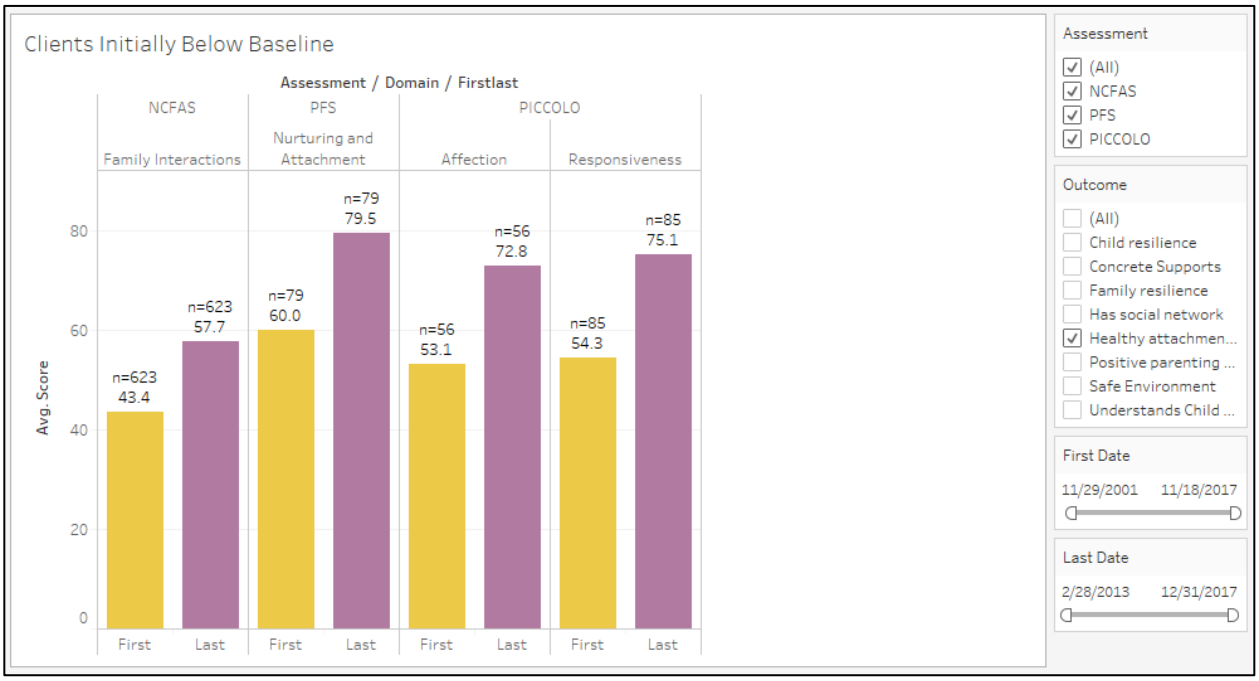


Figure 8. Healthy Attachment & Nurturing Environment Outcome for Families Who Started Below Baseline and Were at PB&J for Therapeutic Length of Time

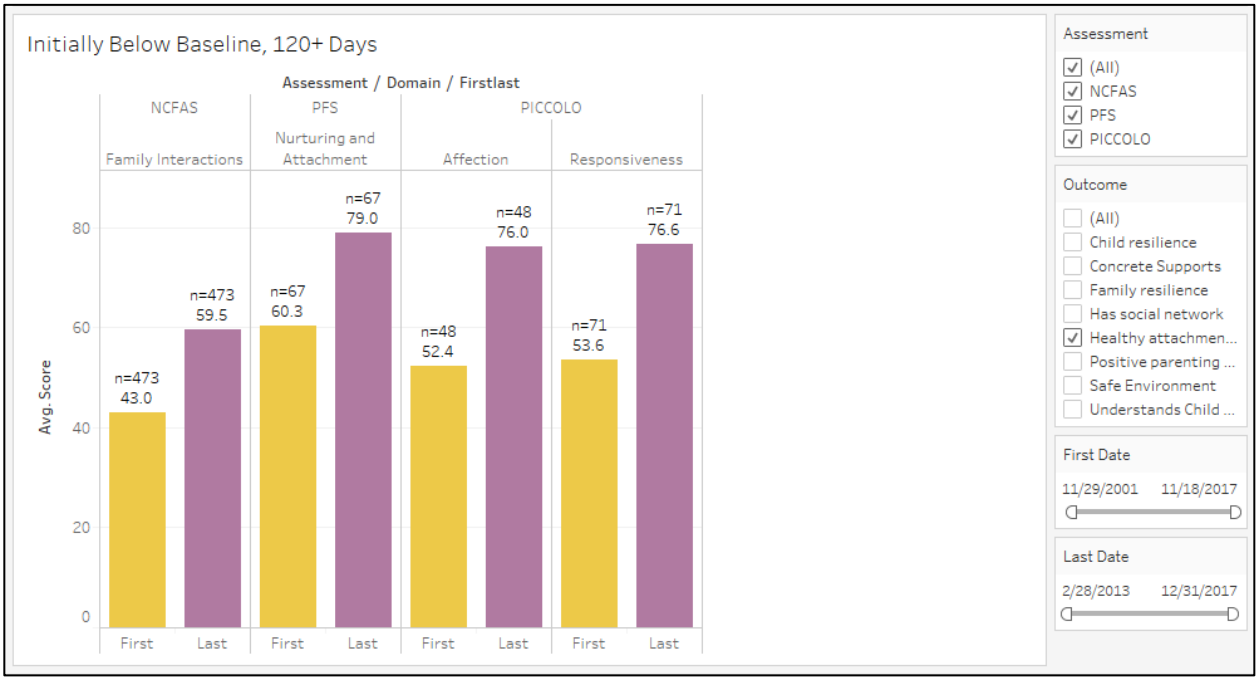


Figure 9. Preliminary Assessment Dashboard Showing Healthy Attachment and Nurturing Environment

With all four graphs displayed together, the viewer can see the number of clients who stayed at PB&J for the therapeutic 120 days or more, compared with all clients, and the number below baseline on given measures, compared with all clients. The dashboard also provides the number of clients represented in each measure. PB&J can therefore track the number who receive 120 days of

services, as a proportion of all who initiate services, and the number who are below baseline on any given measure at intake.

The numbers of clients also indicate where data collection may be inconsistent. Indicators representing less than 80% of clients should be interpreted cautiously. Note also that when subsamples are selected, the client numbers can be

3. Recommendations

The creation of demographic and outcomes dashboards provides an opportunity for PB&J to integrate data review into decision making at all levels. Our main recommendation is that the organization routinely include data reviews in staff, leadership and board meetings. When staff are regularly updated on evaluation results, they can see how their individual efforts help move both the organization and evaluation forward, and they will have an increased interest in the process. Ultimately, this should lead PB&J forward in building capacity to do internal evaluation.

The dashboard also provides key information about the number of assessments completed. This information should be reviewed regularly to assure that assessments are completed when possible.

Finally, staff training for conducting assessments, and in the case of the PFS, facilitating assessments, is crucial. The dashboard visualizations are only helpful if they are accurate. In addition, the organization needs to value accuracy over completeness. If the information is unavailable, it is much better to know that, than to ask staff members to recreate or try to recall how they would assess a family.

4. Next Steps

The immediate steps to be taken by the organization are threefold. The first is to implement the discharge form changes and new data entry procedures discussed previously.

The second is to provide time and support to the Data Manager so that he can prepare the assessment data for Tableau. This work requires programming Oracle views that select first and last assessments, and reshape the data into “long” format, as well as other processing detailed in Appendix B. Perhaps the data manager could be granted a “sabbatical” week of time free of other obligations and focus only on this project.

The third and final step is to set up the Tableau dashboard. Unfortunately, Tableau will not accept a new data source, and all the programming work we did will need to be copied and pasted into PB&J’s version of Tableau. We recommend that next year’s Evaluation Lab team create a plan to train PB&J staff on Tableau. This will enhance PB&J’s internal evaluation capacity.

Appendix A: Intake/Discharge Demographic Forms

☐ DO NOT OPEN

CAREGIVER DEMOGRAPHICS

Data No: _____

Form Type: ☐ **INTAKE** (complete all questions) ☐ **DISCHARGE** (skip Caregiver Medical Information and questions 5-9)*

Staff Name _____ **Staff ID** _____ **Date:** _____

Family File Name: _____ **Family ID** _____

Caregiver Name: _____ **Client ID:** _____

If applicable: MDC Inmate # _____ **NMCD#** _____ **Offender#:** _____

Caregiver Medical Information:
Does the caregiver have any chronic medical conditions or allergies that require ongoing treatment?

