# Implementation and outcomes of wraparound in a "real world" system: Results of a randomized study

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# Previous wraparound research in Nevada

- Bruns, E.J., Rast, J., Walker, J.S., Peterson, C.R., & Bosworth, J. (2006). Spreadsheets, service providers, and the statehouse: Using data and the wraparound process to reform systems for children and families. *American Journal of Community Psychology, 38,* 201-212.

- Mears, SL, Jaffe, J & Harris N (2009). Evaluation of wraparound services for youth with serious emotional disturbances. *Research on Social Work Practice, 19,* 678-685.
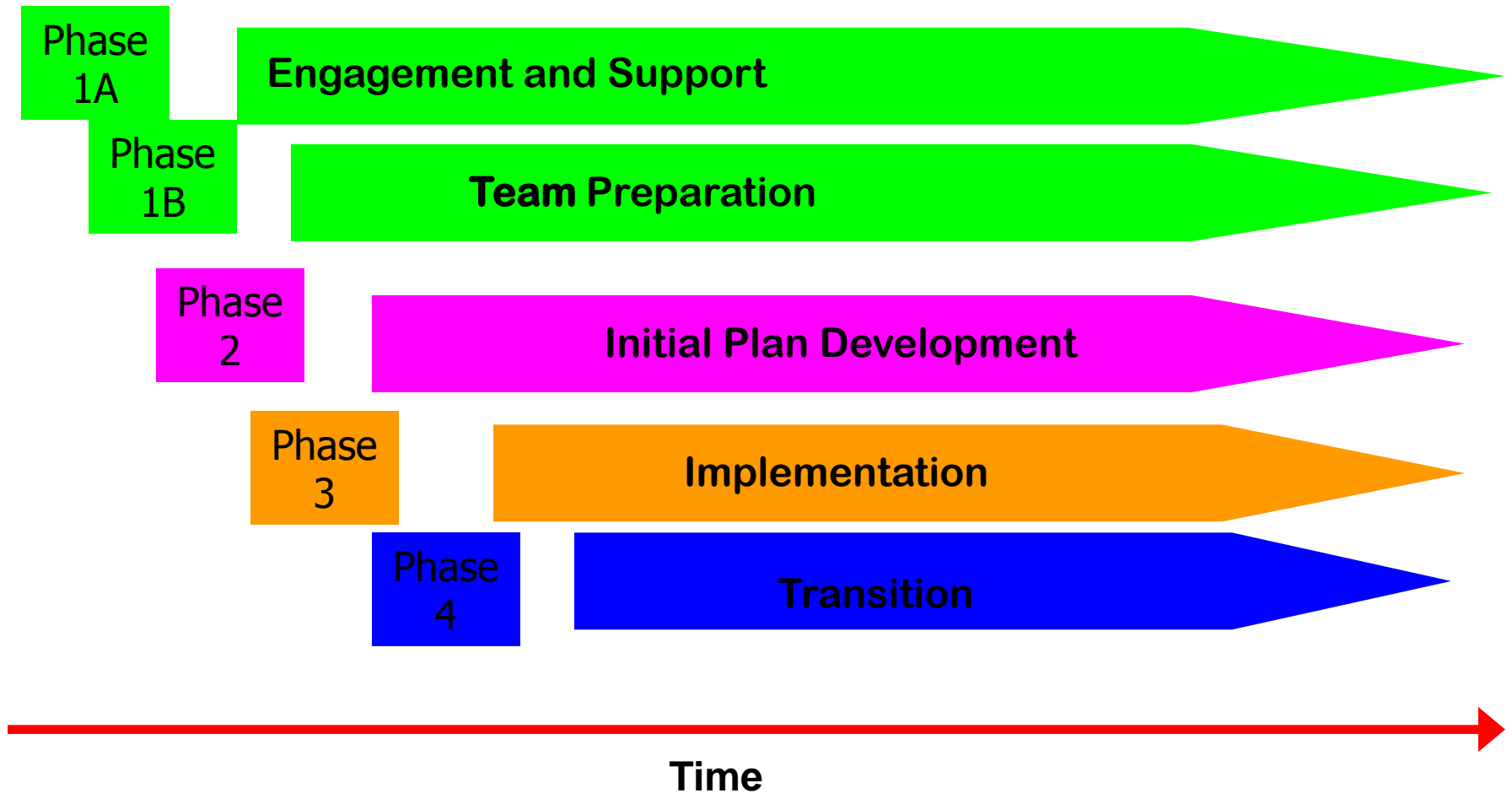
# What is Wraparound?

- Wraparound is a family-driven, team-based process for planning and implementing services and supports.

- Through the wraparound process, teams create plans that are geared toward meeting the unique and holistic needs of children and youth with complex needs and their families.

- The wraparound team members (e.g., the identified youth, his or her parents/caregivers, other family members and community members, mental health professionals, educators, and others) meet regularly to implement and monitor the plan to ensure its success.

# *A practice model:*
# **The Four Phases of Wraparound**



**Phase 1A** — Engagement and Support

**Phase 1B** — Team Preparation

**Phase 2** — Initial Plan Development

**Phase 3** — Implementation

**Phase 4** — Transition

**Time**

Walker & Bruns (2006). *Psychiatric Services.*
For more info, see www.wrapinfo.org

# Wraparound Process
## *Principles*

1. Family voice and choice
2. Team-based
3. Natural supports
4. Collaboration
5. Community-based
6. Culturally competent
7. Individualized
8. Strengths based
9. Unconditional commitment and persistence
10. Outcome-based

Walker, Bruns, Adams, Miles, Osher et al., 2004 (see www.wrapinfo.org)

# Research to Date on Wraparound

- There have been 9 controlled studies of wraparound published in peer review journals
- Results consistently indicate superior outcomes for wraparound compared to "services as usual"*
  - Moderate (ES = .50) effects for living situation outcomes
  - Small – medium (ES = .25 - .40) effects for behavioral, functional, and community outcomes
  - These ESs are similar to studies of evidence based therapies and interventions (e.g., MST) as implemented in real world conditions against alternative treatment conditions

*Suter, J.C. & Bruns, E.J. (2009). Effectiveness of the Wraparound Process for Children with Emotional and Behavioral Disorders: A Meta-Analysis. *Clinical Child and Family Psychology Review, 12,* 336-351

# What does this study contribute?

- Assesses effects of wraparound compared to an intensive, alternative treatment
  - Intensive case management provided by Mojave Mental Health
- Assesses effects of wraparound that has "gone to scale"
  - Most existing wraparound research examines outcomes of small pilot projects
- More extensive array of fidelity, service and outcomes data
  - Assessing differences in fidelity, service processes, and services received for both groups
- Contributes another study of wraparound, to help us understand its impacts in different contexts
  - The current population is youth with SED within a "real world" system, majority of youth involved in child welfare

# Major Research Questions

- What are differences in treatment processes for youth randomly assigned to wraparound (WA) vs. ICM?
  - Services (type and how delivered) received
  - Participants in the treatment process (e.g., team members)
  - Wraparound fidelity (Can the WFI-4 distinguish WA from ICM?)
- What is the overall context for service delivery?
  - System supports for wraparound
  - Organizational and social context for both WA and ICM service delivery
- What are the differences in outcomes for youth assigned to the two models?
  - Process outcomes (working alliance, satisfaction)
  - Ultimate outcomes (residential placements, behavior, functioning)

# Participants

- Enrollment Goals:
  - 150 children and youth (age 6-17) with SED that require intensive intervention
  - Fee for service Medicaid eligible
  - N=75 assigned to Wraparound condition as delivered by Nevada Department of Child and Family Services
  - N=75 assigned to ICM

# Participants

- N=126 referred to study
  - Randomized at referral (WA = 65; ICM = 61)
- N=95 consented and enrolled
- Final group sample sizes
  - WA = 51; ICM = 44

# Treatment Conditions

| Function | Intensive Case Management (ICM) | Wraparound Service Model (WSM) |
|---|---|---|
| Assessment | ●Case management completes intake and refers to provider for evaluations<br>●Case management identifies service needs and plans developed by service providers | ●WSM Facilitator establishes initial engagement with youth and family through detailed engagement process<br>●WSM Facilitator completes a strengths, needs, and culture discovery that provides extensive information on youth and family culture, strengths and needs and integrates assessment information into a single document<br>●WSM engages national supports in process<br>●WSM identifies youth <u>and</u> family needs before considering services |
| Service Plan Development | ●Plan is developed by each service provider<br>●Plans are brought together by case manager<br>●Document is primarily authorization for services | ●A team of 4 to 10 people most important to the is formed and develops an integrated plan<br>●Plan is continually updated to support achieving family vision |
| Referral and Linkage | ●Case manager brokers needed services<br>●**Case manager is also a licensed therapist and may provide therapy to the youth her/himself**<br>●Service providers carry out individual plans | ●WSM Facilitator works with family and other (non team) providers to understand and follow-through on plan<br>●WSM Facilitator supports team members to implement plan |
| Service Coordination | ●Case manager collects documentation from various providers<br>●Case manager develops progress notes<br>●Providers may occasionally meet to discuss case (family may or may not be present) | ●Team develops and monitors plan on ongoing basis<br>●WSM Facilitator follows implementation and progress for each action step<br>●Team meets to refine plan at least monthly |
| Monitoring & Evaluation | ●Service providers track progress, notify case manager<br>●Case manager compiles progress notes and monitors compliance on paperwork | ●Each WSM Plan objective has measurement strategy<br>●Team reviews data on all objectives every month<br>●Team modifies plan based on success in achieving outcomes |

# What is different in wraparound?

- Defined engagement phase with documentation of youth/family strengths, needs, and culture
- Interdisciplinary team that meets frequently
- Natural supports and informal, community supports emphasized
- A plan that is developed by the team, integrated across helpers, and updated frequently
- Intensiveness of effort by facilitator and team to monitor progress and follow through on efforts of team members

# Study Methods

- Caregivers interviewed at Baseline, 6, and 12 months
- Youth (11 and older) interviewed at Baseline, 6, and 12 months
- Wraparound facilitators and Case Managers interviewed at 6 months
- Wraparound system stakeholders completed online survey in late 2007
- Random samples of wraparound teams observed in 2007, 2008, and 2009-2010
- Child welfare, juvenile justice, and education administrative data currently being compiled for study youths
- Medicaid cost data to be compiled and analyzed at end of study

# Measures: Caregivers

- Child Status report
  - Includes information on residential placements
  - Placements were quantified into 4 levels of restrictiveness (Rautkis et al., 2009)
- Strengths and Difficulties Questionnaire (SDQ)
- Child and Adolescent Functional Assessment Scale (CAFAS)
- Working Alliance Inventory – Client (WAIC), adapted
- Family Empowerment Scale (FES)
- Services Assessment for Children and Adolescents (SACA)
- Family Satisfaction Questionnaire (FSQ)
- Wraparound Fidelity Index, v.4 (WFI), CG form

# Measures: Youth

- Youth Satisfaction Questionnaire (YSQ)
- Wraparound Fidelity Index, v.4 (WFI), Youth form

# Measures: Providers

- Working Alliance Inventory – Therapist (WAIT) adapted

- Case Management Function Form (CMFF)

- Wraparound Fidelity Index, v.4 (WFI), Facilitator form

- Organizational Social Context measure (OSC; Glisson & Hemmelgarn)

# Other measures

- Team Observation Measure (administered three times to random samples of N=17, N-12, and N-12 WA teams)

- Community Supports for Wraparound Inventory (CSWI)

  – Assesses system support for wraparound implementation via online survey of wraparound stakeholders

# Results: Overview

1. Did randomization work?
2. What is the profile of missingness and study attrition?
3. What was the nature of services received by the two groups?
4. What was the context for service delivery for both groups?
   - Climate and culture of the provider environments (WA and ICM)
   - System support for wraparound
5. What were the process outcomes for the two groups?
   - Satisfaction, Working alliance, Family empowerment
6. What are preliminary residential, behavioral, and functioning outcomes for the two groups?

# Results, part 1:
# Did randomization work?

- Characteristics of study youth at baseline, by group:
  - Demographics: Age, Race, Ethnicity
  - Profiles of risk factors
  - Current and previous living environments
  - Baseline scores on standardized measures

# Referral to Study

| | Total | Wrap | ICM |
|---|---|---|---|
| Referral to Services | N=93 | N=50 | N=43 |
| Child Welfare | 61 (65%) | 32 (66%) | 31 (75%) |
| Self | 19 (20%) | 10 (20%) | 9 (22%) |
| School | 3 (3%) | 2 (4%) | 1 (2%) |
| MH agency/provider | 5 (5%) | 5 (8%) | 1 (2%) |
| Health clinic/provider | 1 (1%) | 1 (2%) | 0 |
| Other | 4 (4%) | 0 | 0 |
| Assignment to services (active cases) | 95 | 51 | 44 |

# Demographics at Baseline

|  | Total | Wrap | ICM |
|---|---|---|---|
| Male | 54 (57%) | 29 (57%) | 25 (58%) |
| Age (3-17) | 11.87 | 12.19 | 11.5 |
| Race (N=85) |  |  |  |
| White | 35 (37%) | 17 (33%) | 19 (49%) |
| African American | 37 (44%) | 22 (43%) | 18 (47%) |
| Native American | 1 (1%) | 1 (2%) | 0 |
| Mixed Race | 11 (13%) | 10 (20%) | 1 (3%) |
| Other Race | 2 (2%) | 1 (2%) | 1 (3%) |
| Ethnicity |  |  |  |
| Hispanic | 15 (16%) | 7 (13%) | 8 (19%) |
| **DFS Custody** | 63 (66%) | 32 (63%) | 31 (70%) |

