



Learning from CANS to Inform Wraparound Initiatives: Discoveries and Challenges

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November 18, 2016
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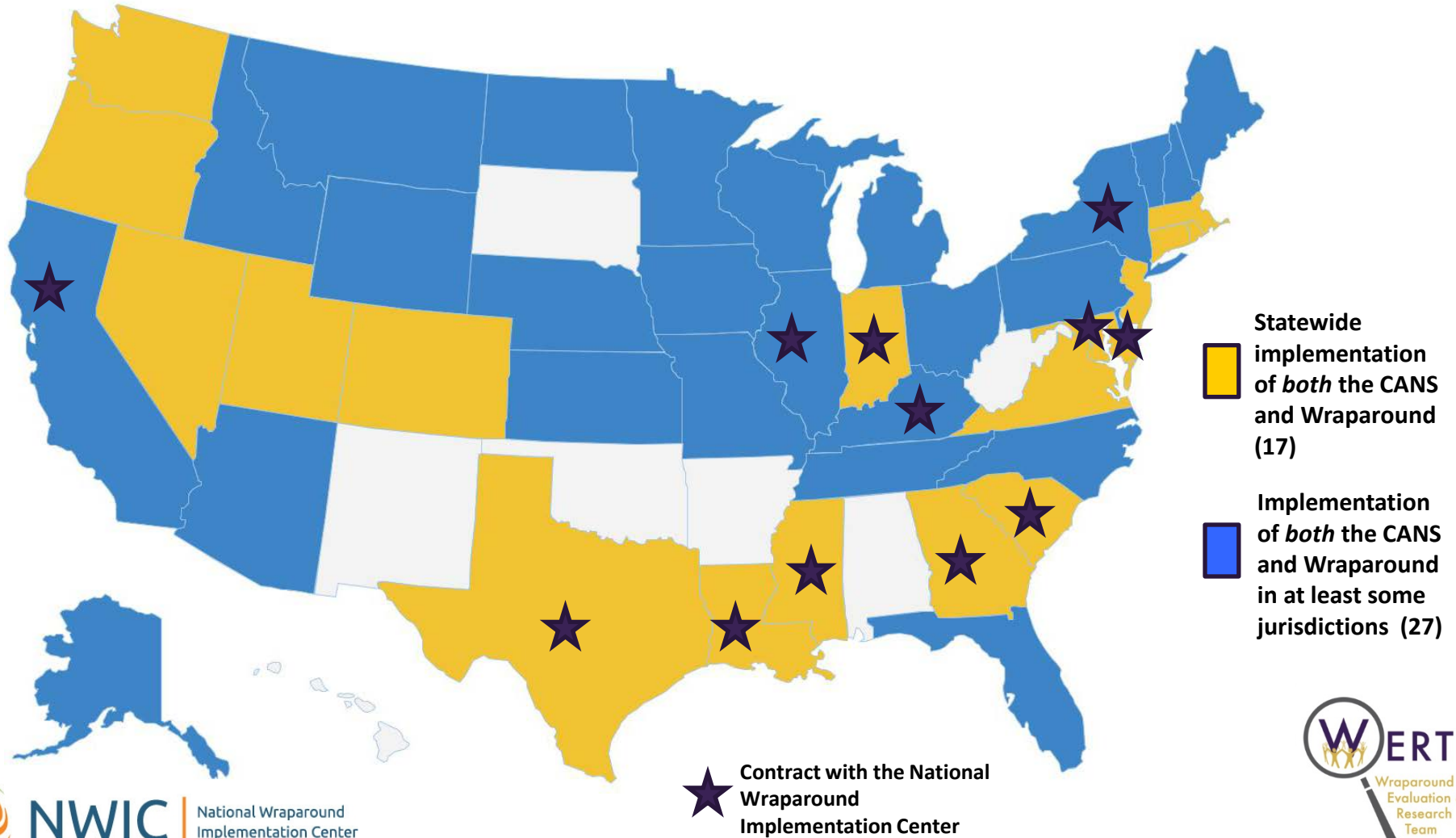
ChapinHall
at the University of Chicago

THANK YOU:

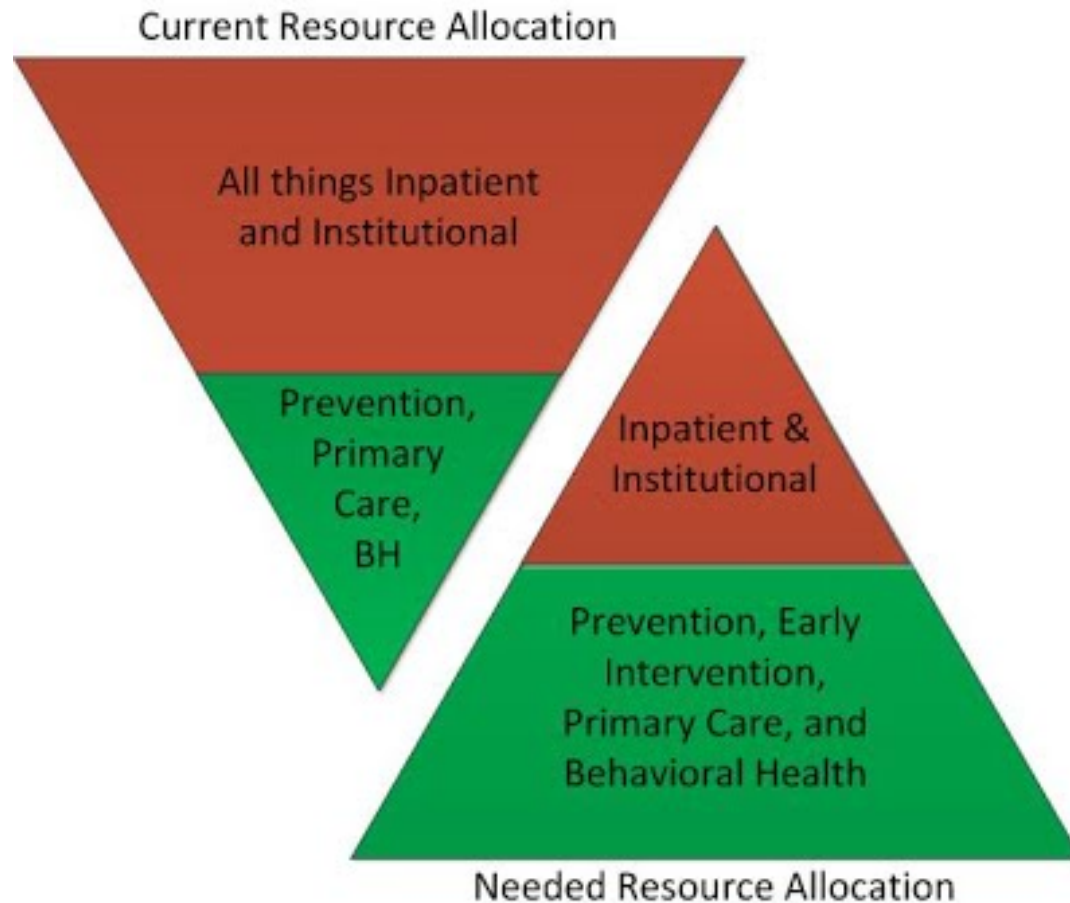
John Lyons
Nathaniel Israel
CANs users nationally! (you know who you are)