☐ Yes
☐ No

If YES, what condition(s)? _____

Medication/Aids _____ Special Care _____

Primary Care Physician _____ Phone _____

1 Caregiver Health Insurance Coverage:

☐ None
☐ Blue Cross Blue Shield - MEDICAID
☐ Blue Cross Blue Shield - Private
☐ Molina - MEDICAID
☐ Molina - Private
☐ Presbyterian - MEDICAID
☐ Presbyterian - Private
☐ United Health - MEDICAID
☐ United Health - Private
☐ Indian Health Service
☐ Medicare
☐ Other: _____

2 Caregiver Living Situation (check one):

☐ Renting
☐ Owns or Buying
☐ Staying with friends or family
☐ Transitional Living
☐ Homeless—Living in shelter
☐ Homeless—Living in motel or car or other arrangement
☐ Correctional facility:
  ☐ CNMCF
  ☐ CMU
  ☐ CMRU
  ☐ MDC
  ☐ YDDC
  ☐ Camino
  ☐ Other: _____

3 At risk of being homeless? ☐ Yes ☐ No

4 How many times did caregiver move his or her household in the last 12 months? ☐

5 Hispanic Origin of Caregiver (check one):

☐ Hispanic/Latino
☐ Not Hispanic or Latino

6 Race of Caregiver(check all that apply):

☐ American Indian or Alaska Native
  Tribal affiliation: _____
☐ Asian
☐ Black or African American
☐ Native Hawaiian or Other Pacific Islander
☐ White

7 Caregiver Language(s) Spoken at Home (check all that apply):

☐ English
☐ Spanish
☐ Navajo
☐ Keresan
☐ Other Native American
☐ American Sign Language (ASL)
☐ Other: _____

8 Primary Language (check one):

☐ English
☐ Spanish
☐ Navajo
☐ Keresan
☐ Other Native American
☐ American Sign Language (ASL)
☐ Other: _____

9 Caregiver Preferred Language at PB&J (check one):

☐ English
☐ Spanish
☐ Other: _____

**Comparisons of Intake and Discharge data from this form help us document how clients' life situations may change as a result of participating in PB&J programs. Thanks for helping us show the outcomes of the good work you do!*

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10 Caregiver Marital Status (check one):
- ☐ Married
- ☐ Committed relationship (not married)
- ☐ Divorced
- ☐ Separated
- ☐ Widowed
- ☐ Single, Never married

11 What is caregiver's highest school level completed? (check one):
- ☐ Less than high school
- ☐ GED
- ☐ High School Diploma
- ☐ Vocational/Technical School, no degree or certificate
- ☐ Vocational/Technical School Certificate
- ☐ Earned college credit at 2-year community college
- ☐ Earned college credit at four-year college
- ☐ Associate's Degree (2-year college)
- ☐ Bachelor's Degree (4-year college) or higher
- ☐ Master's/Advanced Degree

12 Is caregiver currently enrolled in school?
- ☐ No ☐ Yes

If YES, specify where:_____ and indicate type:
- ☐ Middle School (grades 6-8)
- ☐ High School (grades 9-12)
- ☐ GED Classes
- ☐ Vocational/Technical School
- ☐ 2-Year College
- ☐ 4-Year College
- ☐ Graduate Program
- ☐ Other, Specify: _____

13 Does family receive any income or services from these sources? (check all that apply):
- ☐ Wages from employer
- ☐ Income from caregiver's own business
- ☐ Child support from noncustodial parent
- ☐ Food stamps (SNAP)
- ☐ WIC (Women, Infants & Children Nutrition Program)
- ☐ HUD/Section 8 Housing
- ☐ Social Security – Disability
- ☐ Social Security – Retirement
- ☐ TANF (Temporary Assistance for Needy Families)
- ☐ Tribal Support or Tribal Payments (distinguish?)
- ☐ Unemployment insurance
- ☐ Earned Income Tax Credit (EITC) on federal taxes
- ☐ Other source of income

14 Annual family income:
- ☐ $0-$10,000
- ☐ $10,001-$20,000
- ☐ $20,001-$30,000
- ☐ $30,001-$40,000
- ☐ $40,001-$50,000
- ☐ more than $50,001

15 ☐ **WPSPIHST Flag**

16 Employment Status (check one):
- ☐ Currently working for pay (answer question 17)
- ☐ Not currently working for pay (skip to question 18)

17 Employment Information if currently working for pay

16a. Employer:_____

16b. Job Title:_____

16c. Hours worked per week: _____

16d. Would caregiver work more hours if hours were offered? ☐ Yes ☐ No

SKIP to question 20

18 Although not working now, did caregiver have any paid work in last 12 months?
- ☐ Yes ☐ No

19 Reason not currently working for pay (choose one:)
- ☐ Incarceration
- ☐ Disability
- ☐ Retirement
- ☐ Homemaker or Caring for Children or Elderly
- ☐ Full time student (in high school or 12+ credits in college)
- ☐ Part time student
- ☐ Can't find work -- has actively looked for work in last month
- ☐ Can't find work -- has not searched in last month because jobs are not available (discouraged worker)
- ☐ Has been unable to look for work because of other obligations
- ☐ Other reason not currently working

20 Was caregiver arrested or detained in the last 6 months?
- ☐ Yes ☐ No

21 Involvement with CYFD or Tribal Social Services (check one):
- ☐ No involvement
- ☐ CYFD Referred
- ☐ Involved with Protective Services
- ☐ Child in CYFD custody
- ☐ Teen caregiver involved with Juvenile Justice (answer question 22)
- ☐ Tribal Social Services Involved

22 If Teen Caregiver involved in Juvenile Justice what is status? (check one)
- ☐ In Juvenile Justice custody
- ☐ Discharged
- ☐ Informal Probation
- ☐ Supervised Probation
- ☐ Parole
- ☐ Pre-Parole Release
- ☐ Commitment
- ☐ Status Pending

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Data No: _____

PB&J

☐ DO NOT OPEN

CHILD DEMOGRAPHICS

Form Type: ☐ **INTAKE** (complete all questions) ☐ **DISCHARGE** (skip 1-5) *

Staff Name _____ **Staff ID**_____ **Date:**_____

Family File Name_____ **Family ID** _____

Child's Name_____ **Client ID**_____

Child's School District _____ (for intake only)

1 Hispanic Origin (check one)

☐	Hispanic/Latino	A child of Cuban, Mexican, Puerto Rican, Central or South American, or other Spanish culture or origin (including New Mexican Spanish colonial descendants), regardless of race.
☐	Not Hispanic or Latino	A child not of Spanish culture or origin, regardless of race.

2 Race (check all that apply)

☐	American Indian or Alaska Native	A child having origins in any of the original peoples of the Americas. (Please indicate tribal affiliation or community):_____
☐	Asian	A child having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent. This includes, for example, Cambodia, China, India, Japan, Korea, Laos, Malaysia, Pakistan, the Philippine Islands, Thailand, Tibet and Vietnam.
☐	Black or African American	A child having origins in any of the Black racial groups of Africa.
☐	Native Hawaiian/Other Pacific Islander	A child having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
☐	White	A child having origins in any of the original peoples of Europe, the Middle East, or North Africa.

3 How much did child weight at birth?

_____Pounds _____Ounces

☐Check here if birth weight not known

4 Was child full-term at birth?

☐Yes

☐No

5 Primary Language (check one):

- ☐ Pre verbal
- ☐ English
- ☐ Spanish
- ☐ Navajo
- ☐ Keresan
- ☐ Other Native American
- ☐ American Sign Language (ASL)
- ☐ Other:_____

6 Biological Parent Involvement with Child:

- ☐ Both parents involved with child
- ☐ Neither parent involved with child
- ☐ Single mom, father absent
  - ☐ Father absent due to incarceration
- ☐ Single dad, mother absent
  - ☐ Mother absent due to incarceration

7 Child Involvement with CYFD or Tribal Social Services:

- ☐ No current or past involvement
- ☐ No current involvement; involved in the past
- ☐ CYFD Referred
- ☐ Involved with Protective Services
- ☐ Child in CYFD custody
- ☐ Tribal Social Services Referred/Involved

8 Child Health Insurance Coverage:

- ☐ None
- ☐ Blue Cross Blue Shield - MEDICAID
- ☐ Blue Cross Blue Shield - Private
- ☐ Molina - MEDICAID
- ☐ Molina - Private
- ☐ Presbyterian - MEDICAID
- ☐ Presbyterian - Private
- ☐ United Health - MEDICAID
- ☐ United Health - Private
- ☐ Indian Health Service
- ☐ Other:_____

If private please provide insurance id: _____

Complete reverse side at intake only.