# Risk factors at Baseline

| | Total | Wrap | ICM |
|---|---|---|---|
| Has the child had previous psychiatric hospitalization? | 24 (26%) | 14 (28%) | 10 (23%) |
| Has the child ever been sexually abused? | 18 (19%) | 8 (17%) | 11 (26%) |
| Has the child ever been physically abused? | 40 (42%) | 23 (45%) | 17 (40%) |
| Has the child attempted suicide? | 6 (6.3%) | 4 (8%) | 2 (5%) |
| History of substance abuse? | 14 (15%) | 7 (14%) | 7 (16%) |
| History of DV in bio family? | 41 (43%) | 25 (49%) | 16 (36%) |
| History of Mental Illness in bio family? | 37 (39%) | 21 (42%) | 16 (36%) |
| Has bio parent been convicted of a crime? | 53 (56%) | 26 (51%) | 27 (61%) |
| History of substance in the bio family? | 73 (77%) | 39 (77%) | 34 (79%) |

## Restrictiveness of Living Environments

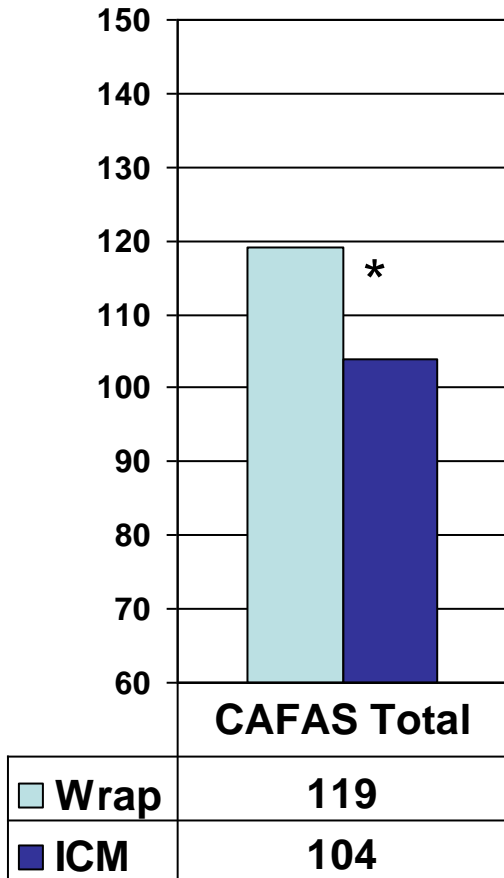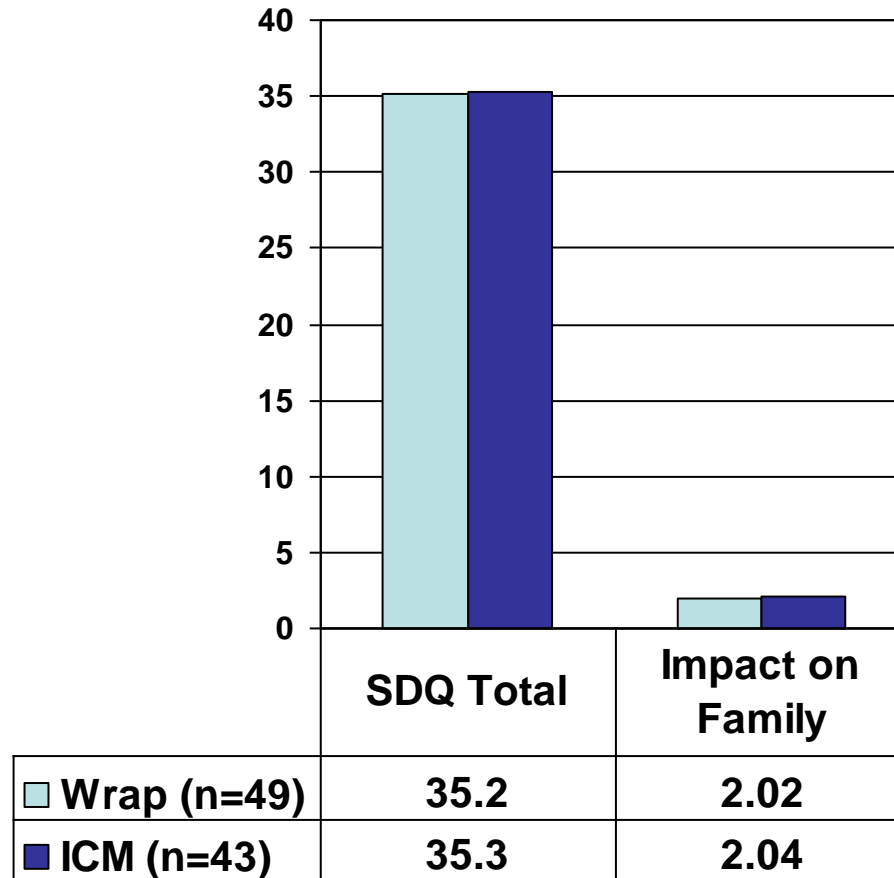| **Low Restrictiveness Environments** |
|---|
| These are characterized by few limitations on what youth can do, where they can go in the community and environment, and whom they can be with and for how long. |
| **Moderate Restrictiveness Environments** |
| These environments are ones in which there are moderate limitations. For example, communication and Internet access may be limited in terms of access and time limits, and some types of clothing are not allowed. Personal choices are more restricted in terms of where youth can go in the community, and there are time and duration limitations on peer associations. |
| **Elevated Restrictiveness Environments** |
| These are characterized by even greater restriction in access and time limits for communication and Internet access, with the Internet typically being heavily filtered. Interaction with friends, choices in recreation, and movement in the community also become more limited and typically monitored.  Choices for living arrangements and finances are much more limited. Seclusion and restraint are sometimes used, and treatment is part of the living environment. |
| **High Restrictiveness Environments** |
| These are characterized by the greatest limitations on what youth can do, where they can go, in the community and environment, and whom they can be with and for how long. Activities are very limited or prohibited; youth may have very limited access to or be prohibited from using the Internet. Additionally, active measures may be taken to prevent contact with friends, or it may be closely supervised. Extracurricular activities are also limited. Seclusion and restraints are sometimes used. |

*Rauktis,M., Huefner, J., O'Brien,K.,  Pecora, P.,  Doucette, A., and Thompson, R. (2009).* Measuring the Restrictiveness of Living Environments for Children and Youth. *Journal of Emotional and Behavioral Disorders: 17(3).*

# PLACEMENT AT BASELINE (N=91)  *p<.1

| Low Restriction Environments (Parental or Relative placements) **N=49** | | |
|---|---|---|
| | **Wrap (n=49)** | **ICM (n=42)** |
| Bio mother only | 9 (18%) | 9 (29%) |
| Two parents (at least 1 bio)* | 5 (10%) | 1 (2%) |
| Bio Father only | 2 (4%) | 0 |
| Adoptive Home | 0 | 2 (5%) |
| Home of a relative or friend | 8 (16%) | 13 (31%) |
| **Moderate Restriction Environments** (Foster homes) **N=24** | | |
| Foster Care | 12 (25%) | 9 (21%) |
| Relative Foster Care | 1 (2%) | 2 (5%) |
| **Elevated Restriction Environments** (Community Tx Homes, Shelters) **N=17** | | |
| Therapeutic Foster Care* | 3 (6%) | 6 (14%) |
| Community Tx Homes* | 7 (14%) | 0 |
| Emergency Shelter | 1 (2%) | 0 |
| **High Restriction Environments** (Inpatient Tx, Detention) **N=1** | | |
| RTC | 1 (2%) | 0 |
| **MEAN RESTRICTIVENESS AT BASELINE*** | **1.76** | **1.33** |
| **Mean Plcmt Changes 6 mos prior** (% w/ ≥1 change) | **1.10 (47%)** | **81 (45%)** |
| **Mean Restrictiveness, 6 months prior*** | **1.65** | **1.39** |

# Baseline scores on Standardized Measures

| | CAFAS Total |
|---|---|
| ☐ Wrap | 119 |
| ■ ICM | 104 |

* *

| | SDQ Total | Impact on Family |
|---|---|---|
| ☐ Wrap (n=49) | 35.2 | 2.02 |
| ■ ICM (n=43) | 35.3 | 2.04 |

**\*p<.1**

# Results, part 2:
# Missingness and Study Attrition
## as of 2/23/2010

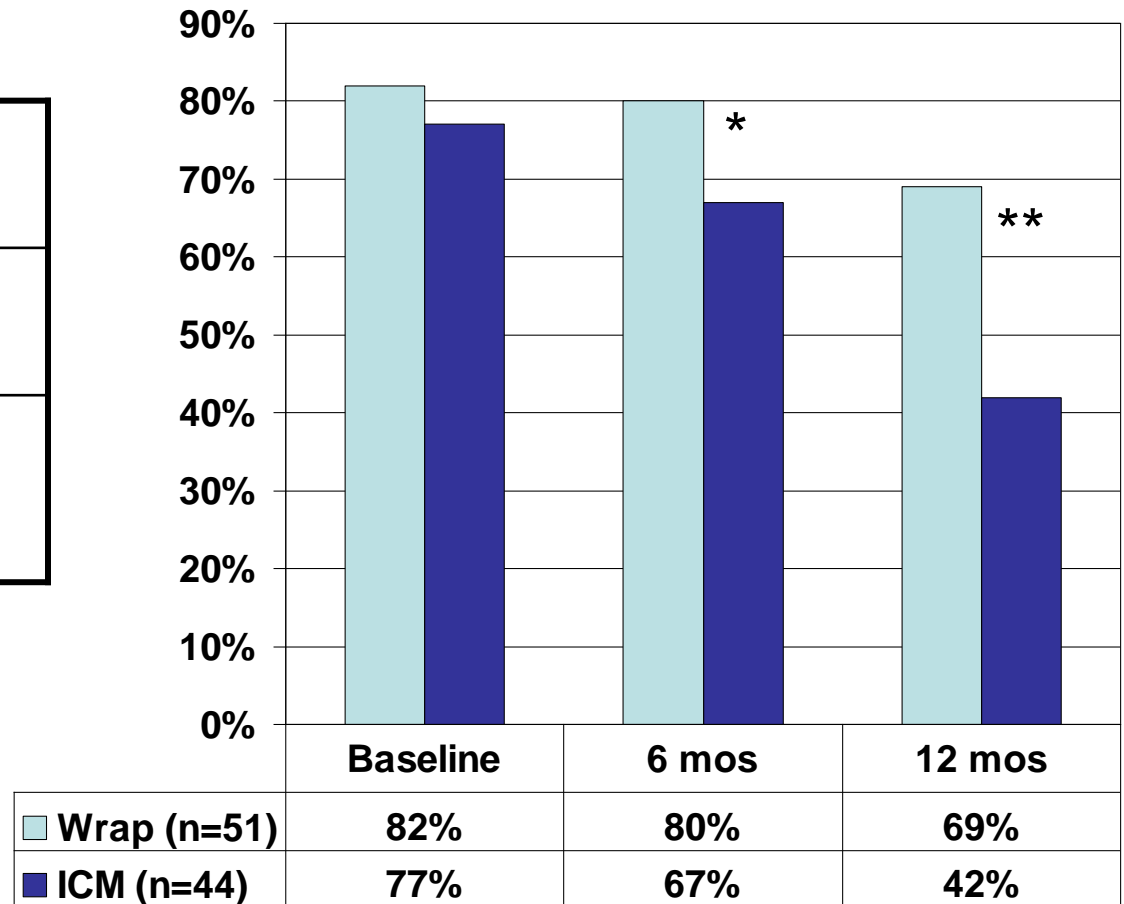| (Caregiver) | BASELINE | 6 MONTH | 12 MONTH |
|---|---|---|---|
| Total Possible | 95 | 95 | 95 |
| Total Completed | 94 | 83 | 75 |
| Completion Rate | 99% | 87% | 79% |
| NOTES | | Lost = 4; Refused = 4 Youth on the run, no info available = 2;No shows = 1; still seeking interview = 1 | Lost/moved = 6; Refused = 7; Youth on the run, no info available = 3; still seeking interview = 4 |

# Results, part 3:
# Nature of Services Received

- Wraparound and ICM services received
- Adherence to Wraparound principles
  - Both groups on WFI (WF/CM, CG, and Y interviews)
  - Wraparound group only on TOM
- Other contextual factors
  - Organizational culture and climate
  - Community support for wraparound

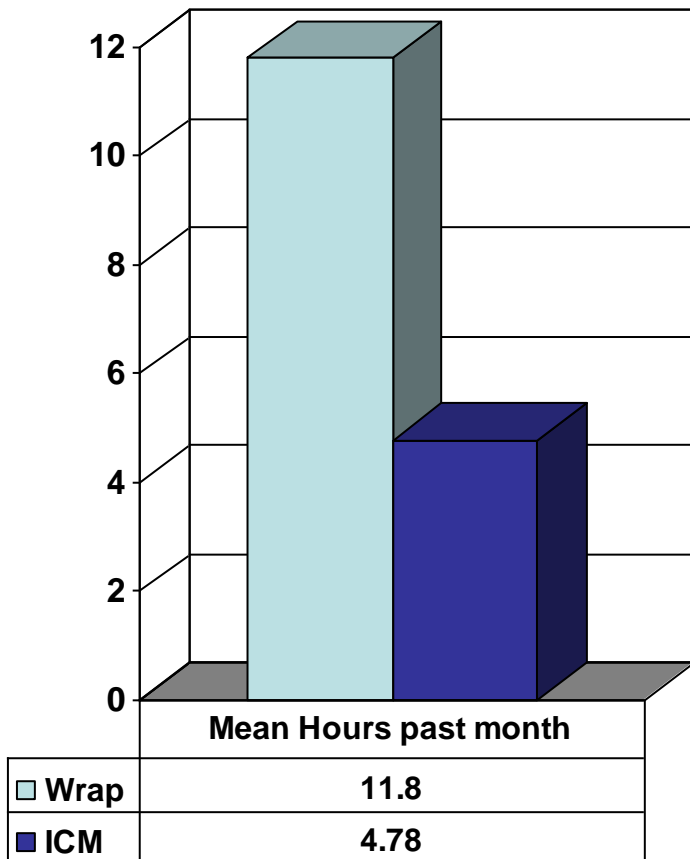# Results, part 3:
# Engagement in Services over time (WA & ICM)

|  | BL | 6 mo | 12 mo |
|---|---|---|---|
| Active in study | 95 | 95 | 95 |
| Received services | 75 | 70 | 54 |



| | Baseline | 6 mos | 12 mos |
|---|---|---|---|
| Wrap (n=51) | 82% | 80% | 69% |
| ICM (n=44) | 77% | 67% | 42% |