April Fernando
Mark Lardner

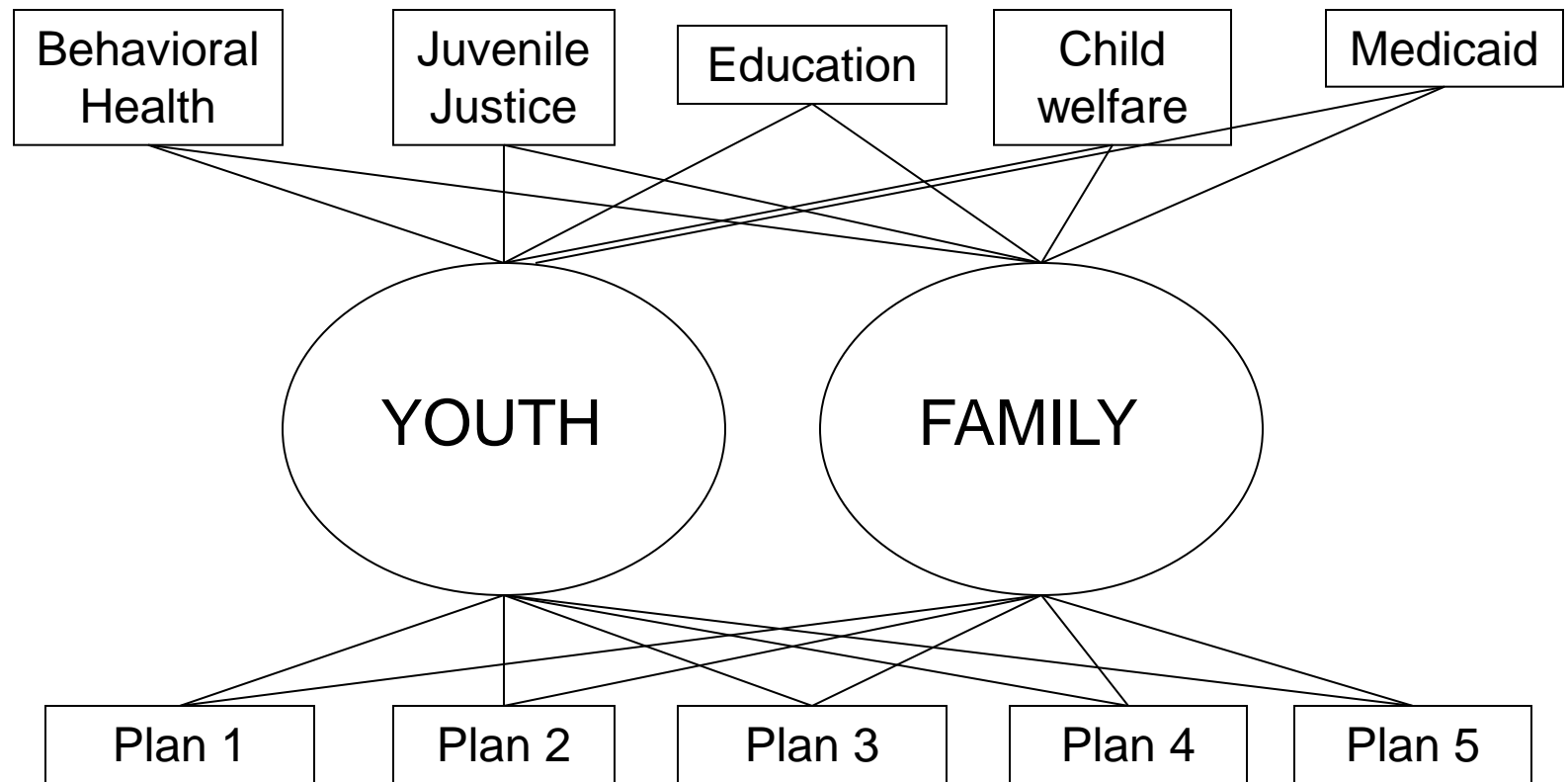
CANS and Wraparound are being implemented in nearly every state