**Comparisons of Intake and Discharge data from this form help us document how clients' life situations may change as a result of participating in PB&J programs. Thanks for helping us show the outcomes of the good work you do!*

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Appendix B: Assessment Data Processing Guide

Preparing PB&J records for Tableau

NCFAS, PFS, PICCOLO

Step		Explanation and details
1	Calculate Domain Scores for PFS and NCFAS	NCFAS: Calculate average for each domain, leaving out the score given for "Overall." Keep all calculated domains.
		PFS: See Below. Keep 4 calculated domains and 5 parenting knowledge scores.
2	Convert Domain Scores to 100-point scales. Be sure that missing scores are left blank or designated as NA and not as zeros or other numbers.	NCFAS: add 3 to the raw score of each calculated domain (see above) so that the scale goes from {-3, -2, -1, 0, 1, 2} to {0, 1, 2, 3, 4, 5}. Divide by 5 and multiply by 100.
		PFS: subtract 1 from each score so that the scale goes from 1-7 to 0-6. Divide by 6 and multiply by 100.
		PICCOLO: for Affection, Responsiveness and Encouragement, divide by 14 and multiply by 100. For Teaching, divide by 16 and multiply by 100.
3	Ensure that all 100-point scores are between 0 and 100. If they are outside of this range, replace with 'NA' or some other indicator of missing	
4	Keep clientid (PFS & PICCOLO), familyid (NCFAS), 100-point scores, survey date	Use consistent field names: "Client ID", "Family ID", "Survey Date." The domain names should be clear descriptions of content, such as "Parental Capabilities" and "Praises Child for Good Behavior."
5	Keep assessments -36 mos. from today	This will allow a user to go back 2 years prior to a client who discharged 12 months before today. ~95% of clients discharge within 2 years. Anything longer seems too long ago.
6	Keep first and last for each client (PFS & PICCOLO) or family (NCFAS)	
7	Drop records if first and last assessment dates are the same	
8	Add a FirstLast field where FirstLast="First" if assessment is first, and FirstLast="Last" is assessment is last	
9	Add an Assessment field for each record that provides the name of the assessment ("NCFAS," "PFS, "PICCOLO")	
10	Convert the data from wide format to long format using the assessment domain names to populate the Domain column and the scores to populate the Score column.	Each record will then consist of "Client ID" (or "Family ID" for NCFAS), "Survey Date," "Firstlast," "Assessment," "Domain," and "Score."

Service Ticket Table

11	Keep records -36 months from today.	
12	Keep unique occurrences of clientid, familyid, program.	File will have one record for each program a client has accessed, with 3 fields: clientid, familyid, program

Discharge Table

13	Keep discharge records -24 months from today	This will allow user to access two years of discharges, with potential first assessments from one year prior.
14	Keep clientid and discharge date only.	

Tableau Programming

1. Open Tableau and connect to one of the assessment data files. The Lab used Excel for this, so the steps are written from that perspective. Some of the following steps may not apply because of this. For example, Tableau may be able to join Oracle views directly without requiring the Wildcard option discussed in #4 below.
2. Once a file had been chosen, a new window will open. Continue to add the remaining assessment data files in the section titled “Connections” by clicking “Add”
3. After all assessment data files are added, double-click on “New Union” under the section titled “Sheets”.
4. When the Union window opens, select “Wildcard (automatic)”.
   - There are 4 fields that can be selected or filled in. Under “Sheets” select “Include” from the drop-down list. Just right of that, fill in the name of the sheet in the workbooks connected to Tableau you wish to join. Be sure to end the name of the sheet with an asterisk (e.g. Long*). This step is why it is necessary to have the long data in sheets with the same name in all assessment files.
   - Under “Workbooks” select “Include”. It is best to leave the field to the right blank. This will allow Tableau to search all files/workbooks in the folder for sheets with the name specified in the above sub-step.
   - Once all fields are appropriately filled in and selected, click “OK”
5. After the data is unioned, hide the columns “Path” and “Sheet” as they will not be used to calculate any of the fields used in the Dashboard.
6. Create the 9 following variables by calculating them: Assessment Taker, First Date, Last Date, Days Between, Nonmissing Score, Nonmissing Score for both First and Last, Below Baseline, and Below Baseline in First Assessment.
   - **Assessment Taker** is the variable which extracts the identification number used for each assessment to uniquely identify a client which was used for conditioning when creating other variables. For PICCOLO and PFS, this number is the Client ID number but for NCFAS this is the Family ID number.
   - **First/Last Date** were created by extracting the first and most recent assessment dates for each assessment taker for each assessment.
   - **Days Between.** This is the time between First and Last Date. It was calculated by subtracting the first date from the most recent date and the difference for each assessment taker in each assessment was recorded in days.

- **Therapeutic** is an indicator created by flagging assessment takers who had a length of time 120 days or more. 120 days is the minimum length of time identified by PB&J for participants to experience the full benefit of their programs.
- **Nonmissing Score** is also an indicator which was created to identify if an assessment taker had a missing score in an assessment.
- **Nonmissing for both First and Last** indicates if the assessment taker has complete information on the first and last assessment for a given question.
- **Below Baseline** flags a score if it is below a defined baseline. The baselines are as follows.
  - For the NCFAS assessment, the baseline is defined on the assessment itself as an overall score of zero (on a -3 to +2 scale) for each question area. This converts to a 66 on the 100-point scale.
  - For the PFS assessment, the Lab defined a baseline at an average score of 5.5 out of 7 which converts to a 78 on the 100-point scale.
  - For the PICCOLO assessment, the Lab defined a total sum of 10.5 for the Affection, Responsiveness, and Encouragement areas as baseline and a total sum of 12 on the Teaching area as baseline. These convert to a 75 on the 100-point scale.
- **Below Baseline in First Assessment** flags assessment takers if they had a score for a Domain that was below the identified baseline in the initial assessment. This is motivated by PB&J's experience with the clients who make large strides in a positive direction which they did not feel was not accurately captured or reflected by the visualizations created in the past.
- **Outcome.** This variable was created using the outcomes identified in the logic model and the sorting of domains in each assessment to outcomes decided on in last year's report.

7. To create a new variable that is calculated from an existing variable, go to the "Data Source" tab and hover over a column header. A down pointing arrow will appear. Click on this arrow to view the drop-down menu. Select "Create Calculated Field…". A new window will open which allows you to type in a name for the new variable and functions for to create it. Below is the code used to create each of the 9 above variables.
   - **Assessment Taker**
     IF [Assessment]='PICCOLO' THEN [Clientid]
     ELSEIF [Assessment]='PFS' THEN [Clientid]
     ELSEIF [Assessment]='NCFAS' THEN[Familyid]
     END
   - **First Date**
     {FIXED [Assessment Taker],[Assessment]:DATE(MIN([Surveydate]))}
   - **Last Date**
     {FIXED [Assessment Taker],[Assessment]:DATE(MAX([Surveydate]))}
   - **Days Between**
     DATEDIFF('day',[First Date],[Last Date])
   - **Therapeutic**
     IF[Days Between]>=120 THEN "120 Days or More"
     ELSEIF [Days Between]<120 THEN "Less than 120 Days"
     END
   - **Nonmissing Score**
     IF ISNULL([Score])=False THEN 1