**p<.05; *p<.1

# Hours of service by WA facilitators and ICM case managers

## Total hours in past month*



| Mean Hours past month | |
|---|---|
| ☐ Wrap | 11.8 |
| ◼ ICM | 4.78 |

## Percent of time on different activities

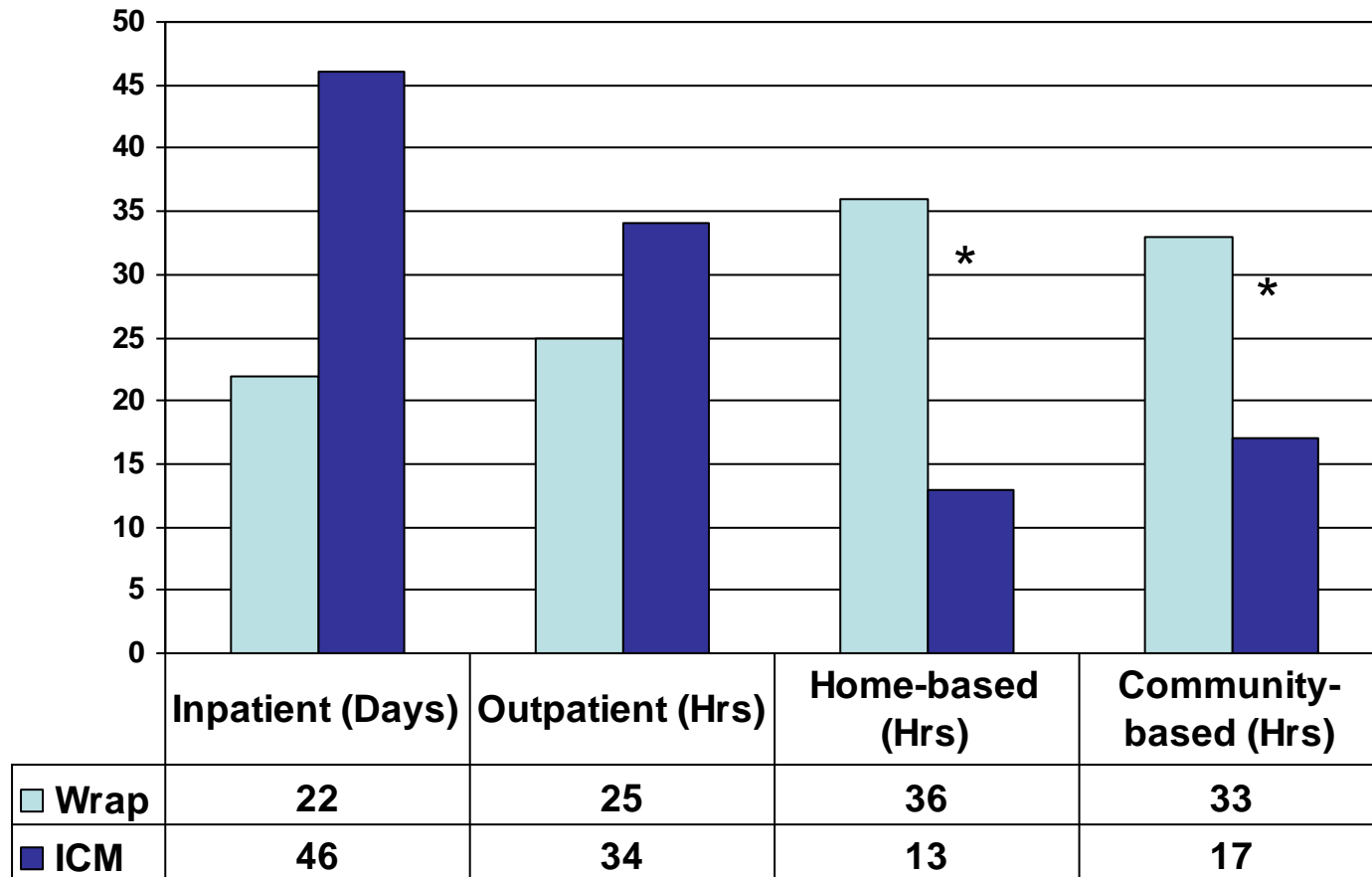| Activity | Wrap | ICM |
|---|---|---|
| Following up on appointments, arranging transportation | 14.9% | 12.2% |
| Coordinating assessment and evaluation activities | 13.1% | 13.8% |
| Developing, implementing, monitoring an individualized plan* | 21.1% | 11.1% |
| Accessing and mobilizing resources to meet client needs | 18.3% | 14.5% |
| Providing crisis response and coordinating crisis services | 6.2% | 3.8% |
| Individual, group, family counseling* | 11.7% | 40.1% |
| Record keeping, report writing* | 17.1% | 8.2% |

*$p < .001$

# Services and Supports Received
## As reported by caregiver on SACA

| Service Type | Wrap (N=43) | ICM (N=38) |
|---|---|---|
| Psych Hospital* | 4 | 1 |
| Residential Treatment Center* | 4 | 1 |
| Prison/jail | 2 | 3 |
| Outpatient Therapy** | 25 | 16 |
| Home-based therapy** | 18 | 10 |
| Family doctor/pediatrician* | 3 | 0 |
| Priest/minister* | 3 | 0 |
| Special classroom | 5 | 2 |
| Special school | 6 | 3 |
| In-school help* | 3 | 0 |
| Mentor** | 7 | 2 |
| Transitional living* | 3 | 0 |
| Recreational/community activities** | 15 | 7 |
| Incidentals/clothing | 3 | 3 |
| Nevada PEP (Family Support & Advocacy Organization) | 2 | 0 |

$**p<.05;$  $*p<.1$

# Days/Hours of Services and Supports Received by Category



| | Inpatient (Days) | Outpatient (Hrs) | Home-based (Hrs) | Community-based (Hrs) |
|---|---|---|---|---|
| ☐ **Wrap** | 22 | 25 | 36 | 33 |
| ■ **ICM** | 46 | 34 | 13 | 17 |

NOTE: Days/hours of service listed only for youth who received the service

**\*p<.05**

31

# Results, part 3:
# Wraparound Fidelity Index
# Overall Fidelity by Group



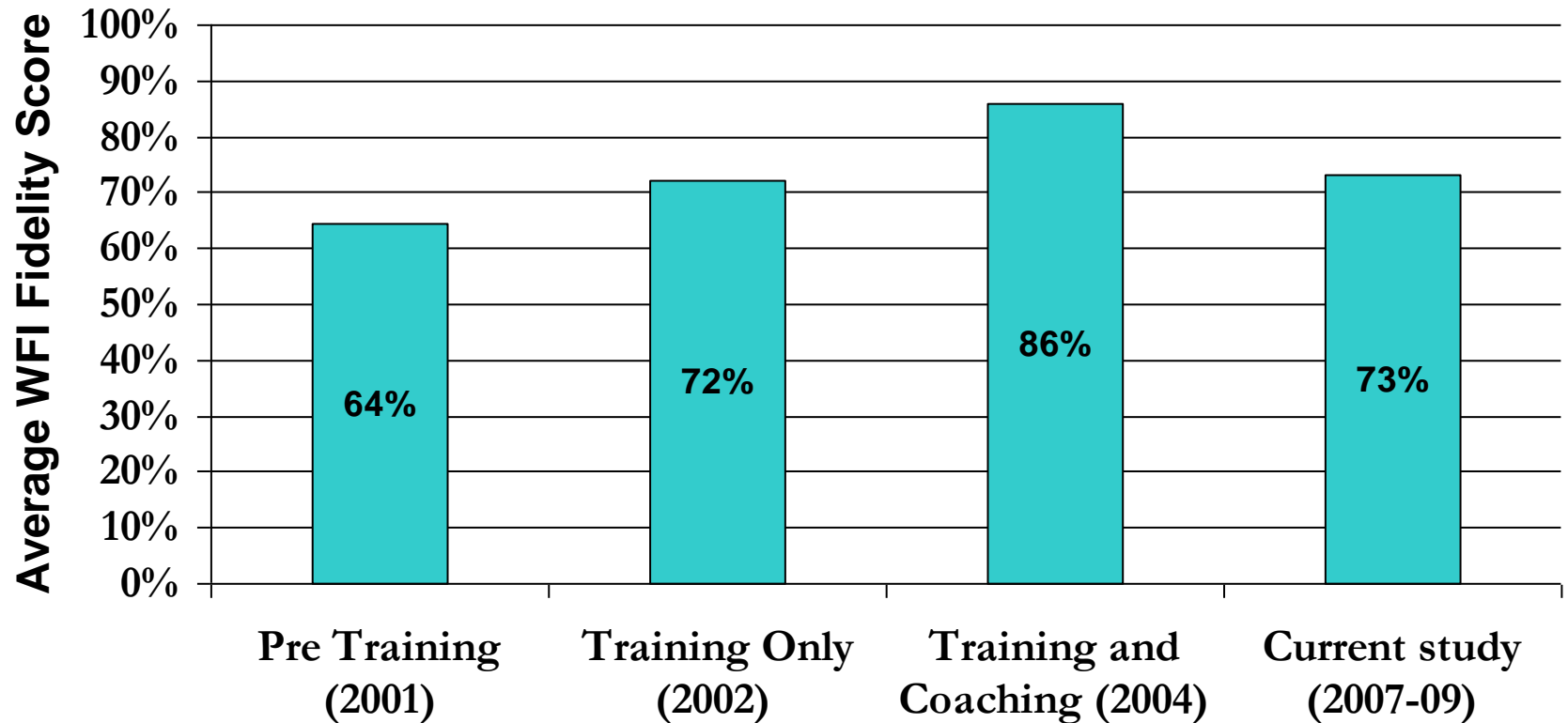| | WF | CG | Youth | Combined |
|---|---|---|---|---|
| ☐ Wrap (N=39) | 79 | 68 | 70 | 73 |
| ■ ICM (N=30) | 72 | 61 | 57 | 66 |
| ☐ Natl Mean (N=2126) | 83 | 75 | 73 | 77 |
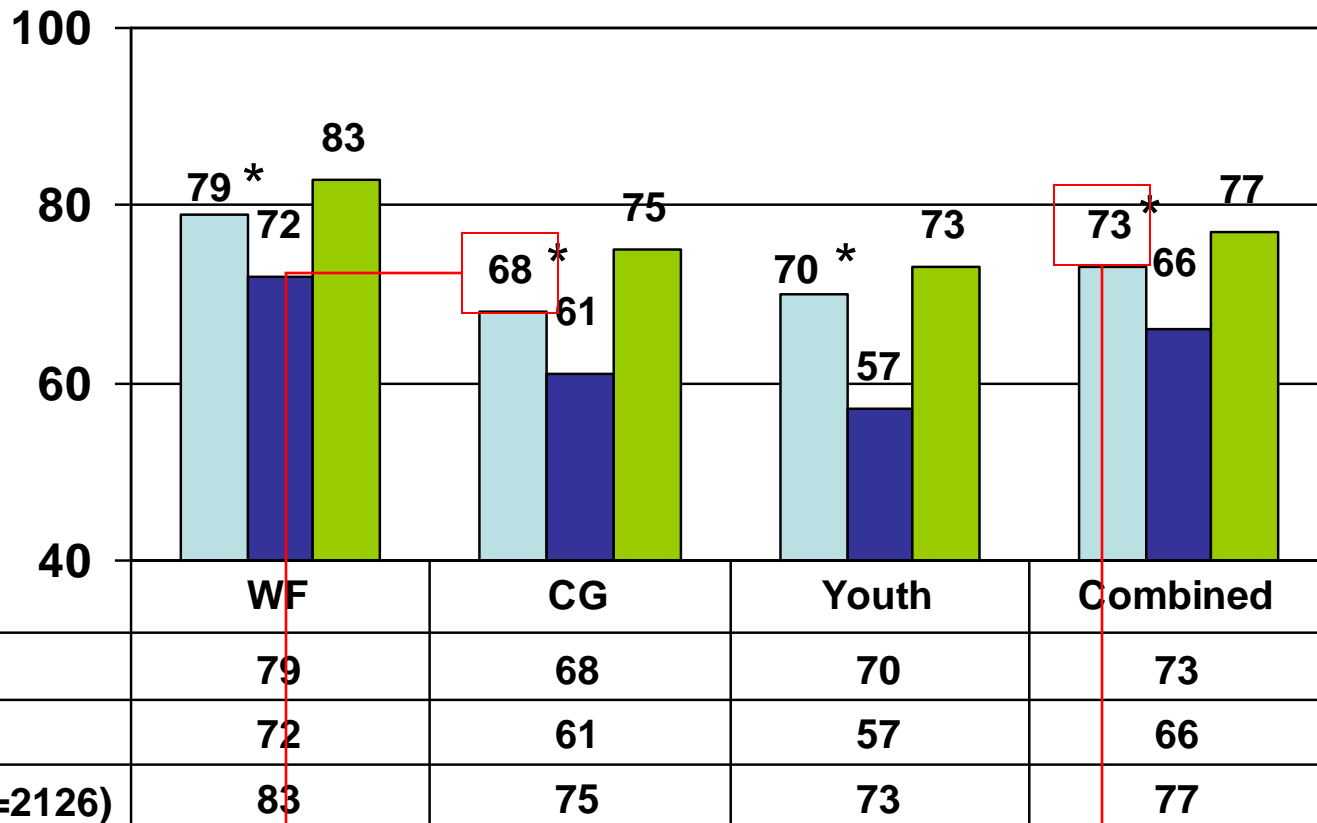
*p<.05

1 - 1.5 SD lower than found in initial pilot study of WA in NV (Bruns et al., 2006)

# Caregiver WFI Fidelity over time in NV



Bruns, Rast, Walker, Peterson, & Bosworth (2006).
*American Journal of Community Psychology.*