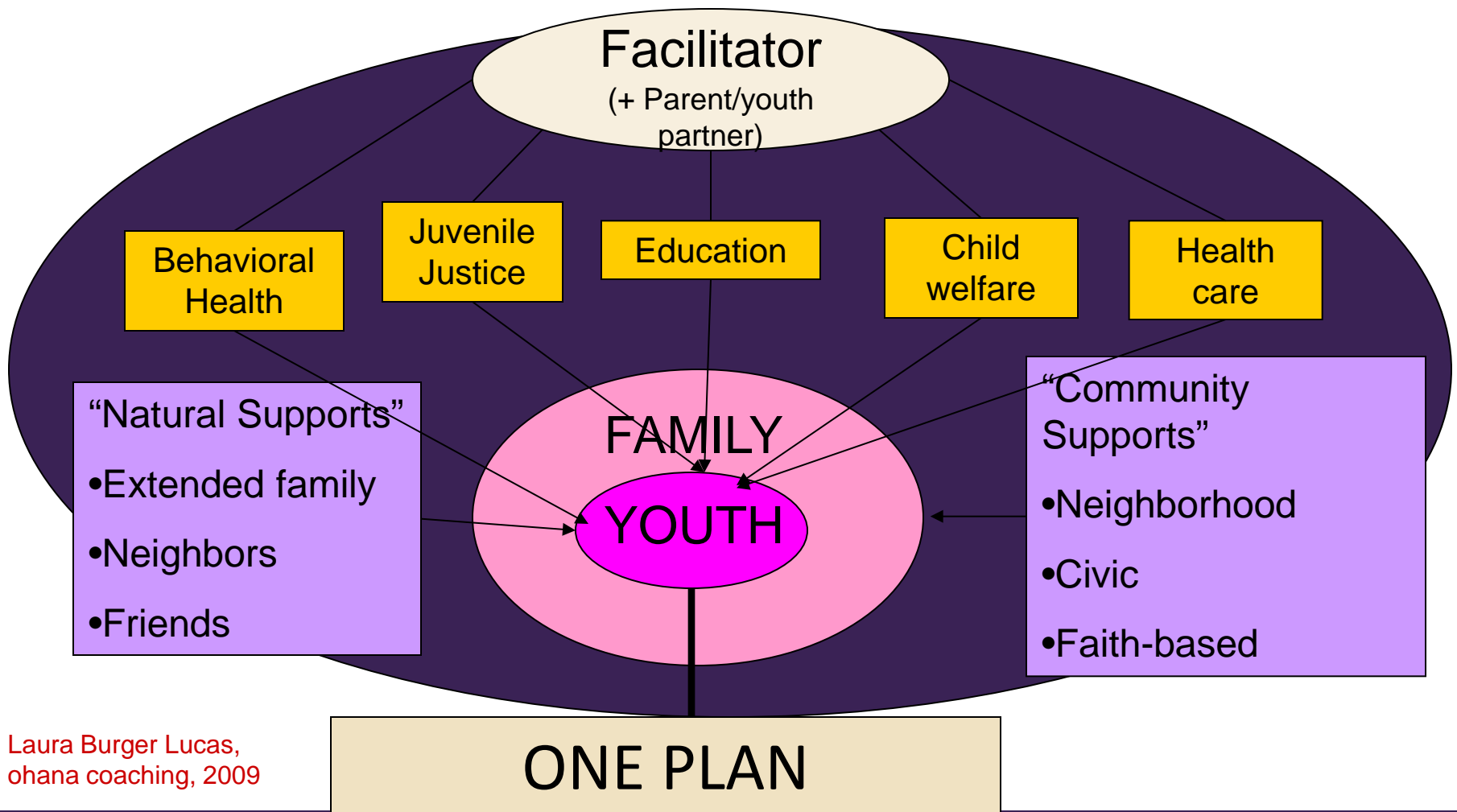
The system and practice agenda: “Flipping” the triangle



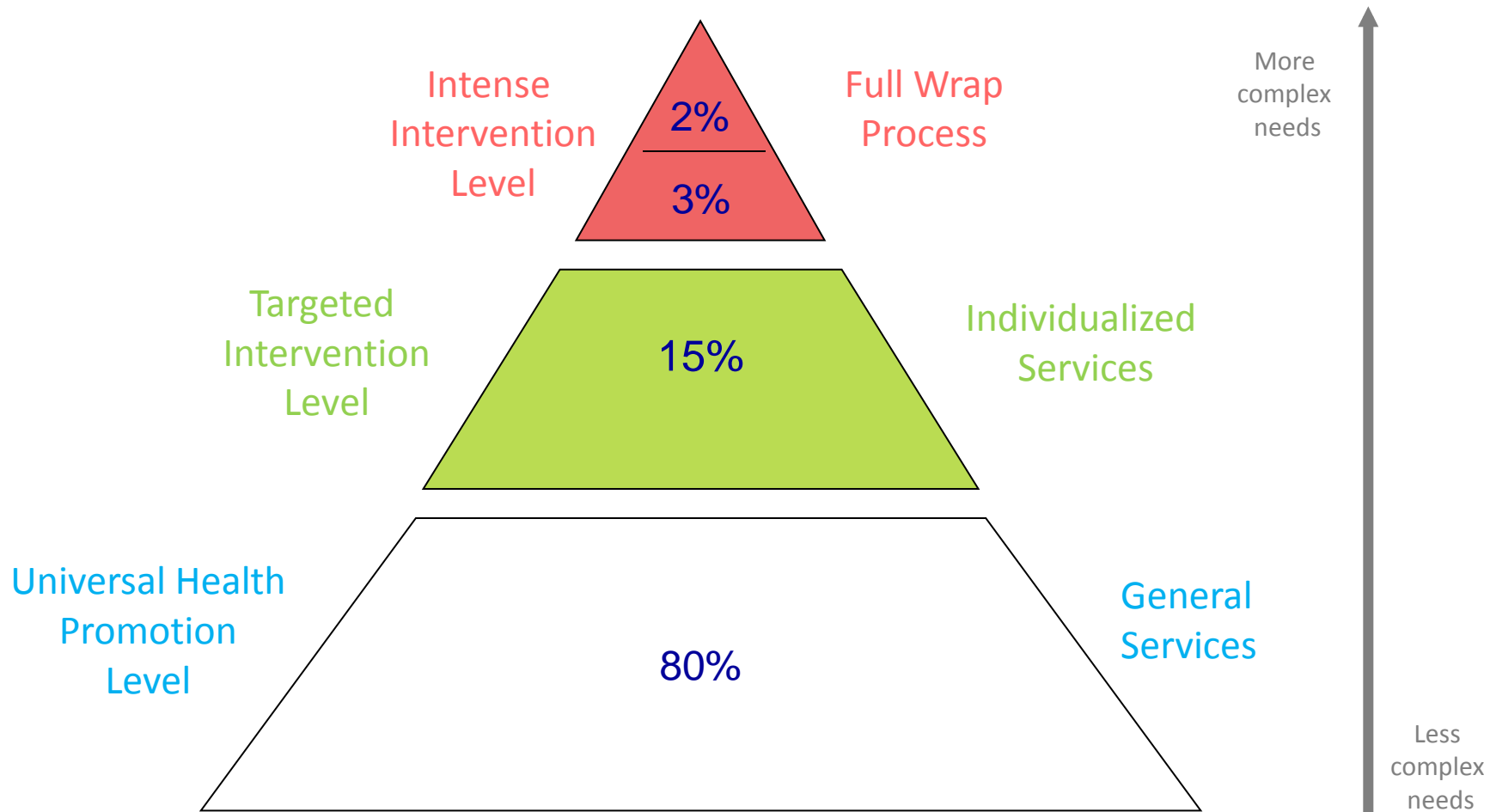
The silo issue: Traditional services rely on professionals and result in multiple plans



In wraparound, a facilitator coordinates the work of system partners and other natural helpers so there is one coordinated plan