ELSEIF ISNULL([Score])= True THEN 0
END

- **Nonmissing for both First and Last**
  {FIXED [Assessment Taker],[Domain]:SUM([Nonmissing Score])}
- **Below Baseline**
  IF [Assessment]='PICCOLO' AND[Score]< 75 AND [Firstlast]="First" THEN 1
  ELSEIF [Assessment]='PICCOLO' AND [Score]>= 75 AND [Firstlast]="First" THEN 0
  ELSEIF [Assessment]='PICCOLO' AND [Score]= Null AND [Firstlast]="First" THEN Null
  ELSEIF [Assessment]='NCFAS' AND[Score]< 66 AND [Firstlast]="First" THEN 1
  ELSEIF [Assessment]='NCFAS' AND [Score]>= 66 AND [Firstlast]="First" THEN 0
  ELSEIF [Assessment]='NCFAS' AND [Score]= Null AND [Firstlast]="First" THEN Null
  ELSEIF [Assessment]='PFS' AND [Score]< 75 AND [Firstlast]="First" THEN 1
  ELSEIF [Assessment]='PFS' AND[Score]>= 75 AND [Firstlast]="First" THEN 0
  ELSEIF [Assessment]='PFS' AND[Score]= Null AND [Firstlast]="First" THEN Null
  END
- **Below Baseline in First Assessment**
  {FIXED [Assessment Taker],[Domain]:SUM([Below Baseline])}
- **Outcome**
  IF [Assessment]='NCFAS' AND [Domain]='Family Interactions' THEN 'Healthy attachment, Nurturing environment'
  ELSEIF [Assessment]='PICCOLO' AND [Domain]='Affection' THEN 'Healthy attachment, Nurturing environment'
  ELSEIF [Assessment]='PICCOLO' AND [Domain]='Responsiveness' THEN 'Healthy attachment, Nurturing environment'
  ELSEIF [Assessment]='PFS' AND [Domain]='Nurturing and Attachment' THEN 'Healthy attachment, Nurturing environment'
  ELSEIF [Assessment]='NCFAS' AND [Domain]='Family Safety' THEN 'Safe Environment'
  ELSEIF [Assessment]='NCFAS' AND [Domain]='Social/Community Life' THEN 'Has social network'
  ELSEIF [Assessment]='PFS' AND [Domain]='Social Support' THEN 'Has social network'
  ELSEIF [Assessment]='PFS' AND [Domain]='Family Functioning and Resiliency' THEN 'Family resilience'
  ELSEIF [Assessment]='NCFAS' AND [Domain]='Environment' THEN 'Concrete Supports'
  ELSEIF [Assessment]='PFS' AND [Domain]='Concrete Support' THEN 'Concrete Supports'
  ELSEIF [Assessment]='NCFAS' AND [Domain]='Self-Sufficiency' THEN 'Concrete Supports'
  ELSEIF [Assessment]='NCFAS' AND [Domain]='Parent Capabilities' THEN 'Positive parenting skills'
  ELSEIF [Assessment]='PICCOLO' AND [Domain]='Encouraging' THEN 'Positive parenting skills'
  ELSEIF [Assessment]='PICCOLO' AND [Domain]='Teaching' THEN 'Positive parenting skills'
  ELSEIF [Assessment]='PFS' AND [Domain]='Praises Child for Good Behavior' THEN 'Positive parenting skills'

```
ELSEIF [Assessment]='PFS' AND [Domain]='Knows What to Do as a Parent' THEN 'Positive parenting skills'
ELSEIF [Assessment]='PFS' AND [Domain]='Keeps Control When Disciplining Child' THEN 'Positive parenting skills'
ELSEIF [Assessment]='PFS' AND [Domain]='Knows that Child Does Not Misbehave to Provoke' THEN 'Understands Child Development'
ELSEIF [Assessment]='PFS' AND [Domain]='Knows How to Help Child Learn' THEN 'Understands Child Development'
ELSEIF [Assessment]='NCFAS' AND [Domain]='Child Well-Being' THEN 'Child resilience'
ELSEIF [Assessment]='NCFAS' AND [Domain]='Family Health' THEN 'Child resilience'
END
```

Once these variables are created, the worksheets that will make up the Dashboard can be created

Appendix C: North Carolina Family Assessment Scale (NCFAS)

NCFAS-G+R: North Carolina Family Assessment Scale for General Services & Reunification

PB&J Family Services

Adapted from National Family Preservation Network NCFAS-G+R (Adapted 3/2013)

Staff Name: _____ Staff ID# _____ Assessment Date: _____

Identified Billable Client: _____ Program: _____ Client/Family ID#: _____

NCFAS-G+R Sequence: ☐ Initial ☐ at 6 months ☐ at 12 months ☐ at Other date (description: _____) ☐ at Discharge

Each of the following factors may be important to helping families become stronger. Consider each factor in terms of the status of the family at the time of assessment. Using the definitions, rate each factor on a continuum of strength/problem by using a 6-point scale of: +2= Clear Strength; +1= Mild Strength; 0= Baseline/Adequate; -1= Mild Problem; -2= Moderate Problem; and -3= Serious Problem. Circle the appropriate number on the scale to the right of each factor. Circle "UK" if you do not have enough information to make a judgment and "NA" if a factor does not apply. The **seven scales in bold type** are overall domains. These domains should be rated with respect to **all the numbered** scales included above them.

	Clear Strength	Mild Strength	Baseline/Adequate	Mild Problem	Moderate Problem	Serious Problem	Unknown	Not Applicable
A. Environment								
1. Housing Stability	+2	+1	0	-1	-2	-3	UK	NA
2. Safety in Community	+2	+1	0	-1	-2	-3	UK	NA
3. Environmental Risks	+2	+1	0	-1	-2	-3	UK	NA
4. Habitability of Housing	+2	+1	0	-1	-2	-3	UK	NA
5. Personal Hygiene	+2	+1	0	-1	-2	-3	UK	NA
6. Learning Environment	+2	+1	0	-1	-2	-3	UK	NA
Overall Environment	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**
Comments on Environment:								
B. Parent Capabilities								
Note: This section refers to biological parent(s), if present, or current caregiver(s).								
1. Supervision of Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
2. Disciplinary Practices	+2	+1	0	-1	-2	-3	UK	NA
3. Provision of Dev./Enrichment Opportunities	+2	+1	0	-1	-2	-3	UK	NA
4. Use of Drugs/Alcohol Interferes with Parenting	+2	+1	0	-1	-2	-3	UK	NA
5. Promotes Chid(ren)'s Education	+2	+1	0	-1	-2	-3	UK	NA
6. Controls Access to Media/Reading Material	+2	+1	0	-1	-2	-3	UK	NA
7. Parent(s)/Caregiver(s)'s Literacy	+2	+1	0	-1	-2	-3	UK	NA
Overall Parental Capabilities	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**
Comments on Parental Capabilities:								

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	Clear Strength	Mild Strength	Baseline/Adequate	Mild Problem	Moderate Problem	Serious Problem	Unknown	Not Applicable
C. Family Interactions								
Note: This section refers to family members living in the same or different households.								
1. Bonding with Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
2. Communication with Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
3. Expectations of Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
4. Mutual Support Within the Family	+2	+1	0	-1	-2	-3	UK	NA
5. Relationship Between Parents/Caregivers	+2	+1	0	-1	-2	-3	UK	NA
6. Family Routines/Rituals	+2	+1	0	-1	-2	-3	UK	NA
7. Family Recreation and Play Activities	+2	+1	0	-1	-2	-3	UK	NA
Overall Family Interactions	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Family Interactions:

D. Family Safety								
Note: This section refers to family members living in the same or different households.								
1. Presence of Domestic Violence	+2	+1	0	-1	-2	-3	UK	NA
2. Presence of Other Family Conflict	+2	+1	0	-1	-2	-3	UK	NA
3. Presence of Physical Abuse of Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
4. Presence of Emotional Abuse of Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
5. Presence of Sexual Abuse of Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
6. Presence of Neglect of Child(ren)	+2	+1	0	-1	-2	-3	UK	NA
7. Presence of Access to Weapons	+2	+1	0	-1	-2	-3	UK	NA
Overall Family Safety	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Family Safety:

E. Child Well-Being								
Note: This section pertains to all the children in the family. If more than on child, children may have different issues. Rate the family, thus if any child has, for example, a behavioral problem, the family as a whole experiences that problem. In this way, all children in the family may contribute to the ratings on a single form.								
1. Child(ren)'s Behavior	+2	+1	0	-1	-2	-3	UK	NA
2. School Performance	+2	+1	0	-1	-2	-3	UK	NA
3. Child(ren)'s Rel. with Parent(s)/Caregiver	+2	+1	0	-1	-2	-3	UK	NA
4. Child(ren)'s Relationship with Sibling(s)	+2	+1	0	-1	-2	-3	UK	NA
5. Child(ren)'s Relationship with Peers	+2	+1	0	-1	-2	-3	UK	NA
6. Cooperation/Motivation to Maintain the Family	+2	+1	0	-1	-2	-3	UK	NA
Overall Child Well-Being	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Child Well-Being:

Identified Billable Client: _____ Client/Family ID#: _____ Date of NCFAS: _____

	Clear Strength	Mild Strength	Baseline/ Adequate	Mild Problem	Moderate Problem	Serious Problem	Unknown	Not Applicable
F. Social/Community Life								
1. Social Relationships	+2	+1	0	-1	-2	-3	UK	NA
2. Rel. w/Child Care, Schools, Extracurricular Serv.	+2	+1	0	-1	-2	-3	UK	NA
3. Connection to Neighborhood, Cult/Ethnic Com	+2	+1	0	-1	-2	-3	UK	NA
4. Connection to Spiritual/Religious Community	+2	+1	0	-1	-2	-3	UK	NA
5. Caregiver(s)'s Initiative/Accept available Help	+2	+1	0	-1	-2	-3	UK	NA
Overall Social/Community Life	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Social/Community Life:

G. Self-Sufficiency								
1. Caregiver Employment	+2	+1	0	-1	-2	-3	UK	NA
2. Family Income	+2	+1	0	-1	-2	-3	UK	NA
3. Financial Management	+2	+1	0	-1	-2	-3	UK	NA
4. Food and Nutrition	+2	+1	0	-1	-2	-3	UK	NA
5. Transportation	+2	+1	0	-1	-2	-3	UK	NA
Overall Self-Sufficiency	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Self-Sufficiency:

H. Family Health								
1. Parent(s)/Caregiver(s)'s Physical Health	+2	+1	0	-1	-2	-3	UK	NA
2. Parent(s)/Caregiver(s)'s Disability	+2	+1	0	-1	-2	-3	UK	NA
3. Parent(s)/Caregiver(s)'s Mental Health	+2	+1	0	-1	-2	-3	UK	NA
4. Child(ren)'s Physical Health	+2	+1	0	-1	-2	-3	UK	NA
5. Child(ren)'s Disability	+2	+1	0	-1	-2	-3	UK	NA
6. Child(ren)'s Mental Health	+2	+1	0	-1	-2	-3	UK	NA
7. Family Access to Health/Mental Health Care	+2	+1	0	-1	-2	-3	UK	NA
Overall Family Health	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Family Health:

I. Caregiver/Child Ambivalence Note: This section is for Reunification cases only.								
1. Parent/Caregiver Ambivalence Toward Child	+2	+1	0	-1	-2	-3	UK	NA
2. Child Ambivalence Towards Parent/Caregiver	+2	+1	0	-1	-2	-3	UK	NA
3. Ambivalence Exhibited by Substitute Care Prov.	+2	+1	0	-1	-2	-3	UK	NA
4. Disrupted Attachment	+2	+1	0	-1	-2	-3	UK	NA
5. Pre-Reunification Home Visitations	+2	+1	0	-1	-2	-3	UK	NA
Overall Caregiver/Child Ambivalence	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Caregiver/Child Ambivalence:

Identified Billable Client: _____ Client/Family ID#: _____ Date of NCFAS: _____

	Clear Strength	Mild Strength	Baseline/Adequate	Mild Problem	Moderate Problem	Serious Problem	Unknown	Not Applicable
J. Readiness for Reunification Note: This section is for Reunification cases only.								
1. Resolution of Significant CPS Risk Factors	+2	+1	0	-1	-2	-3	UK	NA
2. Completion of Case Service Plans	+2	+1	0	-1	-2	-3	UK	NA
3. Resolution of Legal Issues	+2	+1	0	-1	-2	-3	UK	NA
4. Parent/Caregiver Undrstnd. Child Treatment	+2	+1	0	-1	-2	-3	UK	NA
5. Established Back-Up Supports and/or Serv.	+2	+1	0	-1	-2	-3	UK	NA
Overall Readiness for Reunification	**+2**	**+1**	**0**	**-1**	**-2**	**-3**	**UK**	**NA**

Comments on Readiness for Reunification:

Additional Comments

Identified Billable Client: _____ Client/Family ID#: _____ Date of NCFAS: _____

Appendix D: The PICCOLO Instrument

Family ID: _____ Child ID: _____ Child's Name: _____ Child's DOB: _____

Staff ID: _____ Assessment Date: _____ ☐ Intake ☐ At 6 months ☐ Annual ☐ Discharge

Data No:

PICCOLO

Parenting Interactions with Children:
Checklist of Observations Linked to Outcomes

INSTRUCTIONS: Look closely to see behaviors in a quiet parent. Frequency is more important than complexity, but complexity often includes several examples:

SCORING: **0 – "Absent"** – no behavior observed
1 – "Barely" – brief, minor, or emerging behavior
2 – "Clearly" – definite, strong, or frequent behavior

Affection Warmth, physical closeness, and positive expressions toward child					
#	Parent…	Observation Guidelines	Absent	Barely	Clearly
1	**speaks in a warm tone of voice**	Parent's voice is positive in tone, and may show enthusiasm or tenderness. A parent who speaks little but very warmly should be coded highly.	0	1	2
2	**smiles at child**	Parent directs smiles toward child, but they do not need to be looking at each other when smile occurs. Includes small smiles.	0	1	2
3	**praises child**	Parent says something positive about child characteristics or about what child is doing. A "thank you" can be coded as praise.	0	1	2
4	**is physically close to child**	Parent is within easy arm's reach of child, comfortably able to soothe or help. Consider context: expect more closeness for book reading than for playing house.	0	1	2
5	**uses positive expressions with child**	Parent says positive things, or uses words like "honey," "kiddo," or an affectionate nickname. NOTE: emphasis on verbal expressions	0	1	2
6	**is engaged in interacting with child**	Parent is actively involved together *with* child, not just with activities or with another adult.	0	1	2
7	**shows emotional warmth**	Parent shows enjoyment, fondness, or other positive emotion about the child and directed to child. NOTE: includes verbal but emphasis on nonverbal.	0	1	2
			Affection total =		

Roggman, L.A., Cook, G.A., Innocenti, M.S., Jump Norman, V.K., & Christiansen, K. (2009). *PICCOLO (Parenting Interactions with Children: Checklist of Observations Linked to Outcomes).* Logan, UT: Utah State University. Permission for use expires June 30, 2012, or upon publication, whichever comes first. Author permission required for copying or dissemination.

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Family ID: _____ Child ID: _____ Child's Name: _____ Child's DOB: _____

Staff ID: _____ Assessment Date: _____ ☐ Intake ☐ At 6 months ☐ Annual ☐ Discharge

Responsiveness

Responding to child's cues, emotions, words, interests, and behaviors

#	Parent...	Observation Guidelines	Absent	Barely	Clearly
1	**pays attention to what child is doing**	Parent looks at and reacts to what child is doing by making comments, showing interest, helping, **or** otherwise attending to child's actions.	**0**	**1**	**2**
2	**changes pace or activity to meet child's interests or needs**	Parent tries a new activity or speeds up or slows down an activity in response to where child looks, what child reaches for, what child says, or emotions child shows.	**0**	**1**	**2**
3	**is flexible about child's change of activities or interests**	Parent accepts a child's choice of a new activity or toy, shows enthusiasm about child's choices, **or** allows child to play in unusual ways with or without toys.	**0**	**1**	**2**
4	**follows what child is trying to do**	Parent both responds to **and** gets involved with child's activities.	**0**	**1**	**2**
5	**responds to child's emotions**	Parent reacts to child's positive or negative feelings by showing understanding or acceptance, suggesting a solution, re-engaging the child, labeling or describing the feeling, showing a similar feeling, or providing sympathy for negative feelings.	**0**	**1**	**2**
6	**looks at child when child talks or makes sounds**	When child makes sounds, parent's eyes focus on child's face or (if eyes or child's face are not visible) parent's position and head movement face toward child	**0**	**1**	**2**
7	**replies to child's words or sounds**	Parent repeats what child says or sounds child makes, talks about what child says or could be saying, **or** answers child's questions.	**0**	**1**	**2**
			Responsiveness total =		

Roggman, L.A., Cook, G.A., Innocenti, M.S., Jump Norman, V.K., & Christiansen, K. (2009). *PICCOLO (Parenting Interactions with Children: Checklist of Observations Linked to Outcomes).* Logan, UT: Utah State University. Permission for use expires June 30, 2012, or upon publication, whichever comes first. Author permission required for copying or dissemination.

Family ID: _____ Child ID: _____ Child's Name: _____ Child's DOB: _____

Staff ID: _____ Assessment Date: _____ ☐ Intake ☐ At 6 months ☐ Annual ☐ Discharge

Encouragement

Active support of explorations, effort, skills, initiative, curiosity, creativity, and play

#	Parent...	Observation Guidelines	Absent	Barely	Clearly
1	**waits for child's response after making a suggestion**	Parent pauses after saying something the child could do **and** waits for child to answer or do something, whether child actually responds or not	0	1	2
2	**encourages child to handle toys**	Parent offers toys or says positive things when child shows obvious interest in toys. (Does not include preventing children from mouthing toys.)	0	1	2
3	**supports child in making choices**	Parent allows child to choose activity or toy **and** gets involved with activity or toy child chooses at the time.	0	1	2
4	**supports child in doing things on his/her own**	Parent shows enthusiasm for things child tries to do without help, lets child choose how things are done, **and** lets child try to do things before offering help or suggestions. Parent can be engaged in activities child does "on his/her own."	0	1	2
5	**verbally encourages child's efforts**	Parent shows verbal enthusiasm, offers positive comments, **or** makes suggestions about child's activity.	0	1	2
6	**offers suggestions to help child**	Parent gives hints **or** makes comments to make things **easier** for child, without interfering with child's play.	0	1	2
7	**shows enthusiasm about what child is doing**	Parent makes positive statements, claps hands, or shows other clear positive response to what child is *doing*, including quiet enthusiasm such as patting child, nodding, smiling, or asking child questions about activities.	0	1	2
			Encouragement total =		

Roggman, L.A., Cook, G.A., Innocenti, M.S., Jump Norman, V.K., & Christiansen, K. (2009). *PICCOLO (Parenting Interactions with Children: Checklist of Observations Linked to Outcomes)*. Logan, UT: Utah State University. Permission for use expires June 30, 2012, or upon publication, whichever comes first. Author permission required for copying or dissemination.