# WFI Items: Engagement Phase
## Wraparound (N=40) vs. ICM (n=29)

| Item | Facilitator | Caregiver |
|---|---|---|
| 1.1 - Was the family given ample time to talk about strengths, beliefs & traditions *and* At first team meeting were their strengths beliefs and traditions w/ all team members? | **1.61**<br>1.69 | **1.60**<br>1.59 |
| 1.2 - Before first team meeting did you fully explain WA process and choices family could make? | **1.81**<br>1.59 | **1.71**<br>1.23 |
| 1.3 - At beginning of WA process was family given opportunity to say what has worked in past for child? | **1.81**<br>1.81 | **1.79**<br>1.52 |
| 1.4 - Did the family select the people who would be on their team? | **1.50**<br>1.14 | **.56**<br>.50 |
| 1.5 - Is it difficult to get team members to attend team meetings when they are needed? | **1.42**<br>1.18 | **1.64**<br>.75 |
| 1.6 - Before the first WA team meeting/ CM process began, did you go through a process of identifying what leads to crises or dangerous situations for the child and family? | **1.47**<br>1.69 | **1.15**<br>.55 |

# WFI Items: Planning Phase
## Wraparound (N=40) vs. ICM (n=29)

| Item | Facilitator | Caregiver |
|------|-------------|-----------|
| 2.1 - Did the family plan and team create a written plan of care?  & Do they have a copy of the plan? | **1.55**<br>1.00 | **1.31**<br>.83 |
| 2.2 Written statement of what is being worked on by the team (e.g., a team mission, family vision, or explicit goals) | **.76**<br>.14 | **.69**<br>.08 |
| 2.3 Plan includes a mix of informal and formal/professional services | **.38**<br>.17 | **.33**<br>.13 |
| 2.5 Strategies to get youth involved in the community | **1.21**<br>.68 | **.94**<br>.46 |
| 2.8 Is there a crisis or safety plan, including ways to avoid crises | **1.46**<br>.85 | **1.03**<br>.39 |
| 2.9 Confident that in event of major crises, youth will be able to be maintained in community | **1.54**<br>1.68 | **1.67**<br>1.86 |
| 2.11 Team took time to understand family's values and beliefs, these are reflected in the plan | **1.76**<br>1.79 | **1.51**<br>1.63 |

# WFI Items: Implementation Phase
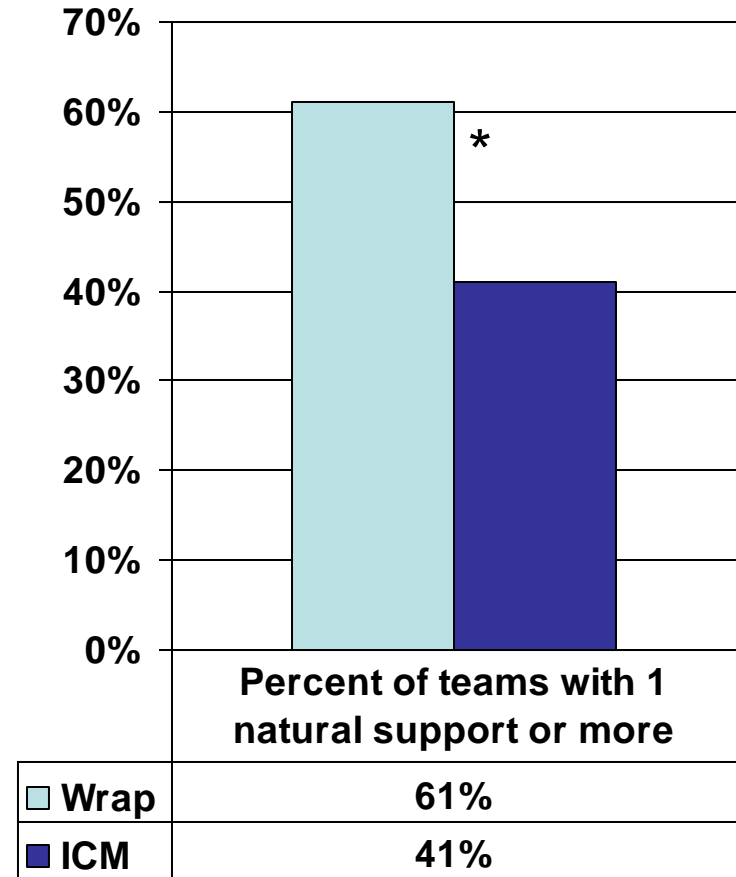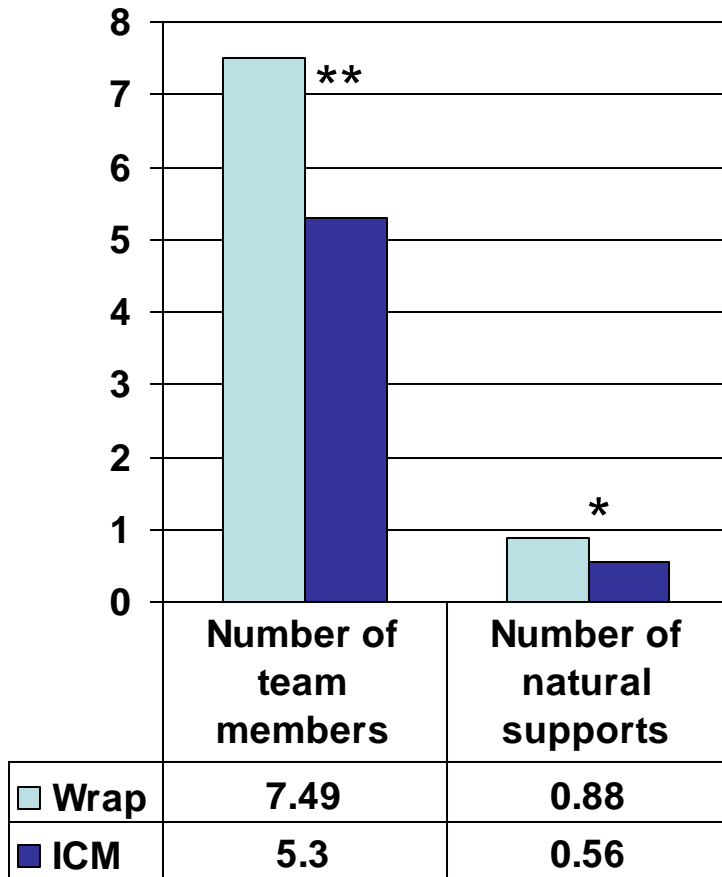## Wraparound (N=40) vs. ICM (n=29)

| Item | Facilitator | Caregiver |
|---|---|---|
| WF3.2 - When wa team has a good idea for support/services can it find resources to make it happen? | **1.82**<br>1.96 | **1.67**<br>1.78 |
| WF3.3 - Does the wa team get the child involved w/ activities they like and do well? | **1.13**<br>.93 | **.86**<br>.88 |
| WF3.6 - Is there a friend or advocate of the child or family who actively participates on wa team? | **.93**<br>.31 | **.83**<br>.63 |
| WF3.8 - Are the services and supports in the wa plan difficult for the family to access? | **1.63**<br>1.62 | **1.81**<br>1.54 |
| WF3.9 - Does the team assign specific tasks to all members at end of meeting *and* Does team review each member's f.t. on tasks? | **1.63**<br>1.07 | **1.32**<br>.52 |
| WF3.12 - Does the team go out of its way to make sure ALL members present ideas and participate in decision making? | **1.95**<br>1.89 | **1.67**<br>1.38 |
| WF3.13 - Do you think the wa process could be discontinued before the family is ready for it to end? | **1.53**<br>1.59 | **1.45**<br>1.61 |

# WFI Items: Transition Phase
## Wraparound (N=40) vs. ICM (n=29)

| Item | Facilitator | Caregiver |
|------|-------------|-----------|
| 4.2 - Has the wa process helped child develop friendships w/ other youth who will have positive influence on them? | **1.32**<br>1.38 | **1.09**<br>1.26 |
| 4.3 - Has the wa process helped child solve own problems? | **1.18**<br>1.61 | **1.03**<br>1.29 |
| 4.4- Has team helped child prepare for major transitions? | **1.57**<br>1.75 | **1.30**<br>1.47 |
| 4.5 - Do you feel like the family will be able to "restart" wa once it has ended? | **1.97**<br>2.00 | **1.81**<br>2.00 |
| 4.6 - Has the wa process helped the family develop or strengthen relationships that will support them when wa is finished? | **1.58**<br>1.61 | **1.54**<br>1.55 |
| 4.7 - Do you feel like the family will be able to succeed on its own, or w/ just the help of family and friends? | **1.36**<br>1.22 | **1.26**<br>1.21 |
| 4.8 - Will some members of the team be there to support the family when formal wa is finished? | **1.79**<br>1.85 | **1.72**<br>1.83 |

# Participants in Wrap vs. ICM process

| | Number of team members | Number of natural supports |
|---|---|---|
| ☐ Wrap | 7.49 | 0.88 |
| ■ ICM | 5.3 | 0.56 |

(Chart: Number of team members — Wrap 7.49, ICM 5.3 **; Number of natural supports — Wrap 0.88, ICM 0.56 *)

| | Percent of teams with 1 natural support or more |
|---|---|
| ☐ Wrap | 61% |
| ■ ICM | 41% |

(Chart: Percent of teams with 1 natural support or more — Wrap 61%, ICM 41% *)

**p<.001; *p<.05

NOTE: Nevada PEP listed as team member for 2 teams (both WIN)

# Results, part 3: Wrap Fidelity
## **Team Observation Results**
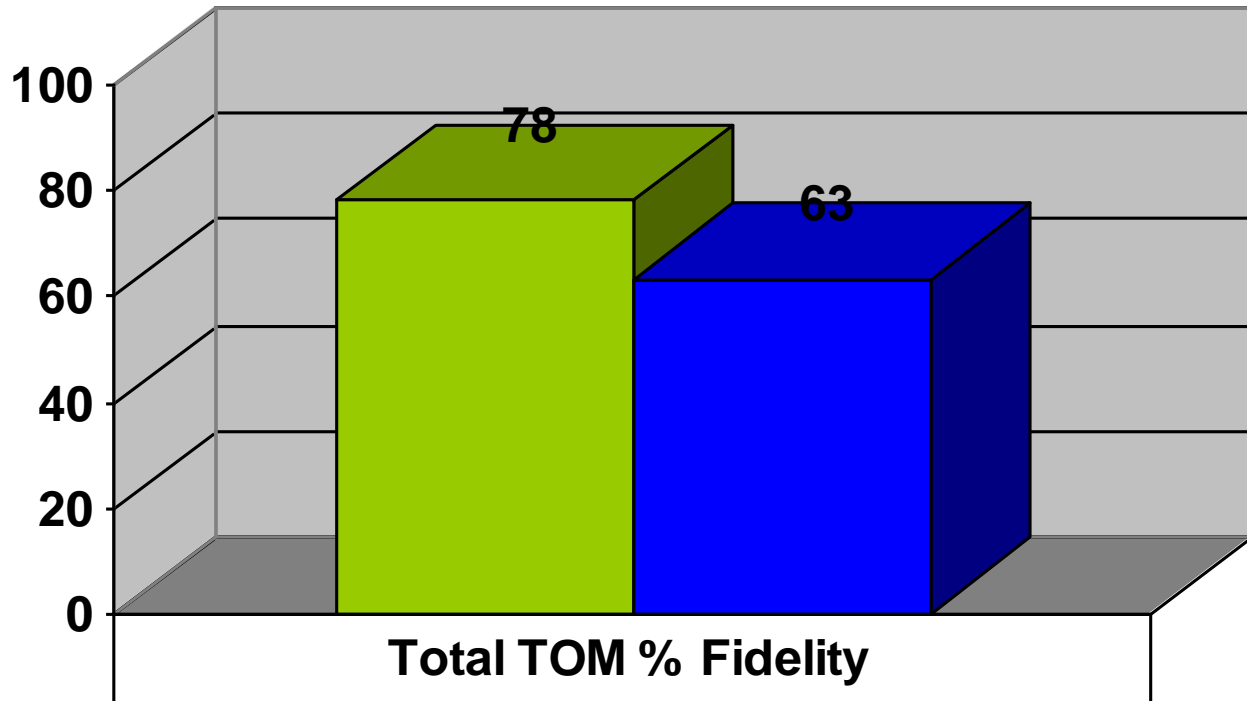


| | Total TOM % Fidelity | |
|---|---|---|
| ■ Nat'l mean | 78 | |
| ■ Wrap in NV | 63 | Mean over 3 waves of data collection |

# 2010 TOM Overall Results (n=12)

| Item | Item Means |
|------|:----------:|
| Item 1: Team Membership and Attendance | 2.92 |
| Item 2: Effective Team Process | 1.33 |
| Item 3: Facilitator Preparation | 3.75 |
| Item 4: Effective Decision Making | 2.67 |
| Item 5: Creative Brainstorming and Options | 1.75 |
| Item 6: Individualized Process | 2.33 |
| Item 7: Natural and Community Supports | 1.00 |
| Item 8: Natural Support Plans | 1.42 |
| Item 9: Team Mission and Plans | 1.58 |
| Item 10: Shared Responsibility | 2.17 |

| Item | Item Means |
|------|:----------:|
| Item 11: Facilitation Skills | 2.33 |
| Item 12: Cultural and Linguistic Competence | 2.83 |
| Item 13: Outcomes Based Process | 0.75 |
| Item 14: Evaluating Progress and Success | 1.58 |
| Item 15: Youth and Family Voice | 3.50 |
| Item 16: Youth and Family Choice | 2.42 |
| Item 17: Focus on Strengths | 1.83 |
| Item 18: Positive Team Culture | 3.00 |
| Item 19: Community Focus | 3.08 |
| Item 20: Least Restrictive Environment | 3.92 |

**Scale 0-4**
0 = none of the indicators for this item evident during observation
1 = some, but fewer than half of the indicators evident
2 = about half of the indicators evident
3 = more than half, but not all, of the indicators present
4 = all of the indicators evident during observation

| TOTAL TOM Mean Score | 2.31 |
|----------------------|:----:|

# Results, part 4:
# System and organizational context

- Organizational Culture and Climate (Glisson OSC measure)

- System support for wraparound (Community Support for Wraparound Inventory)

# Organizational Social Context (OSC)

- The social context of an organizational unit includes the norms, values, expectations, perceptions and attitudes of the unit.