Wraparound at the top of the population served in a systems of care



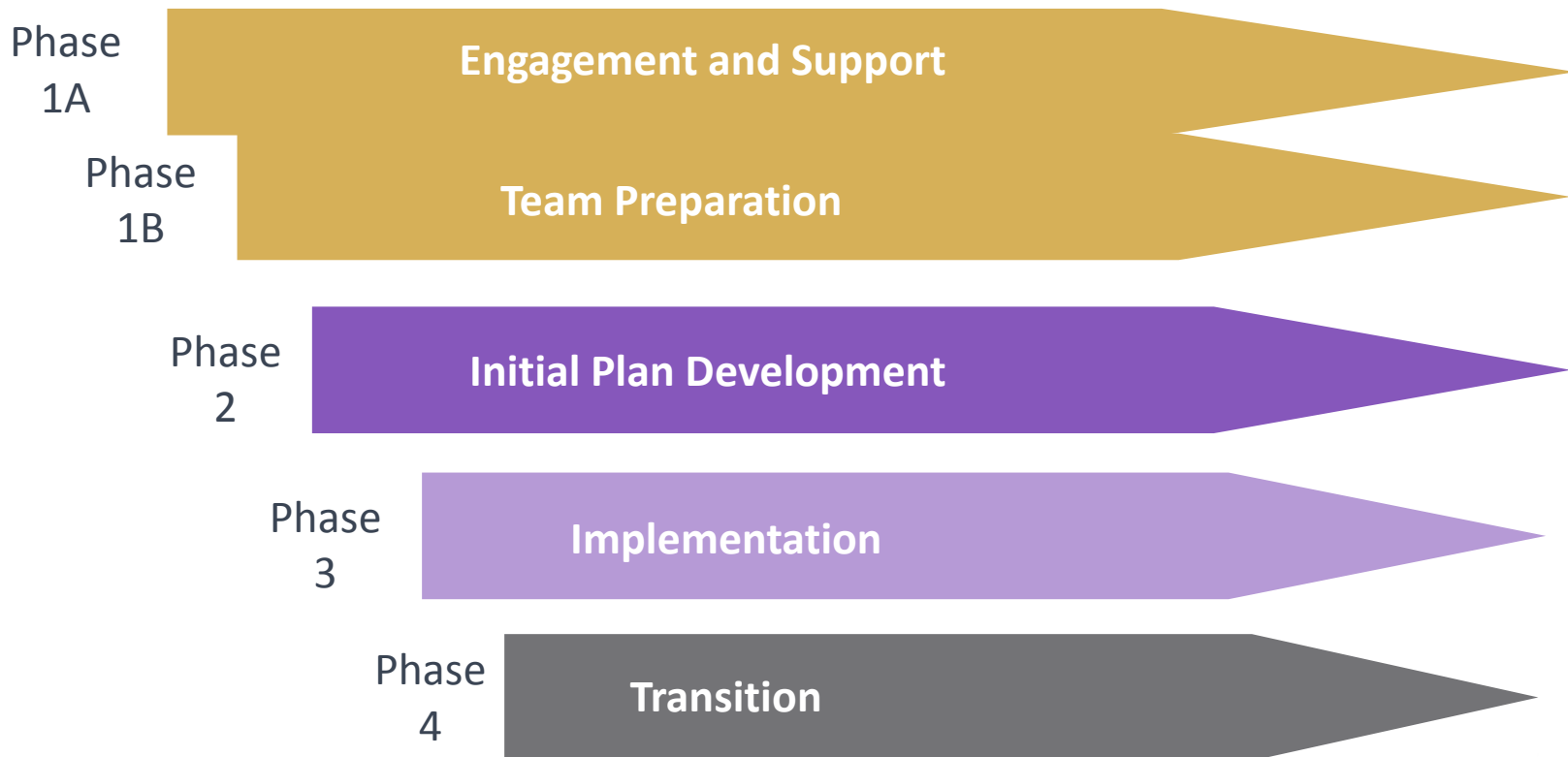
Research-based components of the wraparound process

- Integration of care
 - Multiple systems working together -> one coordinated plan
- High-quality teamwork
 - Blended perspectives, creative brainstorming, shared mission
- Family / youth engagement
 - Engagement phase with active listening and MI components
 - **Youth/family set priorities, develop needs statements**
 - Examining and addressing potential barriers
 - Appointment and task reminders/check-ins

Research-based components of the wraparound process

- Attention to social support (e.g., via peers, natural and community supports)
- Broad service array to meet needs, including research-based practices
- Clear, shared goals with measurement and feedback of progress

