Acknowledgements

The PFR initiative seeks to demonstrate how a comprehensive family-centered FDC approach—grounded in effective cross-systems collaboration and evidence-based practices—improves child, parent and family outcomes, particularly in the areas of child abuse and neglect, reunification and parent-child relationships.
Rationale

- Desire to know whether what we are doing is working
- Identify opportunities for program improvement
- Inform larger Family Treatment Drug Court field as to how data can be used to inform and improve practice
Overview of Presentation

- Review program descriptive and process data
- Provide examples of how we have used data to improve practice
- Review comparative analysis of Family Integrated Treatment (FIT) and non-FIT substance use cases
- Interim results of formal outcome and costs evaluation by Colorado State University
- Discuss next steps
Overview of Jefferson County

- 4th largest County in Colorado – 580,000 residents
- Comprises western suburbs of Denver-metro area
- 3 Semi-interesting facts about Jefferson County
  - “Jefferson” is 2nd most popular County Name
  - Home to Red Rocks Amphitheatre
  - Known as “Gateway to the Rockies”
Overview of Jefferson County Family Integrated Treatment (FIT) Court

- Began October 2008
- Integrated Treatment Court
- 5 Phase Structure including Orientation
- Capacity 40 Families
- Serve In-Home and Out-of-Home Cases
- Colorado is a Medicaid Expansion State

FIT Court Mission Statement:

The Family Integrated Treatment Court is a collaborative effort that offers families the support, services, and treatment necessary to assist parents in establishing and maintaining sobriety while providing safety for their children. FIT Court strives to empower families to look beyond compliance and abstinence, encouraging them to make a commitment to a lifestyle of recovery.
FIT Court Timeline

2008
FIT Court Began: October 2008

2011
Significant Structure Changes
- Added an additional Phase - Living your Recovery Plan
- Expanded time in Phase III to be more inline with Treatment
- Changed Discharge Policy

2015
Family Centered Approach
- Added Phasing Criteria to move toward a more family center approach instead of compliance approach
- Enhanced Criteria to connect families to the community
- Incorporated reunification process into Phasing

2017
Start of PFR Grant
- Planning year for Grant: continue working toward family centered approach and a trauma informed Court Room
- More rigorous data evaluation

2018
Services for The Family
- Dedicated Public Health Nurse on the team
- Kinship Support Group established
Using Data in FIT Court: Where do we get our data

- **Trails**
  - Colorado’s State Automated Child Welfare Information System (SACWIS)
  - Child and Case Outcomes - permanency, length of stay, repeat involvement
  - Full access Statewide Trails data

- **Jeffco “CAT” System**
  - Developed internally – we can make changes at any time
  - Tracks county-specific programs
  - FIT Tracking implemented in Fall of 2009
  - Tracks all aspects of FIT Court program: Phases, Substances, Sobriety, Responses, Incentives, Treatment Episodes, Evidenced Based Practices, Weekly Status Reports, and FIT Outcome
Jeffco Children, Youth & Families
2018 by the Numbers

- **10,600** referrals
- **3,200** assessments
- **625 cases / 1,100** children open on any given day
- **500** children in placement on any given day
- **275** cases with parental substance use issue and goal of return/remain home open on any given day
- **34** active FIT court cases on any day
FIT Program by the Numbers
Substance Use Breakout for FIT Parents

Trends in Last 5 Years
- Methamphetamines has increased (25% → 34%)
- Alcohol has decreased (22% → 14%)
- Marijuana has increased (10% → 15%)
- Heroin/Opiates & Cocaine/Crack Unchanged
FIT Program Outcome Definitions

- **Successful**
  Graduation OR remain home with parent but did not graduate

- **Neutral**
  APR to other parent, court and parent agree program not good fit prior to treatment plan hearing, parent unable to participate (work, moved, jail)

- **Unsuccessful**
  TPR, APR to non-parent, court discharge post treatment plan hearing
FIT Closure Outcome Summary
Last 5 Years (2014-2018)

- Successful Fit Closure Outcome
  - High = 50% in 2015 & 2017
  - Low = 36% in 2016 & 2018

- Successful outcome by Gender
  - 47% Mothers
  - 36% Fathers
  - Mothers have roughly 33% higher likelihood of success
Examples of using Data in FIT Court
What does it take?