- Organizational social context can enhance or inhibit the adoption of best practices; strengthen or weaken fidelity to established protocols; and increase or decrease the availability, responsiveness and continuity of the services being provided by the organization.

# Organizational Social Context Culture Profiles

- The OSC measures how proficient, rigid and resistant the cultures are.

- Proficient cultures are characterized by expectations that service providers will place the well-being of each client first and by expectations that individual service providers will be competent and have up-to-date knowledge.

- Rigid cultures are characterized by service providers having less direction and flexibility in their work; limited input into key management decisions; and being controlled by many bureaucratic rules and regulations.

- Resistant cultures are characterized by expectations that service providers will show little interest in change or in new ways of providing service and that service providers will suppress any opportunity for change.
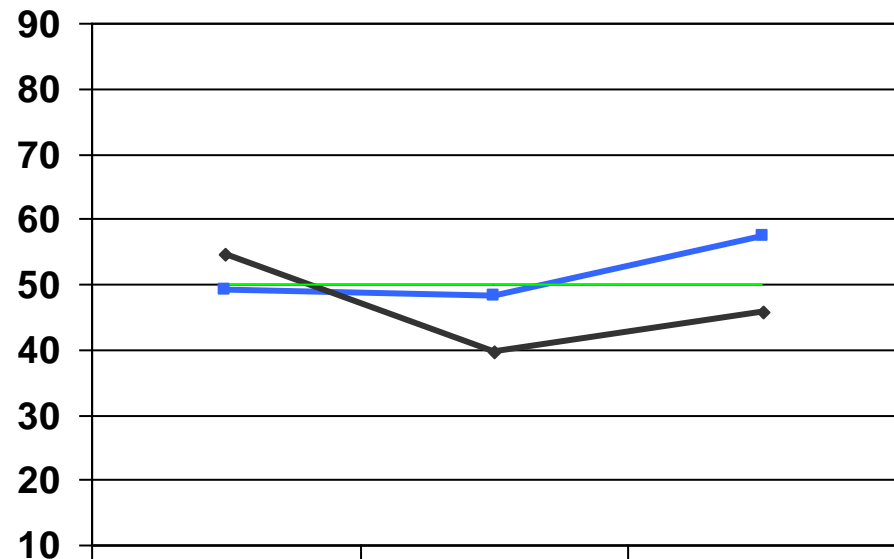
# SOC Culture Profile
## Comparing study organizational units to a national sample of mental health agencies

**Percentile ranks**

|  | Prof. | Rigid. | Resis. |
|---|---|---|---|
| **DCFS** | **45%** | **42%** | **77%** |
| Mojave | 66% | 14% | 32% |

T-scores

| | Proficiency | Rigidity | Resistance |
|---|---|---|---|
| **DCFS-WA (n=18)** | **49.1** | **48.2** | **57.4** |
| **Mojave- ICM (n=14)** | **54.57** | **39.76** | **45.75** |
| **National Sample (n=1112)** | **50** | **50** | **50** |

# Organizational Social Context Climate Profiles

- The OSC also measures how engaged, functional and stressful the climates are.

- Engaged climates are characterized by employee perceptions that they are able to personally accomplish worthwhile things in their work, remain personally involved in their work and be concerned about their clients.

- Functional climates are characterized by employee perceptions that they receive the cooperation and help from coworkers and administration required to do their job, have a clear understanding of how they fit in, and can successfully work within their organizational unit.

- Stressful climates are characterized by employee perceptions that they are emotionally exhausted from their work, pulled in different directions, and unable to get necessary things done.
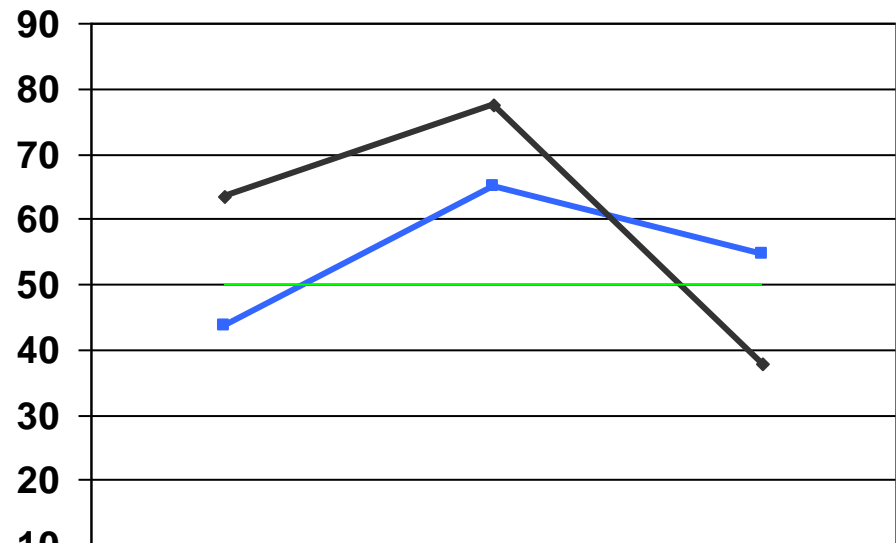
# SOC Climate Profile
## Comparing study organizational units to a national sample of mental health agencies

Percentile ranks

|        | Engag. | Funct. | Stress. |
|--------|--------|--------|---------|
| **DCFS** | **25%** | **94%** | **66%** |
| Mojave | 91% | 99% | 10% |

T-scores

|                              | Engagement | Functionality | Stress |
|------------------------------|------------|---------------|--------|
| **DCFS-WA (n=18)**           | **43.5**   | **65.1**      | **54.7** |
| **Mojave- ICM (n=14)**       | **63.57**  | **77.35**     | **37.84** |
| **National Sample (n=1112)** | **50**     | **50**        | **50** |

# The Community Supports for Wraparound Inventory

- The 40 items are grouped within 6 themes:
  1. Community partnership
  2. Collaborative action
  3. Fiscal policies
  4. Service array
  5. Human resource development, and
  6. Accountability.

- Respondents complete the 40 items by rating the development of supports in their community or program on a 5 point scale
  - 0 = "least developed" and 4 = "fully developed"

# Comparing Clark Co to other national sites on the CSWI
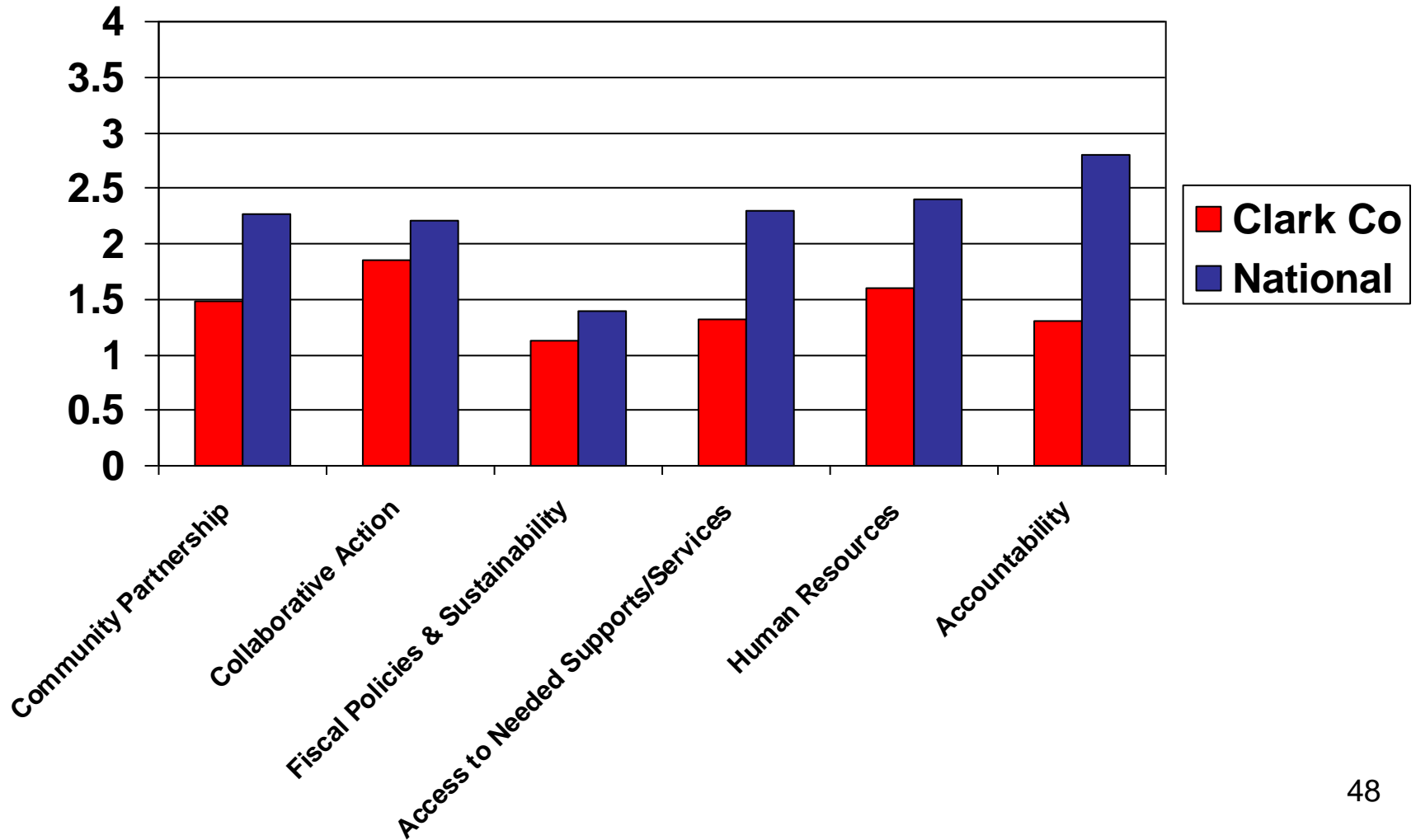
# Summary of implementation results

- WA group received more service
  - Longer length of stay in WA than ICM
  - More hours of WA vs. ICM
  - More frequently use of therapy (though not necessarily more hours); more hours of in-home therapies and community supports
- Fidelity to wraparound higher for WA group; however, mean fidelity far below national means
  - Little engagement of natural supports; primary reliance on professional services; little use of family support services; poor team coherence; little individualization of plans; little engagement of enrolled youths; poor facilitation of team meetings
  - More team members in WA group; Greater likelihood WA follows the procedures of WA
  - However, intended outcomes of WA equally or more likely to be rated by caregivers and youth in ICM group
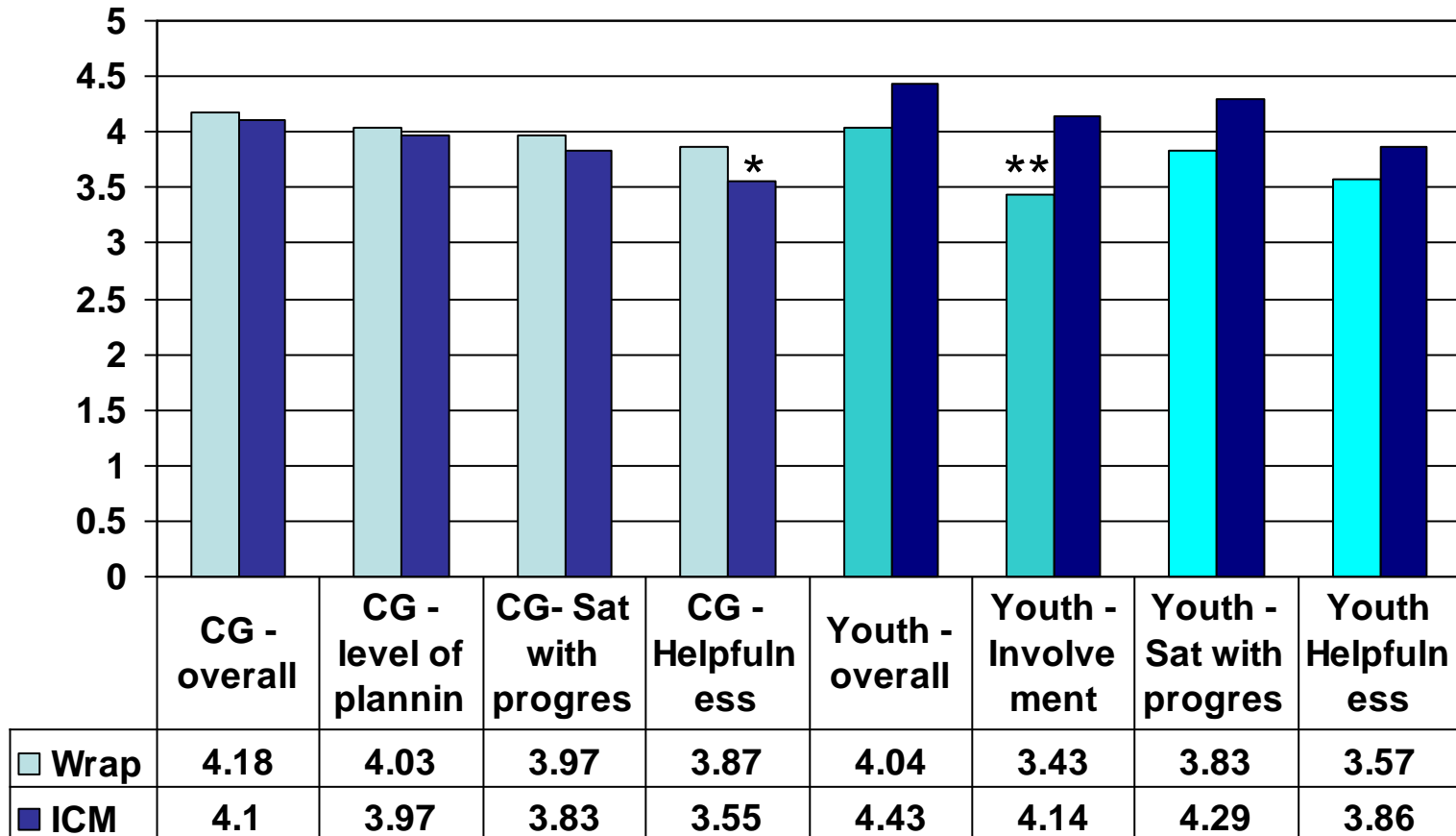
# Summary of implementation results