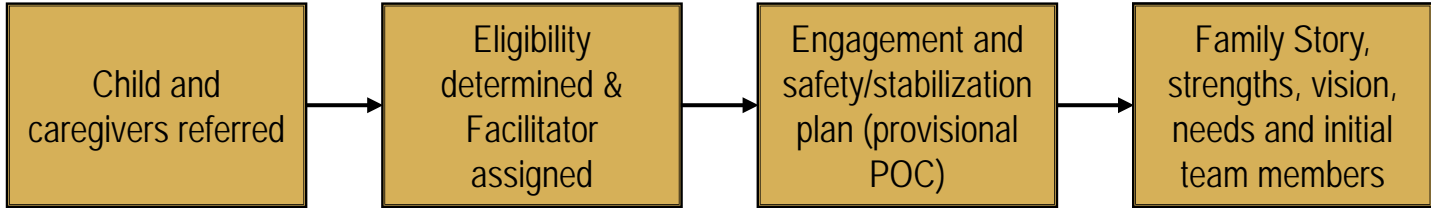
The Phases of Wraparound



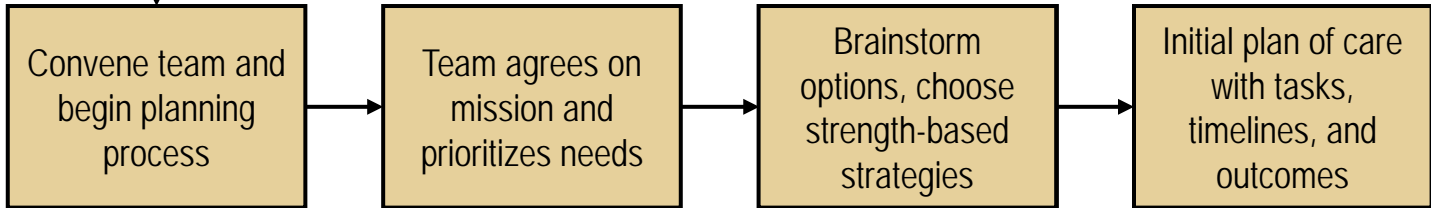
An Overview of the Wraparound Process

Phase

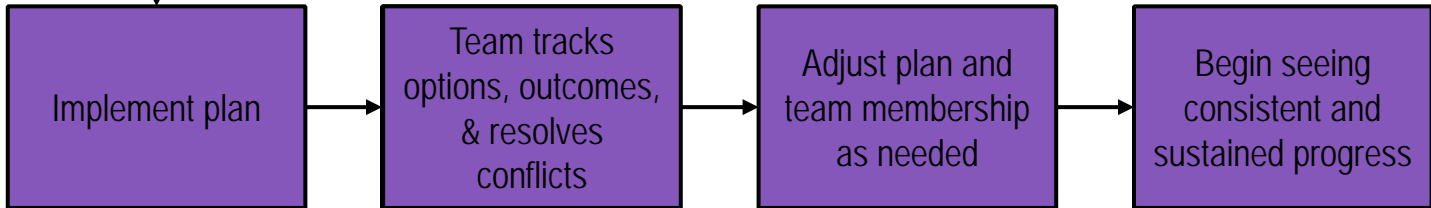
Engagement & Preparation:
Up to 30 days



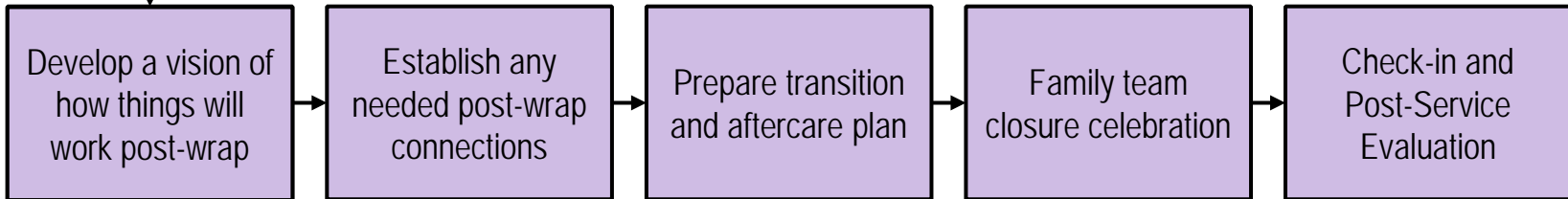
Planning:
1 meeting also within first 30 days



Implementation:
9-18 months



Transition:
4-6 weeks



What is the research base?

13 Published Controlled Studies of Wraparound

Study	System	Control Group Design	Comparison Tx	N
1. Hyde et al. (1996)*	Mental health	Non-equivalent	Traditional Resid./comm. services	69
2. Clark et al. (1998)*	Child welfare	Randomized	Child welfare services as usual	132
3. Evans et al. (1998)*	Mental health	Randomized	Traditional CW/MH services	42
4. Bickman et al. (2003)*	Mental health	Non-equivalent	Mental health services as usual	111
5. Carney et al. (2003)*	Juvenile justice	Randomized	Conventional JJ services	141
6. Pullman et al. (2006)*	Juvenile justice	Historical	Traditional mental health services	204
7. Rast et al. (2007)*	Child welfare	Matched	Traditional CW/MH services	67
8. Stambaugh et al (2007)	Mental health	Non-equivalent	Multisystemic Therapy (MST)	320
9. Rauso et al. (2009)	Child welfare	Matched	Residential services	210
10. Mears et al. (2009)	MH/Child welfare	Matched	Traditional child welfare services	121
11. Grimes et al. (2011)	Mental health	Matched	Usual care	211
12. Bruns et al. (2014)	Child welfare	Randomized	Intensive Case Management	93
13. Jeong et al. (2014)	Juvenile justice	Non-equivalent	Other court-ordered programs	228

*Included in 2009 meta-analysis (Suter & Bruns, 2009)