- **Approach - Continuous Quality Improvement principles**
- **Data – access to and knowledge of**
- **Willingness – to use data to make changes**
  - Data Informed – look at your outcomes
  - Data Driven – use data to make changes in order to improve outcomes
- **Disclaimer - data help identify the factors influencing outcomes, not the action needed to enact change**
How have we used our data: Shift in FIT Court Response Utilization

- Analyzed five years of response data (2010 through 2014)
  - Only 1 in 5 (20%) parents who had a **Phase Regression** response went on to graduate
  - Only 1 in 11 (9%) parents who had a **Jail** response went on to graduate

- Actions Taken – adjusted response utilization
  - Jail
    - 30% of all responses from 2010-2014
    - 7% of all responses from 2015-2017
    - 0.4% in 2018
  - Phase Regression – phased-out, has not been used in last 3 years
  - Replaced these responses with Treatment, Sober Support Activities, and Professional Contact

- Results
  - Retaining parents in program longer – additional 4 months on average for all participants
  - Reduced percentage of parents that discharge due to program requirements
Analyzed FIT Descriptive and Outcome Data – 2008-2011

- National data - minimum 12 months of treatment for model drug court programs
- Descriptive data – our graduates were averaging only 10 months in the program
- Outcome data - most recidivism occurred within first 3 months after case closure
- Opt-outs occurring early in the program (under 6 months)
- Parents who stayed in program longer, even if they opted out, were achieving better outcomes

Actions Taken

- Modified Phase II requirements – adding one month of treatment
- Created Phase IV – monitoring phase added 3 months to program
- Changed opt-out requirements \(\Rightarrow\) discharge must be decision by court and modification to Tx plan

Results

- Average time in program increased by 4 months
- Outcomes improved for all FIT participants, not just graduates

How have we used our data: Phase IV and Discharge Requirements
Overall Time in FIT Program (months)

Average Months in Program by Outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>2010-2013</th>
<th>2014-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharges/Opt-Outs</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Successful/Graduates</td>
<td>11</td>
<td>16</td>
</tr>
</tbody>
</table>

- **Discharges/Opt-Outs:**
  - 2010-2013: 6 months
  - 2014-2018: 10 months

- **Successful/Graduates:**
  - 2010-2013: 11 months
  - 2014-2018: 16 months
Using Data in FIT Court: Cohort Outcome Analysis

- Outcome data in isolation is difficult to interpret
- Need at least one of the following:
  - Benchmarks – target levels established by others, usually at federal or state level
  - Baselines – historical performance within FTC cases to which to compare to future performance
  - Comparison group – equivalent group of non-FTC substance use cases to which to compare outcomes
- Jeffco uses a comparison group or “cohort” to evaluate FIT Court
- Allows us to see if FIT court is producing better outcomes than “traditional” track which is the true intent of the program
- Longitudinal – determine if outcomes are improving over time
Using Data in FIT Court: FIT Cohort Criteria

“Cohort” Criteria for Non-FIT Substance Use Cases

- At least one child in home under age 13
- D&N action filed
- Substance use safety concern indicated on initial safety assessment
- Moderate to high level of risk indicated on initial risk assessment
- Received substance use treatment services
- Case must be open at least 6 months
- 95% of our existing FIT cases meet this criteria
Using Data in FIT Court: FIT Cohort Criteria and Outcomes

❖ Permanency Outcomes
  • Length of Stay in Out-of-home Care
  • Permanency outcome for children / Termination of Parental Rights

❖ Safety Outcomes
  • Subsequent founded assessment during involvement (formal eval)
  • Subsequent Child Welfare Involvement within 1 year for children closed with Parents or Relatives through APR/Guardianship
    ▪ Referral
    ▪ Assessment
    ▪ Case
    ▪ Placement
Comparing FIT and Non-FIT Outcomes
Average Months in OOH Care – Reunifications

- Overall, children reunified with parents in a FIT case spend 1 month less time in care.
- 3 month difference in Average LOS for cases opened 2008-2011.
- No difference in Average LOS to reunification for cases opened 2012-2017.
Comparing FIT and Non-FIT Outcomes Cases with resulting in Termination of Parental Rights (TPR)

- Overall, children FIT case have **20% lower** likelihood of case resulting in TPR
- **55% lower** TPR rate for cases open from 2008-2011
- **No difference** in TPR rate for cases opened 2012-2017
Children adopted in FIT cases have a **50% higher** likelihood of being adopted by relatives.
1-Year Follow-Up Outcomes
Cases Closed with Parents or APR/Guardianship

**Referral**
- 2008-2011: FIT 56%, Non-FIT 53%
- 2012-2017: FIT 42%, Non-FIT 54%
- 6% higher for FIT
- 20% lower for Non-FIT