- Organizational culture and climate favors ICM group in all 6 categories
  - Likely to influence service quality and continuity
- System support for wraparound not favorable
  - Relative to other wraparound sites assessed nationally, stakeholders viewed collaboration across systems as poor, service array as weak, and consistency of training and coaching uneven

# Results, part 5:
# Process outcomes

- Family Satisfaction
- Youth satisfaction
- Working alliance, per therapist
- Working alliance, per caregiver
- Family empowerment

# Caregiver and Youth Satisfaction



| | CG - overall | CG - level of plannin | CG- Sat with progres | CG - Helpfulness | Youth - overall | Youth - Involvement | Youth - Sat with progres | Youth Helpfulness |
|---|---|---|---|---|---|---|---|---|
| ☐ Wrap | 4.18 | 4.03 | 3.97 | 3.87 | 4.04 | 3.43 | 3.83 | 3.57 |
| ■ ICM | 4.1 | 3.97 | 3.83 | 3.55 | 4.43 | 4.14 | 4.29 | 3.86 |

**p<.05; *p<.1

NOTE: Ns = CG (WA = 38, ICM = 29); Youth (WA = 23, ICM = 10)

# Working alliance, Provider report

## WAIT Total Score



| | WAIT Total |
|---|---|
| ☐ Wrap (n=35) | 5.23 |
| ■ ICM (n=24) | 4.92 |

**p<.05; *p<.1
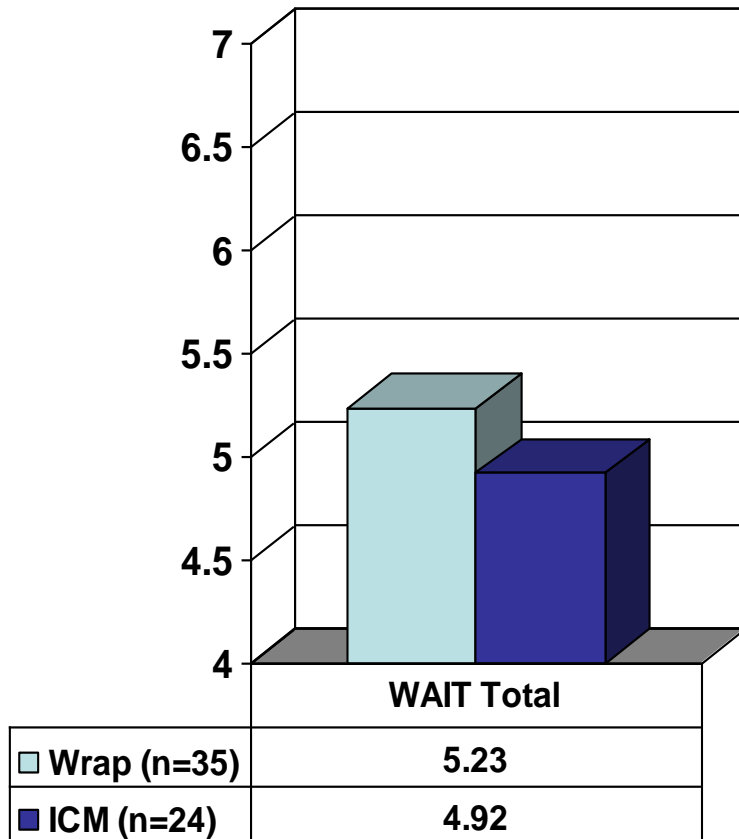
## Scores for specific WAIT items

| Activity | Wrap | ICM |
|---|---|---|
| My client and I agree about steps to be taken | 5.00 | 4.88 |
| My client and I feel confident about the usefulness of therapy | 4.77 | 4.46 |
| I believe my client likes me | 5.31 | 5.09 |
| I am confident in my ability to help my client* | 5.76 | 5.38 |
| We are working on mutually agreed goals | 5.37 | 5.08 |
| We agree on what is important to work on | 5.34 | 5.08 |
| My client and I have built a mutual trust** | 5.40 | 4.58 |
| My client and I believe the ways we are working is correct | 4.94 | 4.71 |

# Working alliance, Caregiver report

## WAIC Total Score



| | WAIT Total |
|---|---|
| ☐ Wrap (n=35) | 5.58 |
| ■ ICM (n=26) | 6.03 |

**p<.05; *p<.1

## Scores for specific WAIT items
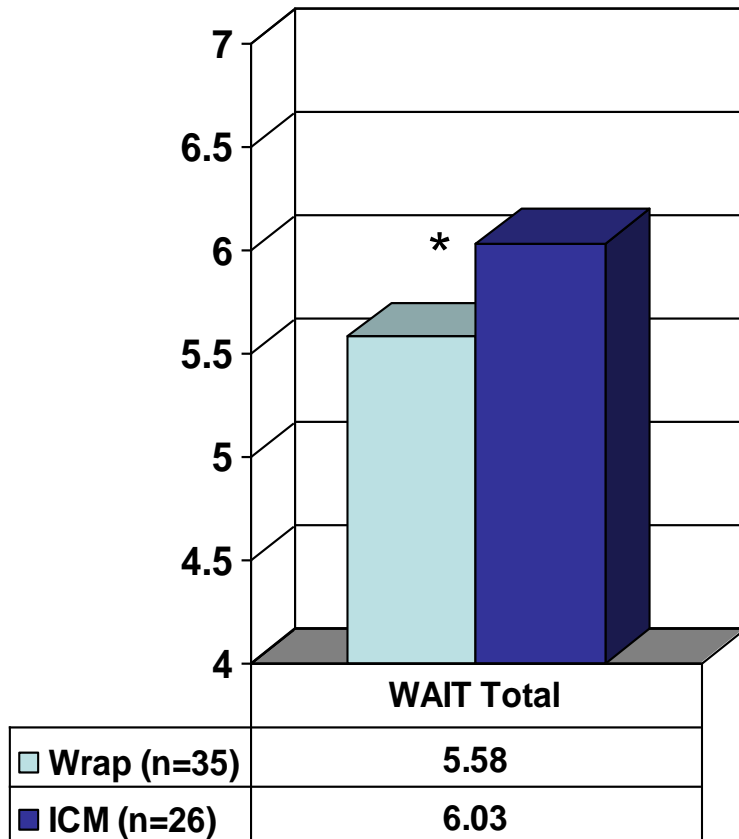
| Activity | Wrap | ICM |
|---|---|---|
| What I am doing in CM/WA gives me new ways of looking at problems** | 4.57 | 5.54 |
| I believe my CM/WF likes me | 6.11 | 6.20 |
| My CM/WF does not understand what I am trying to accomplish** | 2.57 | 1.81 |
| I am confident in my CM/WF's ability to help me | 5.94 | 5.92 |
| We are working toward mutually agreed upon goals* | 5.69 | 6.15 |
| I feel my WF/CM appreciates me* | 5.89 | 6.38 |
| We agree on what is important to work on* | 5.71 | 6.31 |
| We trust one another* | 5.94 | 6.31 |
| We have different ideas about what the problems are* | 2.63 | 1.92 |
| I believe the way we are working with our problems is correct* | 5.34 | 6.00 |

# Family Empowerment Scale
## Total Scores



| | FES - Family | FES - Services | FES - Community |
|---|---|---|---|
| ☐ Wrap (n=43) | 4.19 | 4.21 | 3.2 |
| ■ ICM (n=37) | 4.26 | 4.17 | 2.91 |
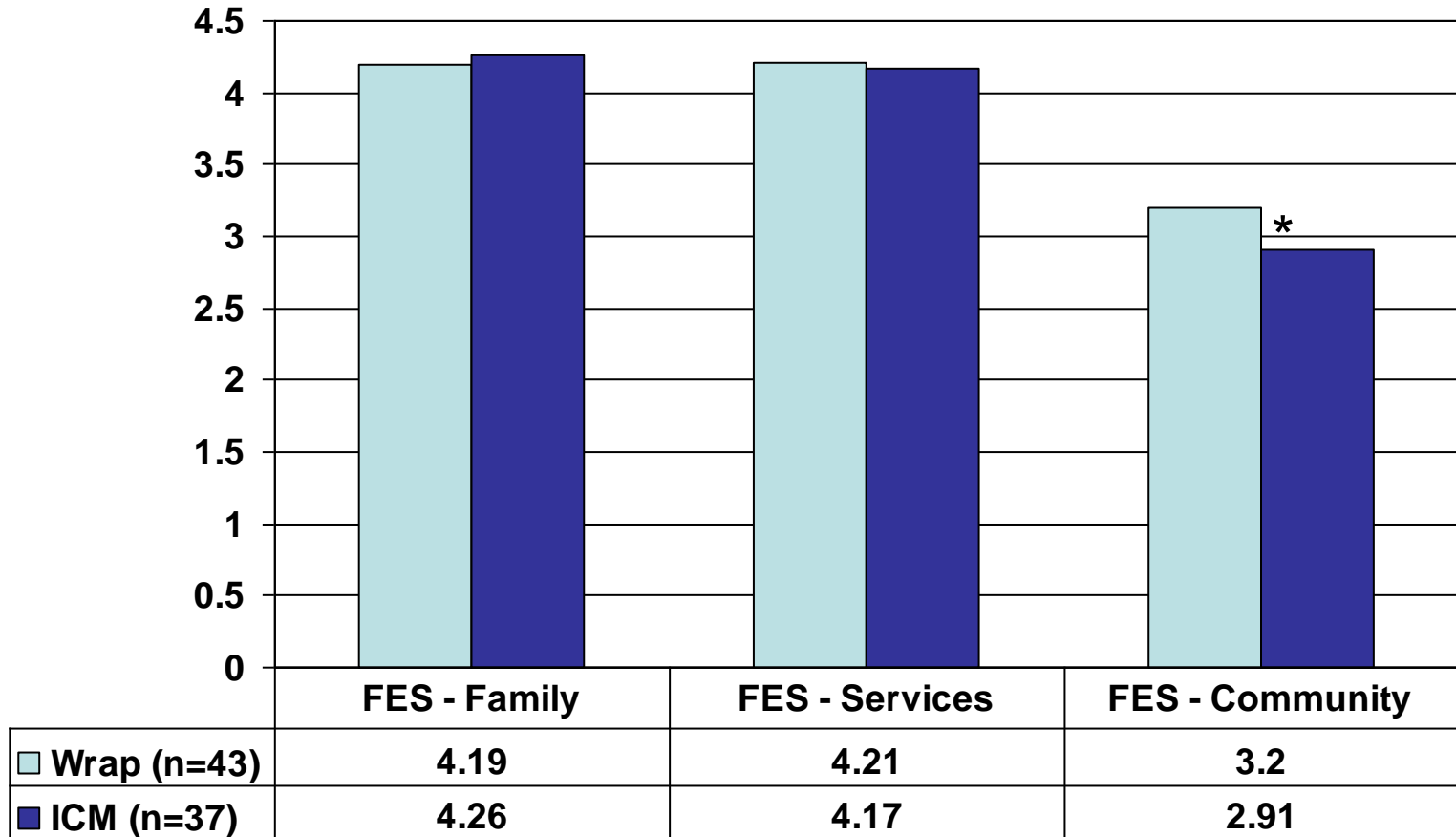
*p<.1

# Family empowerment
## Item scores with significant group differences

| FES Item | Wrap (N=43) | ICM (N=37) |
|---|---|---|
| **Family Scale** | | |
| When I need help with problems in my family, I am able to ask for help from others | 3.98 | 4.30 |
| **Services Scale** | | |
| When necessary, I take the initiative in looking for services for my child | 4.29 | 3.92 |
| **Community scale** | | |
| I get in touch with legislators when important issues concerning children are pending | 1.86 | 1.49 |
| I help other families get the services they need | 3.19 | 2.70 |

*p<.1

# Results, part 6:
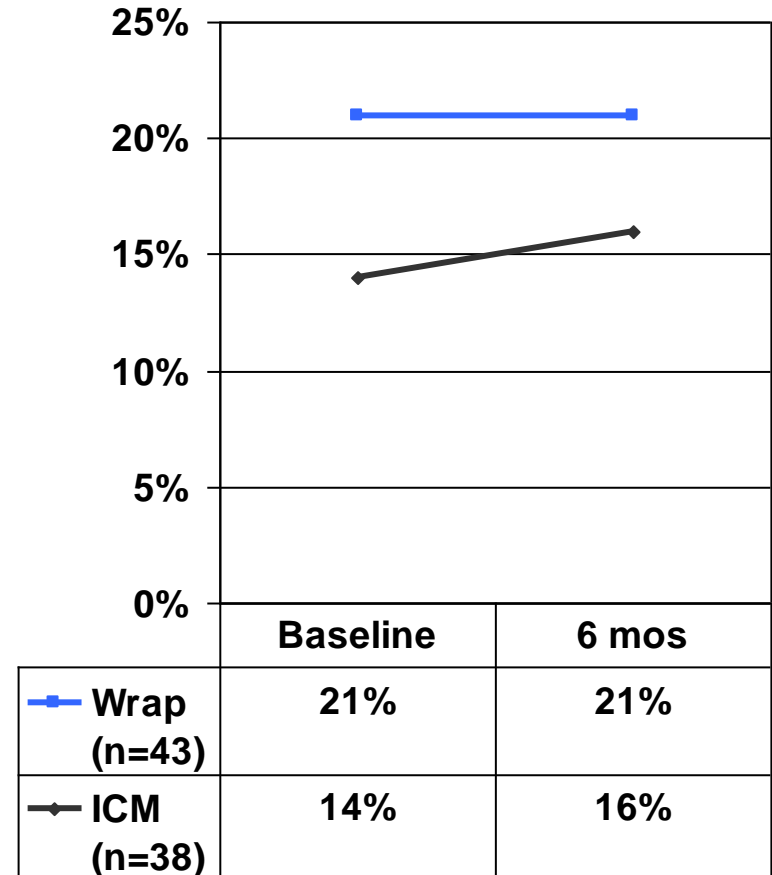# Youth outcomes

- Residential placement outcomes
  - Restrictiveness of placement
  - Number of residential placement changes
- Behavioral outcomes
  - Strengths and Difficulties Questionnaire
- Functional Outcomes
  - Child and Adolescent Functional Assessment Scale (CAFAS)
  - Administrative data (e.g., child welfare outcomes, arrests, school outcomes)