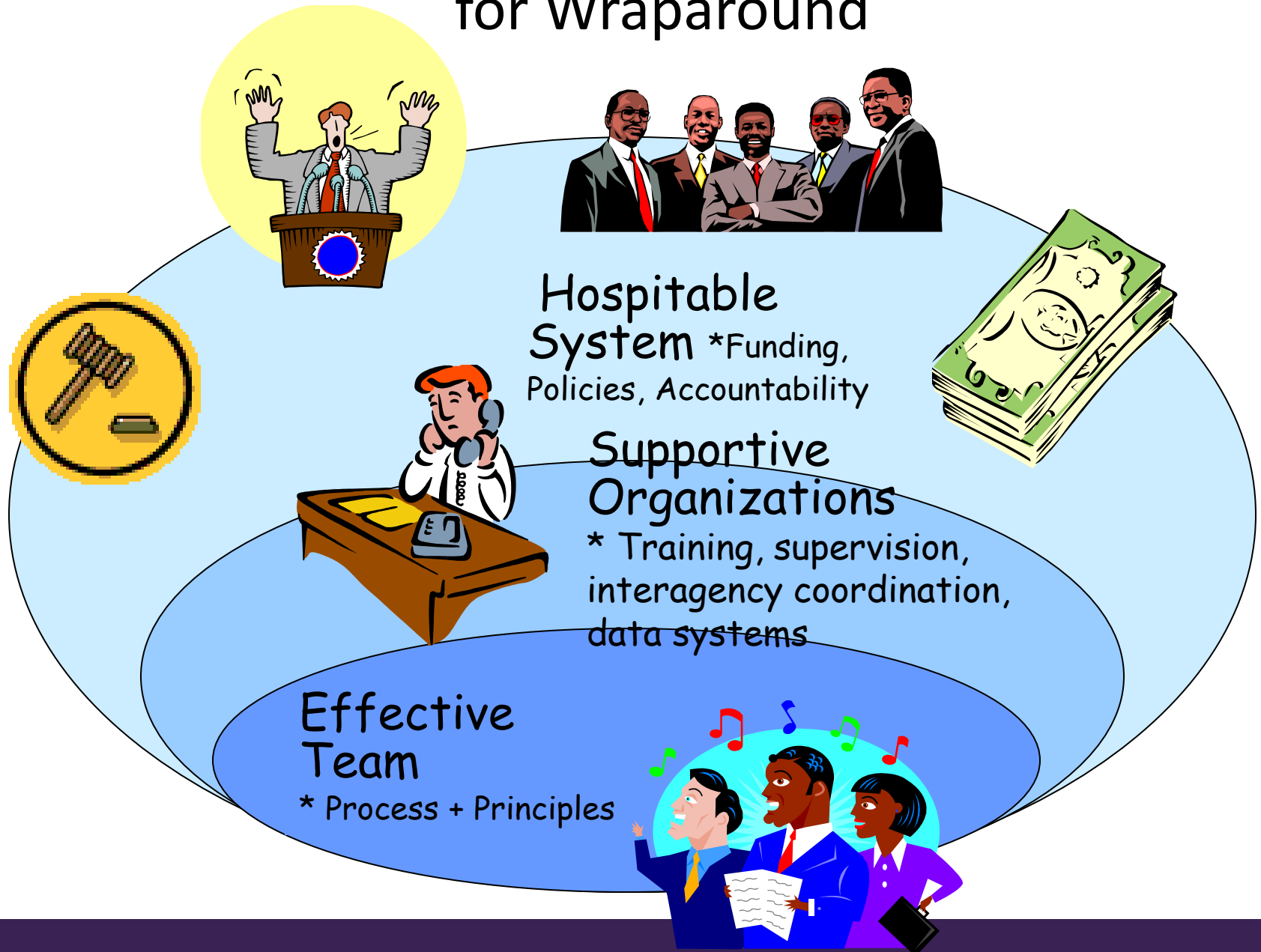
Outcomes of wraparound

(13 controlled, published studies; Bruns & Suter, 2010)

- Better functioning and mental health outcomes
- Reduced arrests and recidivism
- Increased rate of case closure for child welfare involved youths
- **Reduced residential placements**
- **Reduced costs**



Necessary Community and System Supports for Wraparound



Necessary program and system conditions for effective Wraparound

1. **Community partnership:** *Do we have productive collaboration across our systems and stakeholders?*
2. **Fiscal policies:** *Do we have the funding and fiscal strategies to meet the needs of children?*
3. **Service array:** *Do teams have access to the services and supports they need to meet families' needs?*
4. **Human resource development:** *Do we have the right jobs, caseloads, and working conditions? Are people supported with coaching, training, and supervision?*
5. **Accountability:** *Do we use tools that support effective decision making and tell us whether we are successful?*

Decision support promoted by CANS/TCOM

	Family and Youth	Program	System
Decision Support	<ul style="list-style-type: none"> Care planning Effective practices Selection of EBPs 	<ul style="list-style-type: none"> Eligibility Step-down Transition 	<ul style="list-style-type: none"> Resource Management Right-sizing
Outcome Monitoring	<ul style="list-style-type: none"> Service transitions Celebrations Plan of care revision 	<ul style="list-style-type: none"> Evaluation of Outcomes 	<ul style="list-style-type: none"> Evaluation Provider profiles Performance contracting
Quality Improvement	<ul style="list-style-type: none"> Care management Supervision 	<ul style="list-style-type: none"> Continuous quality improvement Program (re)design 	<ul style="list-style-type: none"> Transformation Business model design

From Lyons, 2012

Points of CANS and Wraparound connection at Family and Youth Level

- Focus on the whole family, not just the “identified child”
- Base planning on presence of Needs and Strengths rather than symptoms or deficits
 - Prioritize issues that demand action (Needs) or that could be leveraged into productive strategies that bolster the family’s existing capacities (Strengths)
- Individualization of care
- Data-informed planning
- Effective teamwork
- Promoting transparency

Program and system decision support promoted by CANS/TCOM

	Family and Youth	Program	System
Decision Support	<ul style="list-style-type: none"> Care planning Effective practices Selection of EBPs 	<ul style="list-style-type: none"> Eligibility Step-down Transition 	<ul style="list-style-type: none"> Resource Management Right-sizing
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Information needed to promote wrap program/system decision support

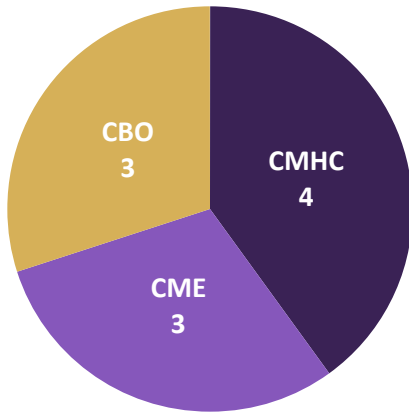
- Are our services “right sized” to youth and families’ level of complexity?
- What kinds of services and supports will meet the profile of youth/family needs?
- Are we achieving positive outcomes?
 - For youth/families?
 - At a program level?
 - At a system level?

National CANS and Wrap data project

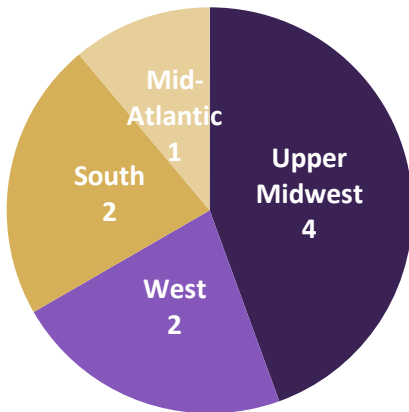
- In 2015 had CANS data from four Wraparound initiatives and explored the following aims:
 - What are the typical strengths and needs of wraparound-enrolled youth and families?
 - What are “benchmarks” for trajectories of improvement on CANS over time?
 - What is the variation in CANS profiles by youth, states, and sites?
- Site-level differences explained the most variation in scores, **therefore set out to add more sites to the dataset for further analysis**

We now have CANS data from 10 large wraparound initiatives

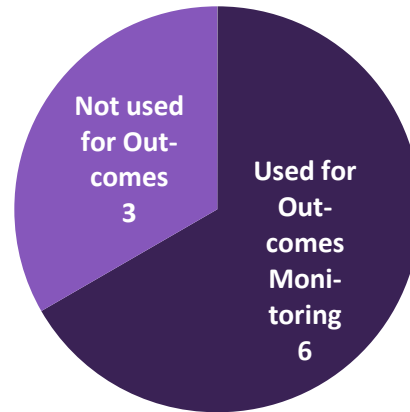
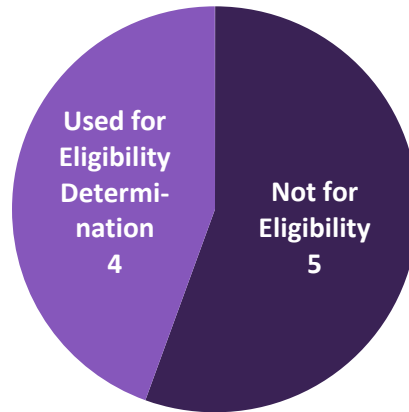
Provider Type



Site Region



System-Level CANS Usage



- Care Coordinators typically completed the CANS; external assessors were used in one site
- One site had very few baseline to six-month matched CANS, and therefore was excluded from the analysis

Combining CANS data across sites proved to be challenging

- CANS is customized at each site
 - Tools don't just differ on which items are included, but items and scale anchors are often revised
- Over 400 unique CANS items were identified across the 10 sites (including module items)
- Only 40-50 items overlap substantially enough to be compared across all sites

What is different between the CANS across sites?