Family ID: _____ Child ID: _____ Child's Name: _____ Child's DOB: _____

Staff ID: _____ Assessment Date: _____ ☐ Intake ☐ At 6 months ☐ Annual ☐ Discharge

Teaching

Shared conversation and play, cognitive stimulation, explanations, and questions

#	Parent…	Observation Guidelines	Absent	Barely	Clearly
1	**explains reasons for something to child**	Parent says something that could answer a "why" question, whether child asks a question or not	0	1	2
2	**suggests activities to extend what child is doing**	Parent says something child could do to add to what child is already doing, but does not interrupt child's interests, actions, or play.	0	1	2
3	**repeats or expands child's words or sounds**	Parent says the same words or makes the same sounds the child makes **or** repeats what child says while adding something that adds to the idea.	0	1	2
4	**labels objects or actions for child**	Parent names what child is doing, playing with, or looking at.	0	1	2
5	**engages in pretend play with child**	Parent plays make believe in any way – for example, by "eating" pretend food.	0	1	2
6	**does activities in a sequence of steps**	Parent demonstrates or describes the order of steps or does an activity in a way that a definite order of steps is clear even if parent does not say exactly what the steps are. Book reading counts only if parent makes the steps explicit by exaggerating or explaining the steps of reading.	0	1	2
7	**talks to child about characteristics of objects**	Parent uses words or phrases that describe features such as color, shape, texture, movement, function, or other characteristics.	0	1	2
8	**asks child for information**	Parent asks any kind of question or says, "tell me," "show me," or other command that may require a yes/no response, short answer, or longer answer—whether or not child replies. Does not include questions to direct attention ("see?") or suggest activities ("wanna open the bag?")	0	1	2
			Teaching total =		

Roggman, L.A., Cook, G.A., Innocenti, M.S., Jump Norman, V.K., & Christiansen, K. (2009). *PICCOLO (Parenting Interactions with Children: Checklist of Observations Linked to Outcomes).* Logan, UT: Utah State University. Permission for use expires June 30, 2012, or upon publication, whichever comes first. Author permission required for copying or dissemination.

Appendix E: The Protective Factors Survey (PFS)

Data No: ____

PROTECTIVE FACTORS SURVEY

(Program Information – for staff use only, all fields required)

Staff ID: _____ **Staff Name:** _____

Client ID: # _____ **Family/Client Name:** _____

1. Date survey completed: _____ Is this a: ☐ Pre-test? ☐ Post-test?

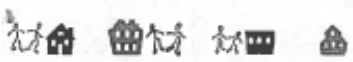
2. How was the survey completed?
   - ☐ Completed in face to face interview
   - ☐ Completed by participant with program staff available to explain items as needed
   - ☐ Completed by participant without program staff present
   - ☐ Completed by staff without participant (participant unavailable for posttest)

Part I. *Please click (or circle) on the number that describes how often the statements are true for you or your family. The numbers represent a scale from 1 to 7 where each of the numbers represents a different amount of time. The number 4 means that the statement is true about half the time.*

	Never	Rarely	Very Rarely	About Half the Time	Frequently	Very Frequently	Always
1. In my family, we talk about problems.	1	2	3	4	5	6	7
2. When we argue, my family listens to "both sides of the story".	1	2	3	4	5	6	7
3. In my family, we take time to listen to each other.	1	2	3	4	5	6	7
4. My family pulls together when things are stressful.	1	2	3	4	5	6	7
5. My family is able to solve our problems.	1	2	3	4	5	6	7

Part II. *Please click (or circle) on the number that best describes how much you agree or disagree with the statement.*

	Strongly Disagree	Mostly Disagree	Slightly Disagree	Neutral	Slightly Agree	Mostly Agree	Strongly Agree
6. I have others who will listen when I need to talk about my problems.	1	2	3	4	5	6	7
7. When I am lonely, there are several people I can talk to.	1	2	3	4	5	6	7
8. I would have no idea where to turn if my family needed food or housing.	1	2	3	4	5	6	7



This survey was developed by the FRIENDS National Resource Center for Community-Based Child Abuse Prevention in partnership with the University of Kansas Institute for Educational Research & Public Service through funding provided by the US Department of Health and Human Services.

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Data No: ____

PROTECTIVE FACTORS SURVEY

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9. I wouldn't know where to go for help if I had trouble making ends meet.	1	2	3	4	5	6	7
10. If there is a crisis, I have others I can talk to.	1	2	3	4	5	6	7
11. If I needed help finding a job, I wouldn't know where to go for help.	1	2	3	4	5	6	7

Part III. *This part of the survey asks about parenting and your relationship with your child. For this section, please focus on the child that you hope will benefit most from your participation in our services. Please write the child's age or date of birth and then answer questions with this child in mind.*

Child's Name: _____ DOB/Age: _____	Strongly disagree	Mostly Disagree	Slightly Disagree	Neutral	Slightly Agree	Mostly Agree	Strongly Agree
12. There are many times when I don't know what to do as a parent.	1	2	3	4	5	6	7
13. I know how to help my child learn.	1	2	3	4	5	6	7
14. My child misbehaves just to upset me.	1	2	3	4	5	6	7

Part IV. *Please tell us how often each of the following happens in your family.*

	Never	Very Rarely	Rarely	About Half the Time	Frequently	Very Frequently	Always
15. I praise my child when he/she behaves well.	1	2	3	4	5	6	7
16. When I discipline my child, I lose control.	1	2	3	4	5	6	7
17. I am happy being with my child.	1	2	3	4	5	6	7
18. My child and I are very close to each other.	1	2	3	4	5	6	7
19. I am able to soothe my child when he/she is upset.	1	2	3	4	5	6	7
20. I spend time with my child doing what he/she likes to do.	1	2	3	4	5	6	7

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Appendix F: Outcomes for Clients at PB&J in 2017