# Residential Restrictiveness
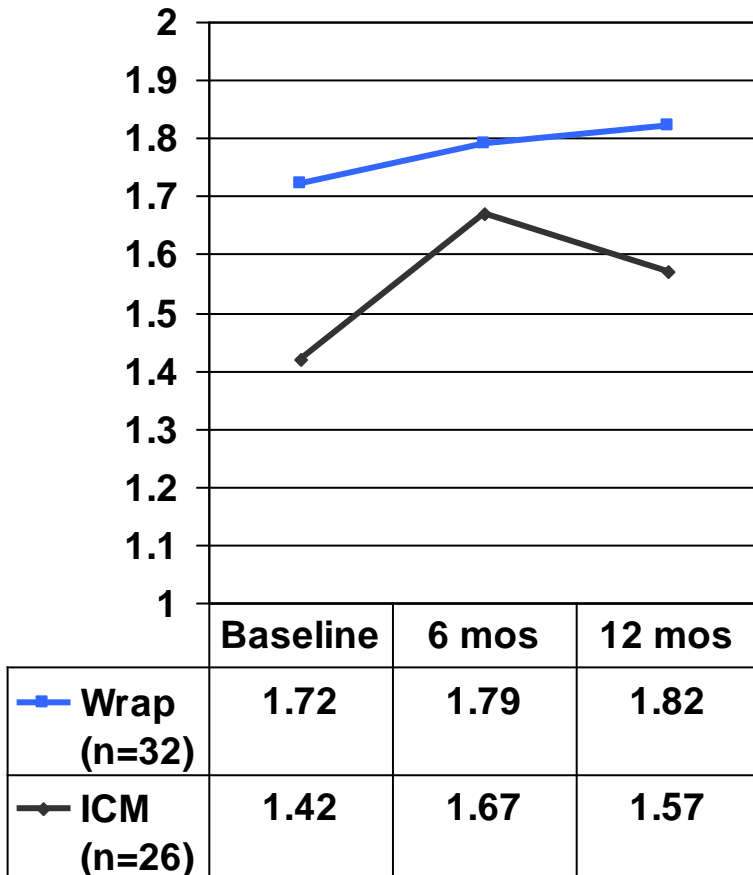# 6 months (n=81)

Mean restrictiveness*
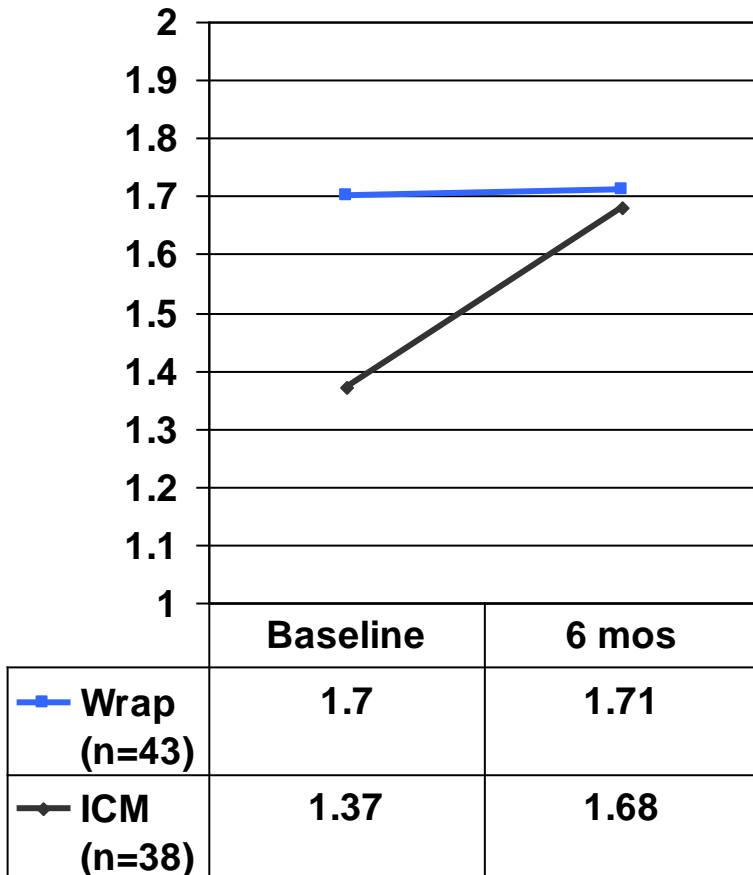
Percent in elevated or high restriction environment at data collection point
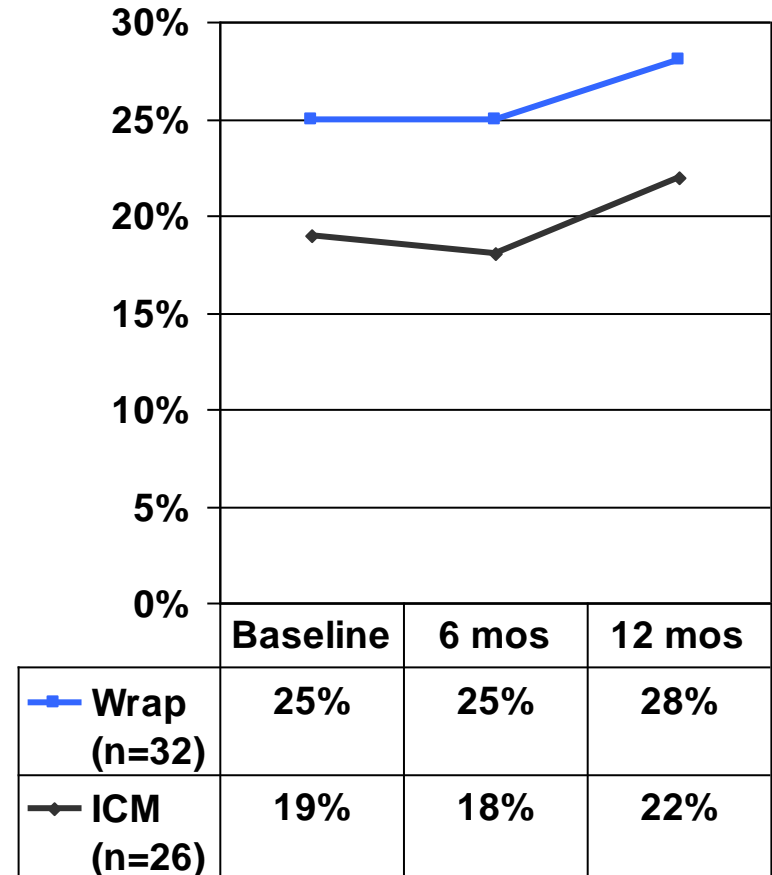


| | Baseline | 6 mos |
|---|---|---|
| ▬■▬ Wrap (n=43) | 1.7 | 1.71 |
| ▬◆▬ ICM (n=38) | 1.37 | 1.68 |

| | Baseline | 6 mos |
|---|---|---|
| ▬■▬ Wrap (n=43) | 21% | 21% |
| ▬◆▬ ICM (n=38) | 14% | 16% |

*p<.1

58

# Residential Restrictiveness
# 12 months (n=58)

Mean restrictiveness

Percent in elevated or high restriction environment



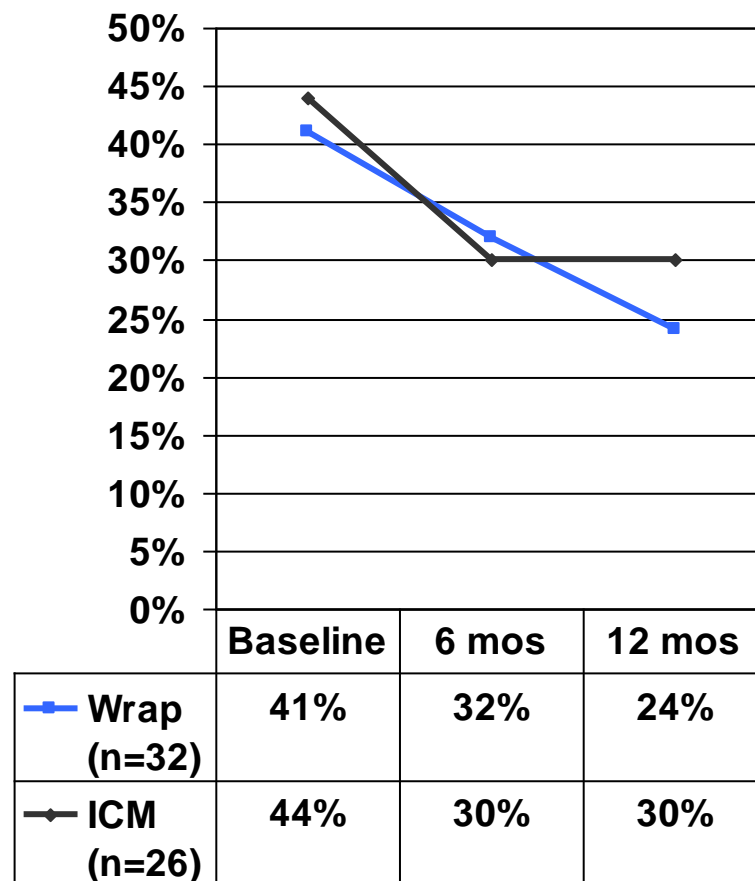| | Baseline | 6 mos | 12 mos |
|---|---|---|---|
| ▪— Wrap (n=32) | 1.72 | 1.79 | 1.82 |
| ◆— ICM (n=26) | 1.42 | 1.67 | 1.57 |

| | Baseline | 6 mos | 12 mos |
|---|---|---|---|
| ▪— Wrap (n=32) | 25% | 25% | 28% |
| ◆— ICM (n=26) | 19% | 18% | 22% |

# Placement Changes
# 12 months (n=58)

## Mean number of plcmt changes*



| | Baseline | 6 mos | 12 mos |
|---|---|---|---|
| **Wrap (n=32)** | 1.1 | 0.71 | 0.36 |
| **ICM (n=26)** | 0.72 | 0.42 | 0.44 |

*p<.1
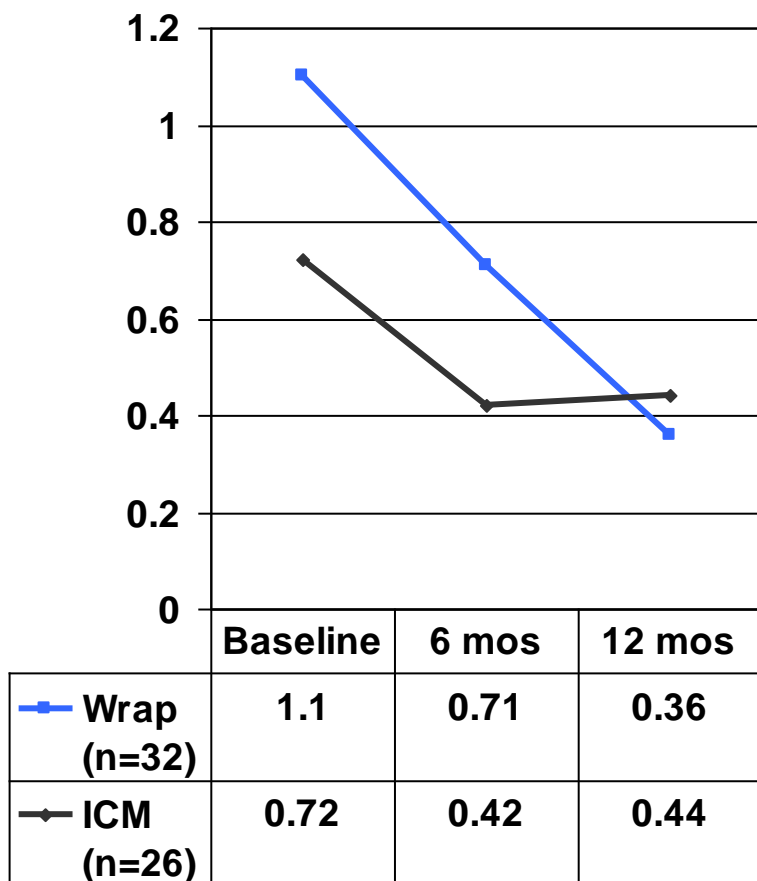
## Percent of youth with a plcmt change



| | Baseline | 6 mos | 12 mos |
|---|---|---|---|
| **Wrap (n=32)** | 41% | 32% | 24% |
| **ICM (n=26)** | 44% | 30% | 30% |

# Emotional and Behavioral Problems
# 6 month outcomes – Intent to Treat (n=76)

## SDQ – Total EBD Problems

| | Baseline | 6 mos |
|---|---|---|
| Wrap (n=42) | 35.6 | 34.1 |
| ICM (n=34) | 34.9 | 31.5 |