- Sites include a range of different modules
 - Common modules include: Juvenile Justice, Trauma, Developmental Disability
- There is variation in how sites organize their tools
 - Items are moved between domains and modules
- Sites make subtle changes to the wording of items

Example of variation across sites

- **Example Site 1 Domains**

- Trauma
- Life Functioning
- School
- Child & Family Acculturation
- Child Behavioral/Emotional Needs
- Child Risk Behaviors
- Child Strengths
- Current Caregiver Needs
- Identified Permanent Resource Needs

- **Example Site 2 Domains**

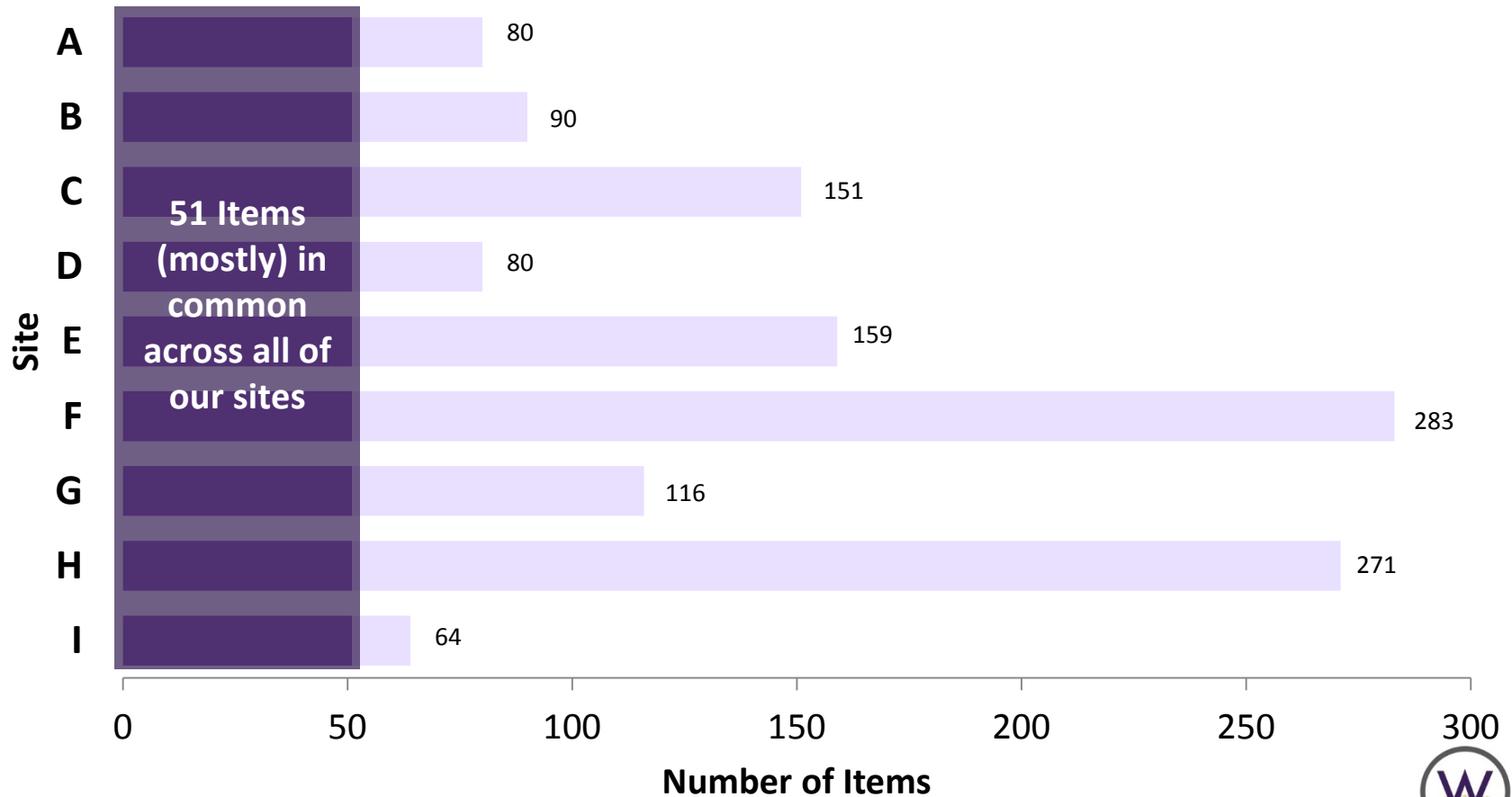
- Strengths
- Home/A Place to Live
- Substance Use
- Educational/Vocational
- Psychological/Emotional
- Health/Medical
- Safety/Crisis
- Legal
- Family/Relationships
- Social/Recreational
- Cultural Spiritual
- Daily Living
- Financial

Sites shared some CANS domains

- Most common “core” domains
 - Child Strengths
 - Life Domain Functioning
 - Emotional/Behavioral Needs
 - Child Risk Behavior
 - Caregiver Strengths and Needs

Variability across wraparound/CANS sites

We found 51 items to focus on in these analyses



We focused on data from n=4,291 youth with matched Baseline/Six Month assessments

All Forms (n=24,328)

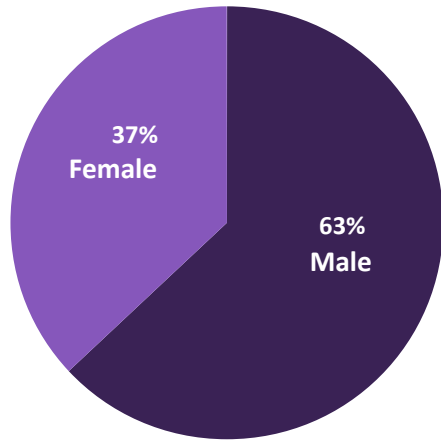
Baseline Forms (n=7,966)

Matched Baseline-6 mo. youth (n=4,291)