**Assessment**
- 2008-2011: FIT 42%, Non-FIT 41%
- 2012-2017: FIT 41%, Non-FIT 41%
- 2% higher for FIT
- 40% lower for Non-FIT
1-Year Follow-Up Outcomes
Cases Closed with Parents or APR/Guardianship

<table>
<thead>
<tr>
<th>Year</th>
<th>Case</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2011</td>
<td>14.4%</td>
<td>11.3%</td>
</tr>
<tr>
<td>2012-2017</td>
<td>6.7% (50% lower)</td>
<td>11.0% (3% higher)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Case</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2011</td>
<td>15.0%</td>
<td>11.3%</td>
</tr>
<tr>
<td>2012-2017</td>
<td>13.1%</td>
<td>40% lower</td>
</tr>
</tbody>
</table>

FIT: 3% lower, 3% higher, 40% lower
Non-FIT: 50% lower, 9.4%
Summary of Cohort Outcome Results
FIT vs. Non-FIT

- Children reunified with parents in FIT cases spend just over 1 month less time in care.

- **20% lower** TPR rate in FIT cases from 2008 through 2018, however TPR rate last 5 years is roughly the same for FIT vs. non-FIT cases (22%).

- Children adopted in FIT cases are adopted by relatives at a **50% higher** rate than non-FIT cases.

- Several key program changes made after reviewing process and outcome data:
  - Implementation of Recovery Phase (Phase IV)
  - Additional time in treatment – now requires minimum of 12 months
  - Change in discharge requirements
  - Behavioral components for phase completion
  - Eliminated use of Jail and Phase Regression responses

- 1-Year follow-up outcomes for FIT cases have improved after program changes (2012-2017):
  - Subsequent Referral **20% lower** for FIT
  - Subsequent Assessment **40% lower** for FIT
  - Subsequent Case **50% lower** for FIT
  - Subsequent Placement **40% lower** for FIT
Formal Outcome & Cost Evaluation: Overview

- Partnership with Colorado State University Social Work Research Center for formal outcome and cost-offset evaluation funded by Doris Duke Charitable Foundation

- Why a formal evaluation?
  - Independent
  - Utilizes more rigorous evaluation methodologies

- Goals
  - Is what we are doing working?
  - Does FIT achieve better outcomes?
  - Does FIT cost more than traditional track when accounting for subsequent involvement?
    - Examines direct costs to Child Welfare agency – Services, Placement, Case Management
    - Impact of improved outcomes to “off-set” initial higher costs of program
Formal Evaluation: Evaluation Methodology & Key Definitions

- **Propensity score matching (PSM)**
  - Technique used to match individual FIT cases to otherwise eligible non-FIT cases
  - Helps account for unobservable differences between two groups
  - Matching variables used: caregiver and child demographics, prior child welfare involvement, substances used, risk assessment factors (DV, Homelessness, Income, Physical Abuse, Mental Health)

- **Statistical Significance**
  - Is the difference between the groups due to chance or because of the program
  - Function of the sample size and the magnitude of the difference in outcomes (effect size)

- **Odds Ratio**
  - Relative measure of effect, which allows the comparison of the intervention group relative to the comparison group.
  - How many times more likely is a favorable outcome to occur versus an unfavorable outcome
Formal Evaluation: Sample Methodology

- **Time Frame**
  - FIT: Cases opened between 1/1/2012 and 6/30/2017
    - All FIT cases that progressed beyond Orientation phase were eligible
  - Non-FIT: Cases opened between 1/1/2009 and 6/30/2017

- **Full Sample**
  - 122 FIT cases (15%)
  - 718 non-FIT cases (85%)
  - Used for the following outcomes
    - Permanency - Cases closed with children living with parents
    - Subsequent founded report of abuse or neglect
    - Costs - during involvement and within 1-year of closure
Formal Evaluation:
Sample Methodology (continued)

- **Placement Sample**
  - Cases in which children were in out-of-home placement during involvement
  - 86 FIT (70% of full FIT sample)
  - 421 non-FIT (60% of full non-FIT sample)
  - Time to achieve Reunification/Allocation of Parental Rights

- **Completer Sample**
  - Cases that did NOT result in TPR/Adoption – children living with Parents or Relatives
  - 101 FIT cases (80% of full FIT sample)
  - 577 non-FIT cases (80% of full non-FIT sample)
  - Outcome: highest level of subsequent involvement within one year
    - No Involvement ➔ Referral ➔ Assessment ➔ Case ➔ Placement
Full Sample Outcomes: 
Permanency & Subsequent Founded Abuse/Neglect

- **Permanency**
  - **13% higher** odds of a FIT Court case having children remain with parents or return home to parents are than a non-FIT Court case
  - This effect was **not statistically significant**
  - Estimated odds: 26% lower $\rightarrow$ 68% higher