## SDQ – Burden on Family

| | Baseline | 6 mos |
|---|---|---|
| Wrap (n=42) | 2.09 | 1.79 |
| ICM (n=34) | 1.99 | 1.65 |
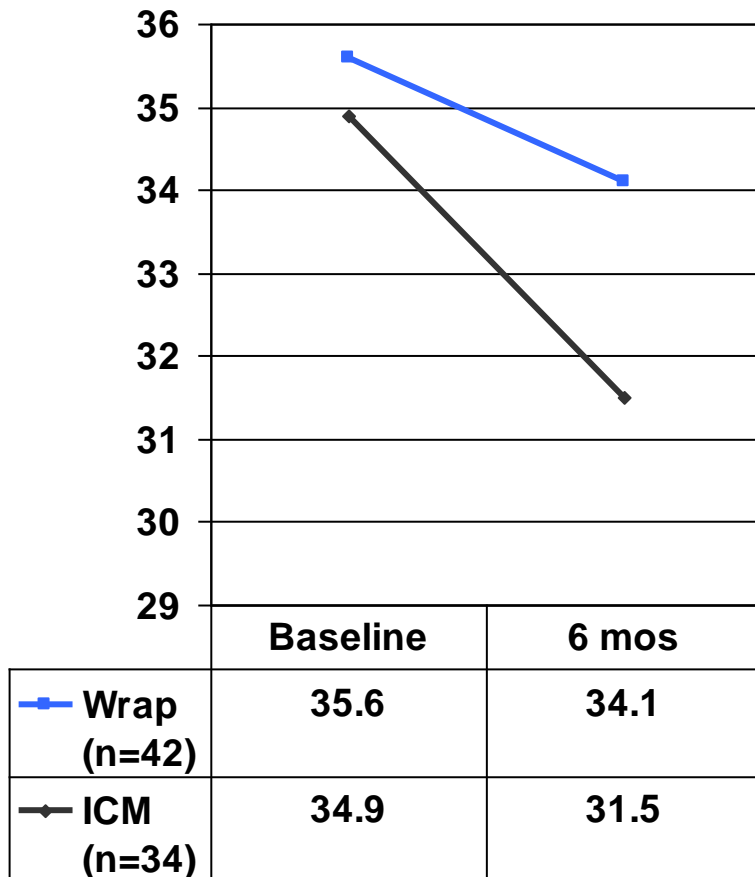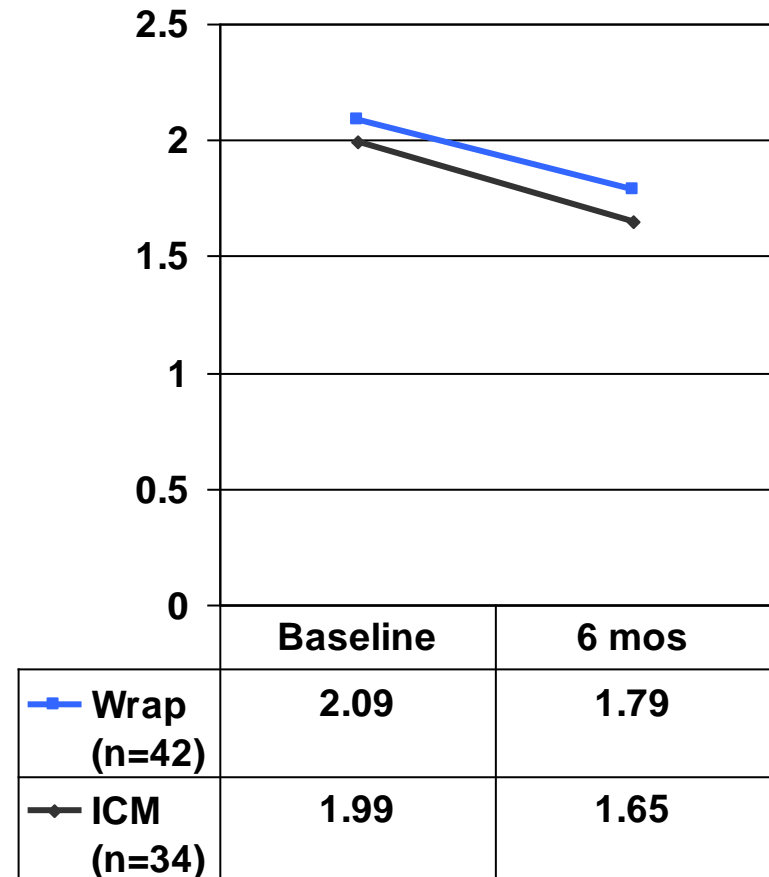
# Child/Adolescent Functioning
# 6 month outcomes – Intent to Treat (n=81)

CAFAS Total Performance Score



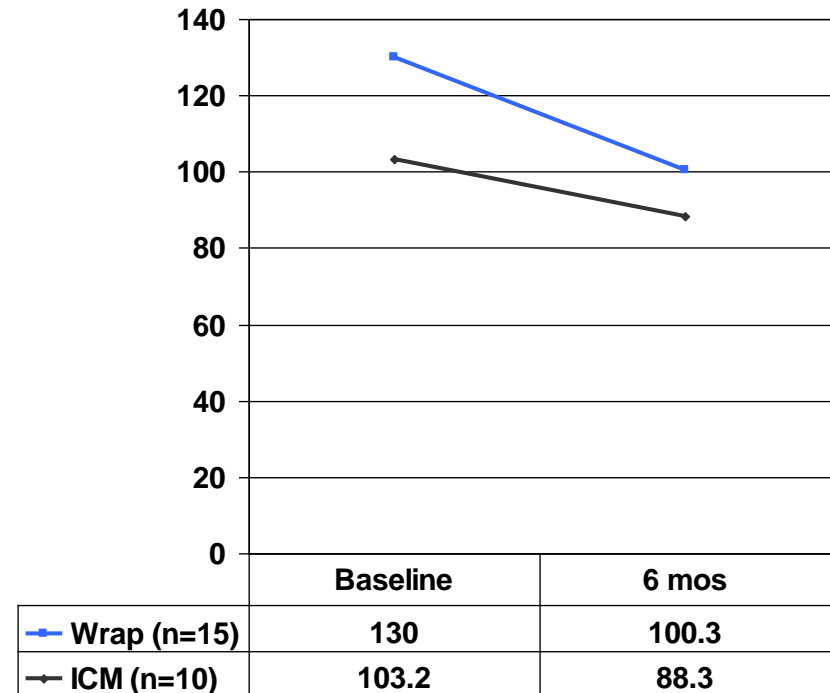| | Baseline | 6 mos |
|---|---|---|
| ■ Wrap (n=44) | 119.5 | 104.5 |
| ◆ ICM (n=37) | 99.7 | 88.1 |
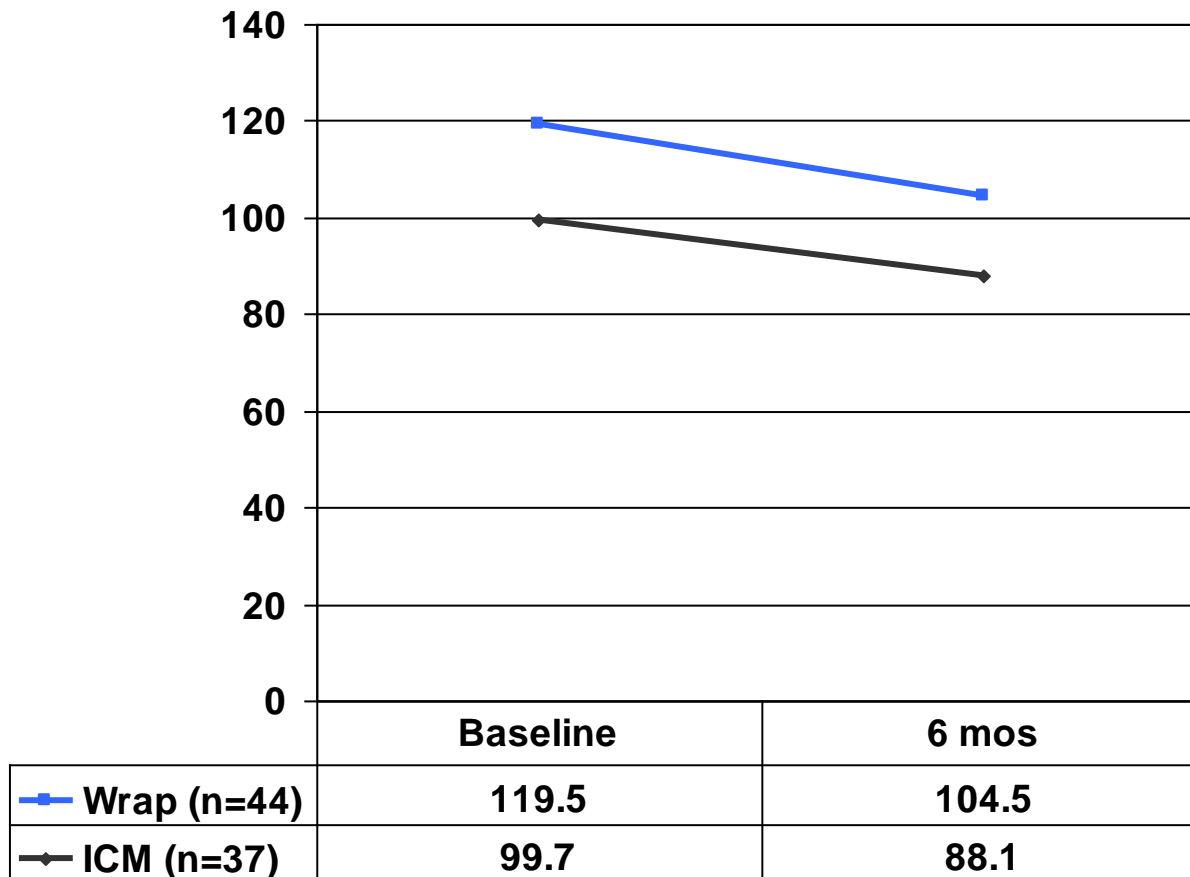
# Research Questions: For future analysis

- Are there differences in outcomes for different types of youth and families?
  - E.g., Youth in CW custody vs. family custody
  - Youth who received service vs. did not
- What are the costs and cost-benefits of the two models?
- How important is "wraparound fidelity" to achieving outcomes?
  - At a family, facilitator, service type, or region level

# Child/Adolescent Functioning
# 6 month outcomes by custody type

### CAFAS Total: DFS Custody

| | Baseline | 6 mos |
|---|---|---|
| Wrap (n=29) | 111.8 | 104.8 |
| ICM (n=27) | 97 | 88.5 |
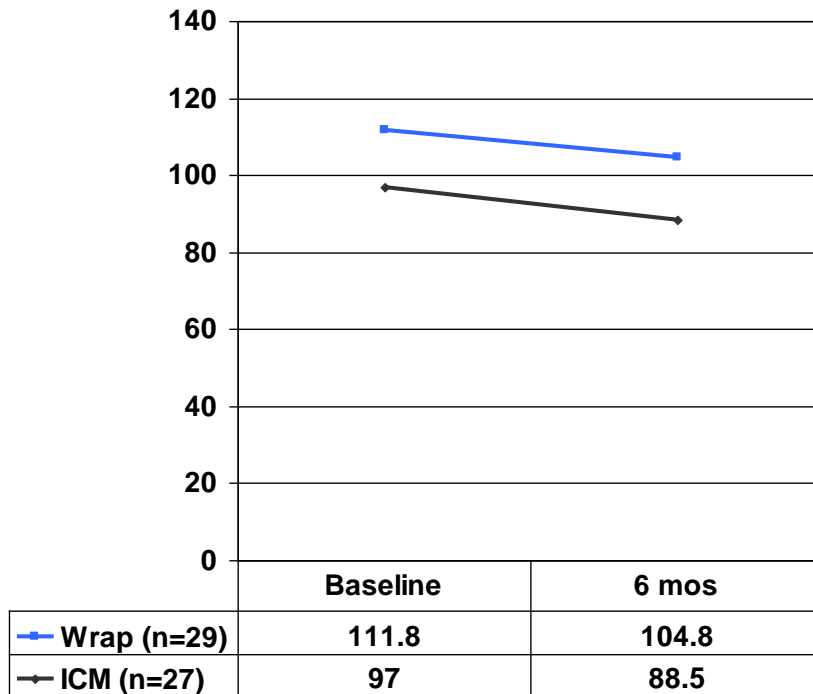
### CAFAS Total: Parental/Family Custody*

| | Baseline | 6 mos |
|---|---|---|
| Wrap (n=15) | 130 | 100.3 |
| ICM (n=10) | 103.2 | 88.3 |

*p<.1

**NOTE:** No other significant between-group differences found by custody group across 10 total outcomes assessed

# Summary of Short-term Outcomes

- Trend toward greater CG satisfaction for wraparound group

- Trend toward greater youth satisfaction for ICM group

- WA facilitators perceive greater therapeutic alliance with family; however, caregivers report greater alliance with ICM case managers

- CGs in wraparound group report greater community-level empowerment on FES

# Summary of Youth Outcomes

- Trends in favor of WA group for residential placement outcomes
  - However, differences at baseline make difficult to interpret
- No differences in behavioral or functional outcomes at 6 months for full study sample
  - 12 month data collection not complete
  - Administrative data not yet compiled
- Marginally significant difference in CAFAS outcomes for parental custody group
  - However, no other differences found; possibly due to chance or greater likelihood of regression to mean

# What does it all mean?

- Achieving residential outcomes continues to be WA's strong suit
- Overall outcomes for WA attenuated in context of:
  - Relatively low fidelity
  - Poor system supports
    - Lack of collaboration among systems
    - Little training, coaching, or support to data-driven supervision
  - Less favorable organizational climate and culture
- Emotional/behavioral outcomes trend toward ICM group
  - Case manager as therapist = More appropriate and consistent use of clinical services?
- WA provides greater enhancement to services for caregivers than youth
- WA implementation in child welfare context can be problematic

# Big Picture Implications

- As is so often the case with EBPs, going to scale is difficult
  - Must pay attention to implementation at service, organizational, and system levels
- Outcomes for a wraparound initiative that is:
  - not supported by high-quality training and coaching…
  - implemented in absence of necessary system supports…
  - implemented under stressful organizational conditions…
  - not adhering to core aspects of the model…
    - … are unlikely to better than for well-supported intensive case management
- More service is not necessarily better
- More controlled studies of wraparound in "real world" systems, and *under conditions of greater fidelity controls* are needed
  - Or, controlled research that compares implementation conditions – how much does fidelity matter