Figure F1. Preliminary Assessment Dashboard Showing 'Child Resilience' Outcome

Figure F2. Preliminary Assessment Dashboard Showing 'Concrete Supports' Outcome

Figure F3. Preliminary Assessment Dashboard Showing 'Family Resilience' Outcome

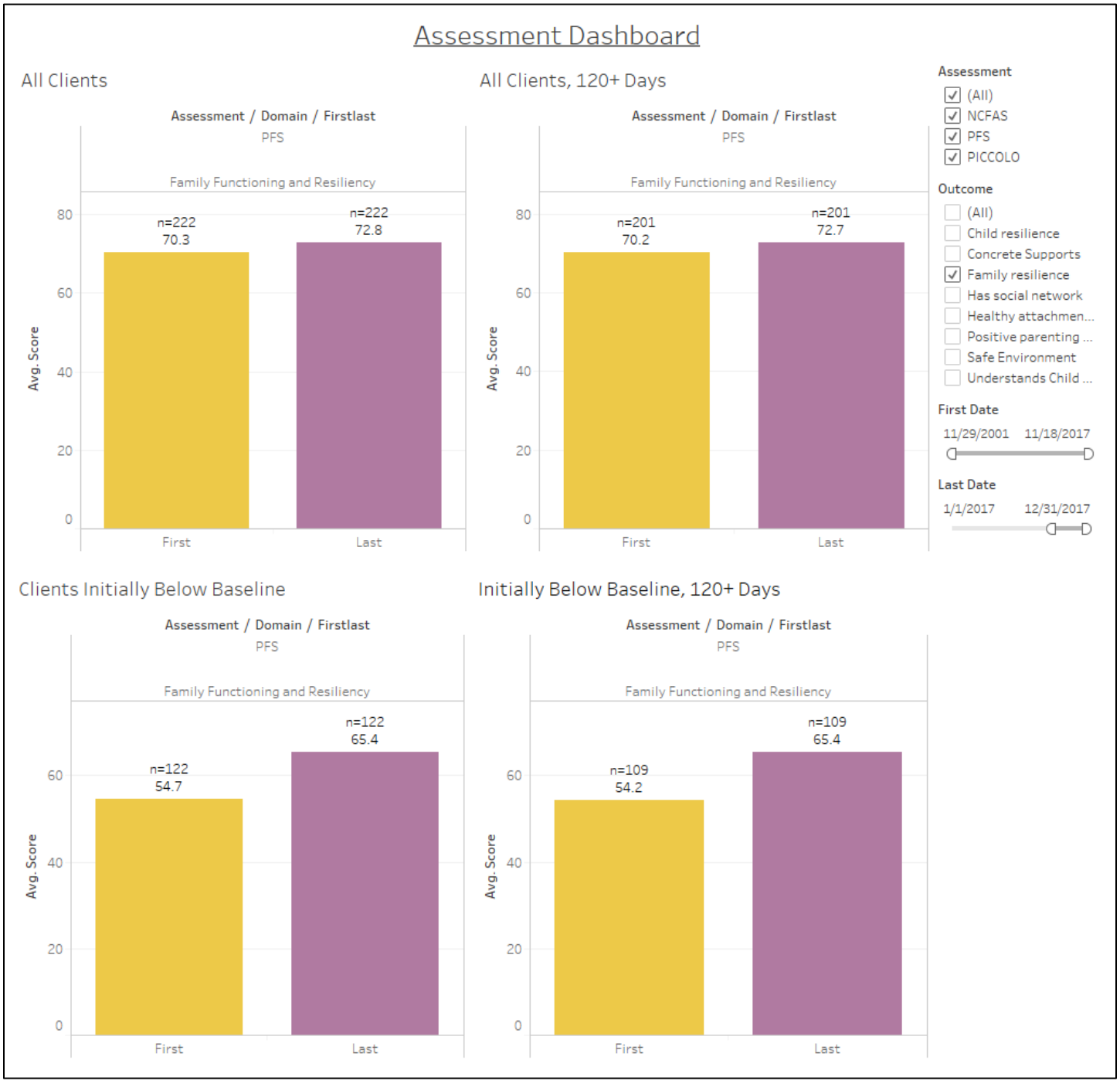

Figure F4. Preliminary Assessment Dashboard Showing 'Has Social Network' Outcome

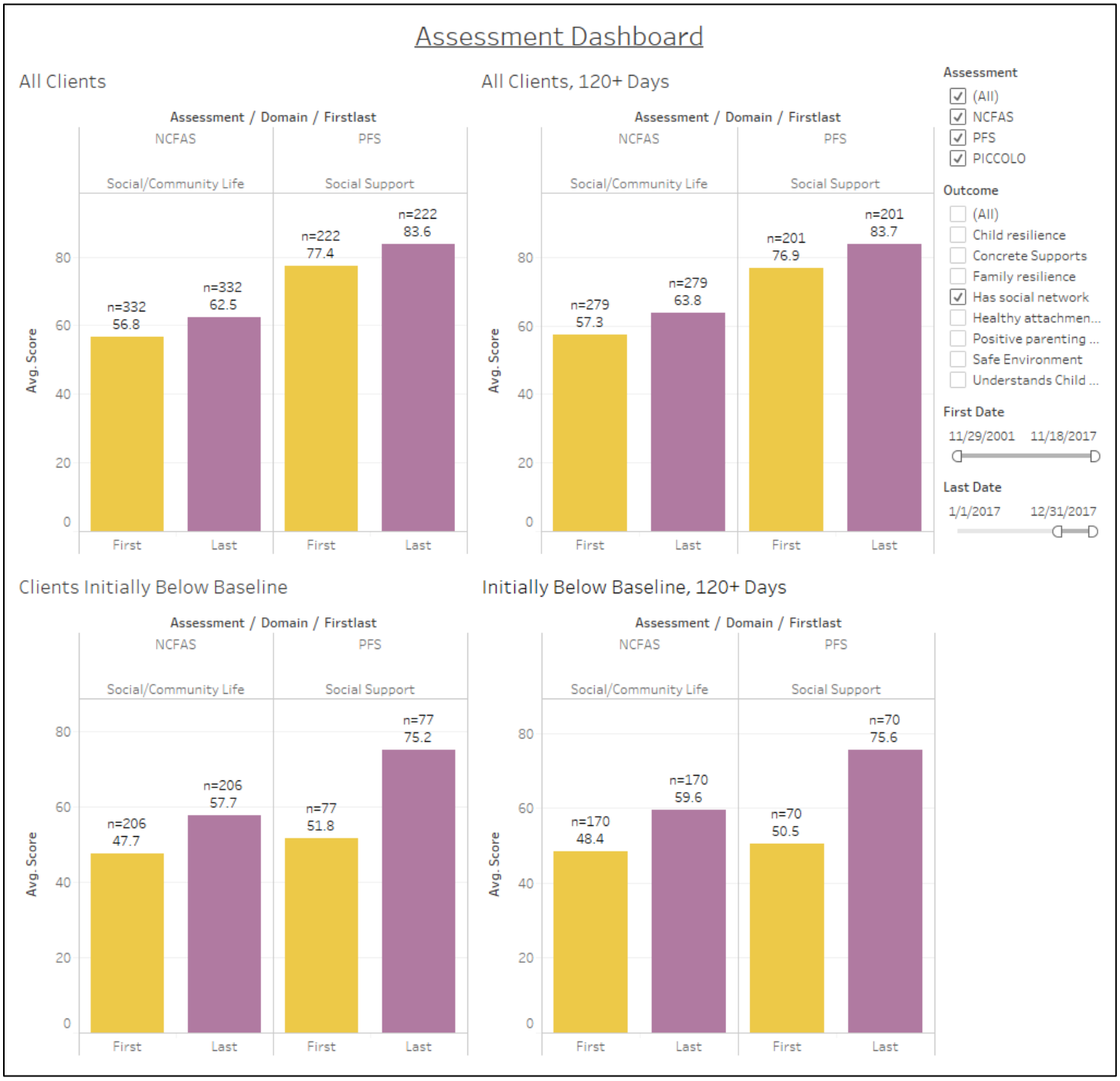

Figure F5. Preliminary Assessment Dashboard Showing 'Positive Parenting Skills' Outcome