- **Subsequent founded report of abuse or neglect**
  - **29% lower** odds of a FIT Court case having a subsequent founded report of abuse or neglect than a non-FIT Court case
  - This effect was **not statistically significant**
  - Estimated odds: 28% lower $\rightarrow$ 130% higher
Formal Evaluation: Cost Methodology

- Direct costs to the Division
  - Service costs (Core and AFS) – actual costs paid for each case
  - Placement costs – actual costs paid for each case
  - Adoption costs – actual costs for each case (if applicable)
  - Case management costs
    - Used actual caseload data, loaded costs that includes all support activities
    - $32 per case / day ~ $1,000 per month / case
  - Assessment costs
    - Uses real data
    - $2,500 per assessment

- Measured during involvement and 1-year post closure
Full Sample:
During Involvement & 1-Year Follow-Up Cost Results

Costs During Involvement
- FIT Court case is estimated to cost $13,225 more than a non-FIT Court case.
- Estimated cost ranges: $7,265 more → $19,185 more.
- Statistically significant difference, indicating that FIT Court has a higher upfront cost.

Follow-up Costs within 1-Year
- FIT Court case is estimated to cost $1,083 less than a non-FIT Court case.
- Estimated cost ranges: $2,201 less → $35 more.
- Trending toward statistical significance (p = 0.06).

<table>
<thead>
<tr>
<th>Type of Case</th>
<th>Cost During Involvement</th>
<th>Cost Within One Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIT</td>
<td>$48,612</td>
<td>$2,413</td>
<td>$51,025</td>
</tr>
<tr>
<td>Non-FIT ***</td>
<td>$35,387</td>
<td>$3,496</td>
<td>$38,884</td>
</tr>
<tr>
<td>DIFFERENCE</td>
<td>$13,225*</td>
<td>($1,083)**</td>
<td>$12,141</td>
</tr>
</tbody>
</table>

* Statistically significant  ** Not statistically significant, but trending *** Note: Weighted costs for the Non-FIT cases not actual costs.
Formal Evaluation Placement Sample:
Time to Reunification/APR

- Average weighted days to Reunification / APR
  - FIT: 206 days,  Non-FIT: 200 days

- No statistically significant difference was found between FIT and non-FIT cases
Formal Evaluation Completer Sample: Subsequent CW Involvement within 1-Year

- Used Completer sample ➔ cases that did not result in TPR/Adoption
- 74% higher odds of a FIT Court case not having subsequent CW involvement within 1 year
- Estimated odds range: 17% higher ➔ 163% higher
- Statistically significant difference between FIT Court and non-FIT on likelihood of subsequent child welfare involvement within 1 year
Non-FIT Court cases have a greater predicted probability of having a higher level of subsequent child welfare involvement than FIT Court cases.
Formal Evaluation:
Summary of Interim (Year 1) Findings

- FIT Court reduces the odds of being re-involved in the child welfare system based on completer sample
- FIT Court cases incurred higher service and placement costs during initial involvement than did non-FIT Court cases
- Service and placement costs for FIT Court cases were lower than non-FIT Court cases one year after initial involvement
- No difference in permanency and subsequent founded assessment outcomes between FIT Court and non-FIT Court cases for the full sample
- No difference in time to reunification/APR between FIT Court and non-FIT Court cases for the placement sample
Next Steps

- **Formal Outcome & Cost Evaluation**
  - Replicate Year 1 evaluation with an additional year of cases
  - Add 2-year follow-up outcome and cost analysis for cases included in Year 1 sample
  - Explore feasibility of obtaining additional cost measures from other systems (Respondent Attorney, Office of the Child’s Representative, County Attorney Costs)
  - Conduct a predictive analysis to identify profiles of cases most likely to be successful in FIT court and target FIT to those with highest likelihood of success

- **Applying principles used in FIT court cases to non-FIT cases**
  - Quality screening at Intake
  - Early assessment - evaluator at initial hearing (TPC)
  - Judicial officers checking in with families regularly on engagement in treatment
Questions

- Dr. Marc Winokur  
  Director, Social Work Research Center  
  Colorado State University  
  marc.winokur@colostate.edu  
  970.491.0885

- Kelli Sutton  
  Problem Solving Court Coordinator  
  1st Judicial District  
  kelli.sutton@judicial.state.co.us  
  720.772.2687

- Graig Crawford  
  Senior Data Analyst  
  Jefferson County Human Services  
  gcrawfor@Jeffco.us  
  303.271.4012