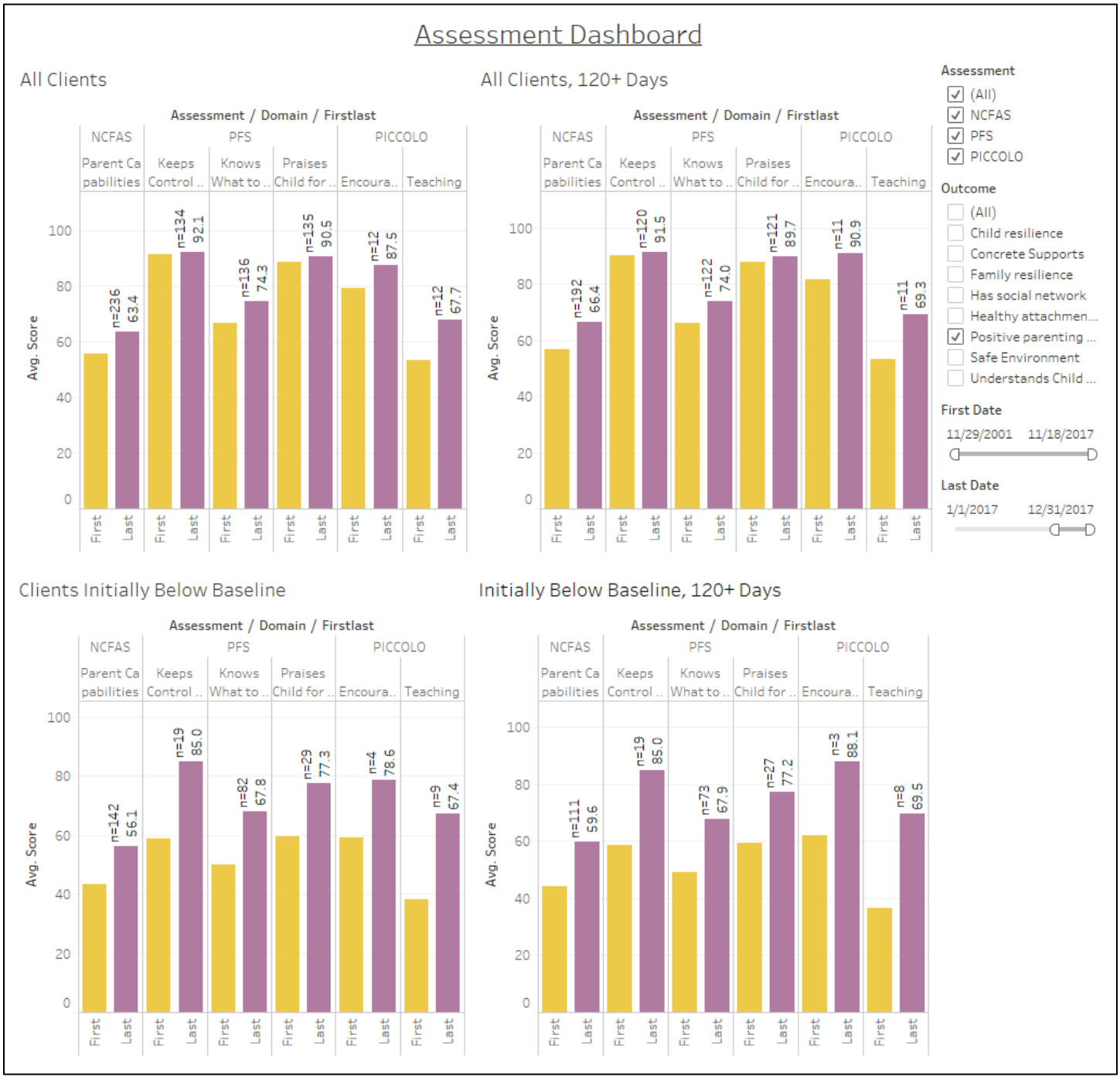

Figure F6. Preliminary Assessment Dashboard Showing 'Safe Environment' Outcome

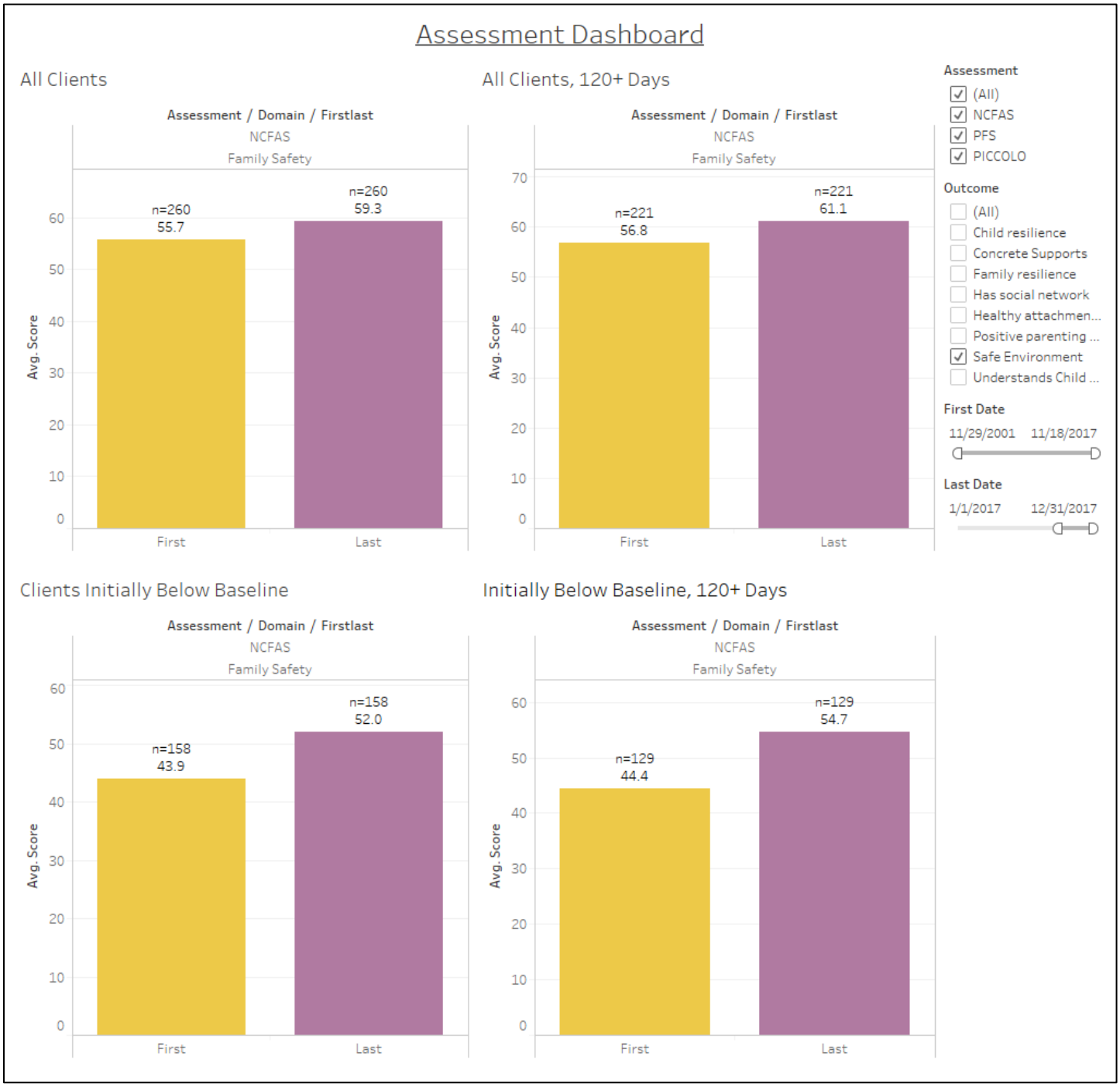
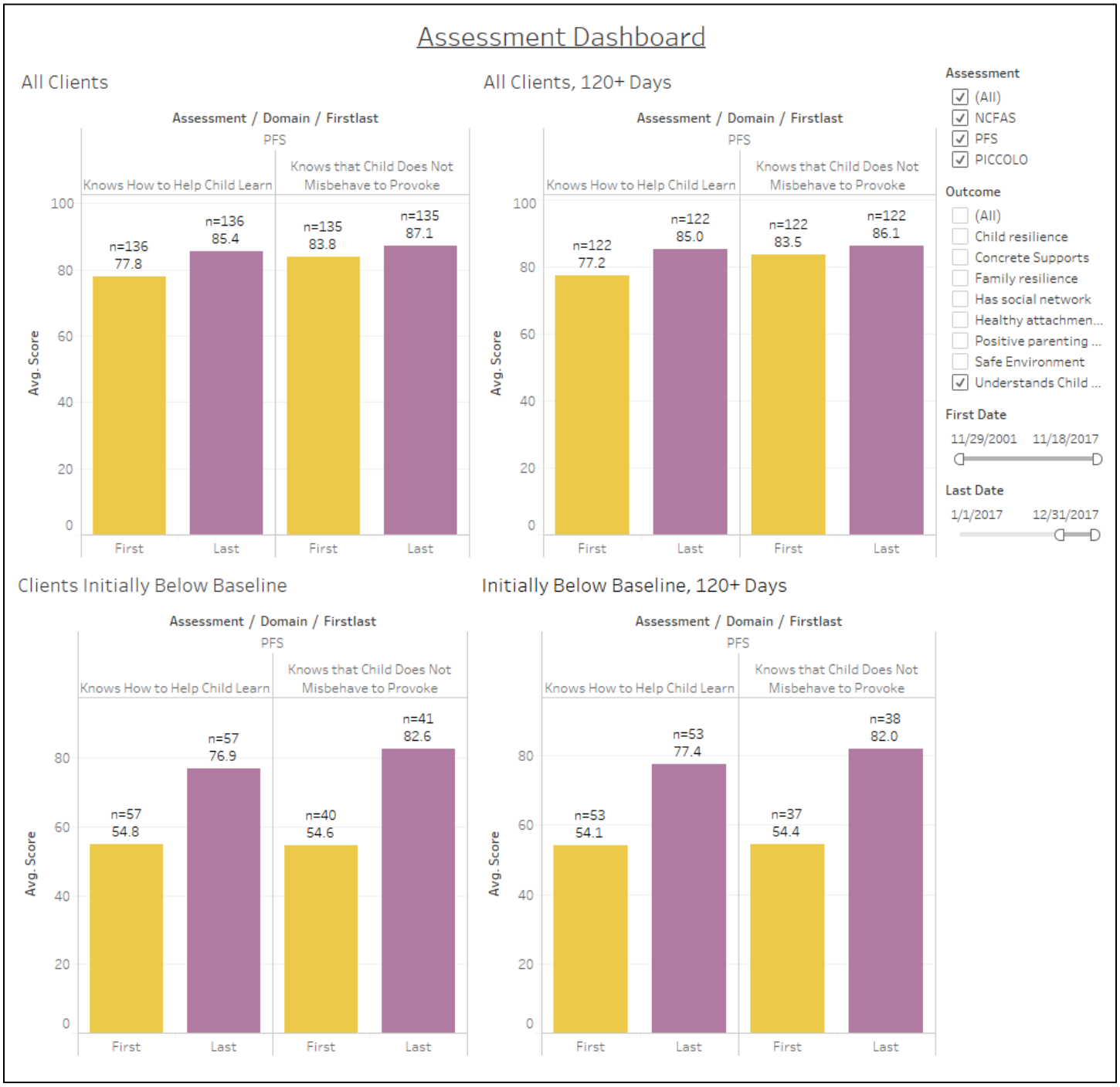
Figure F7. Preliminary Assessment Dashboard Showing 'Understands Child Development' Outcome