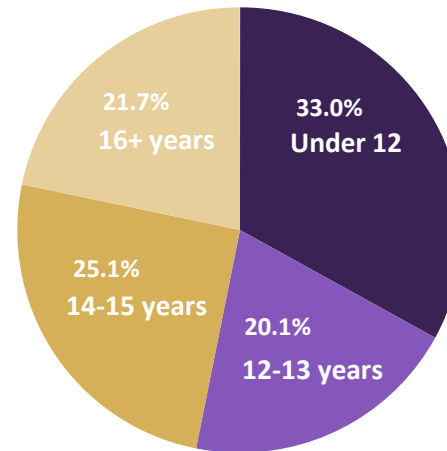
- Assessments done within 45 days (on either side) of Wraparound enrollment date and 6-months

Number of youth by site and site characteristics

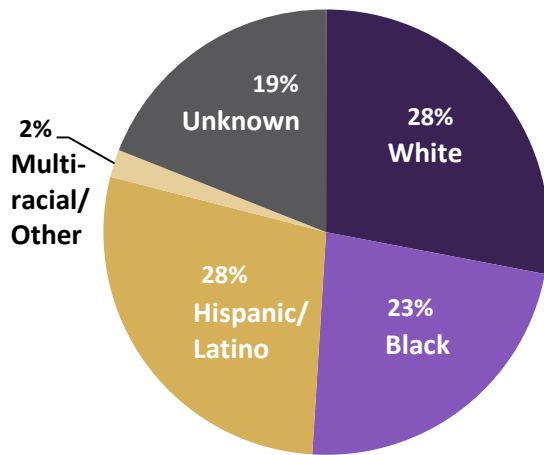
Gender



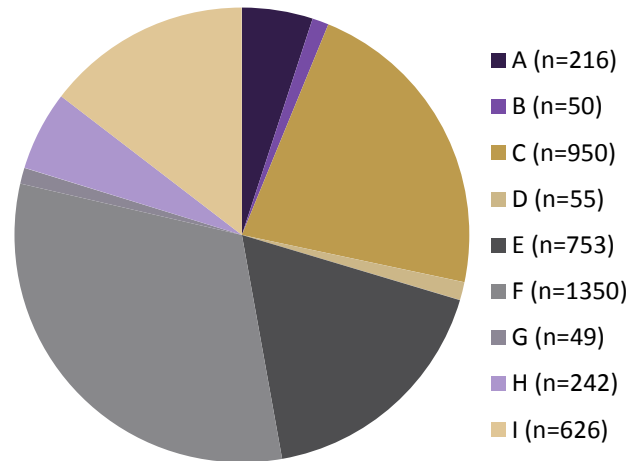
Age at Baseline



Race/Ethnicity



Site



Initial analyses focused on site-level differences in CANS ratings and change

1. Which baseline needs and strengths are most prevalent at each site?
2. How do ratings and change in ratings vary by site?
3. What site-level differences might account for some of the variance in scores and change?



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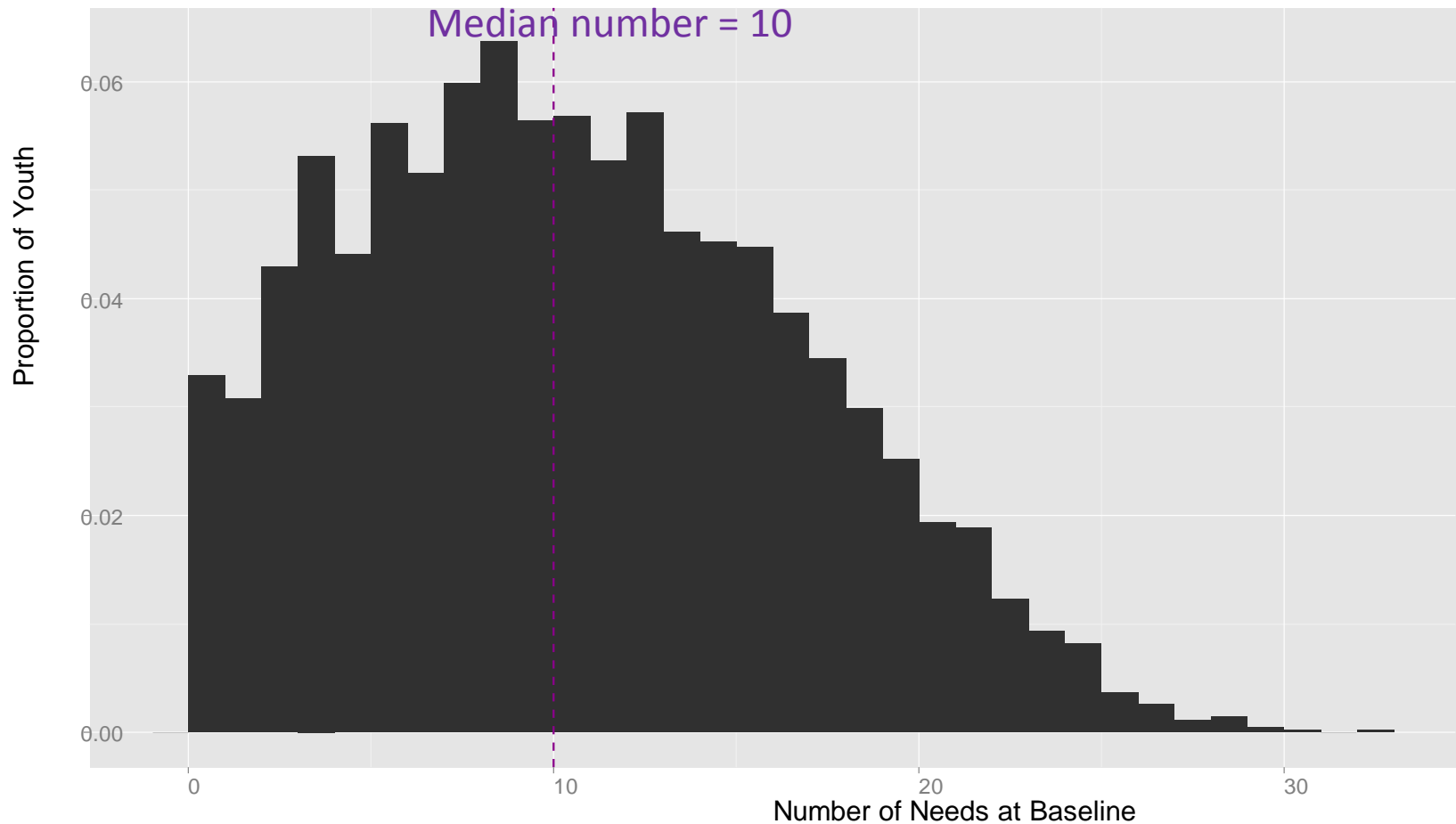
OVERALL RESULTS (N=4,291)

Proud co-partners of:

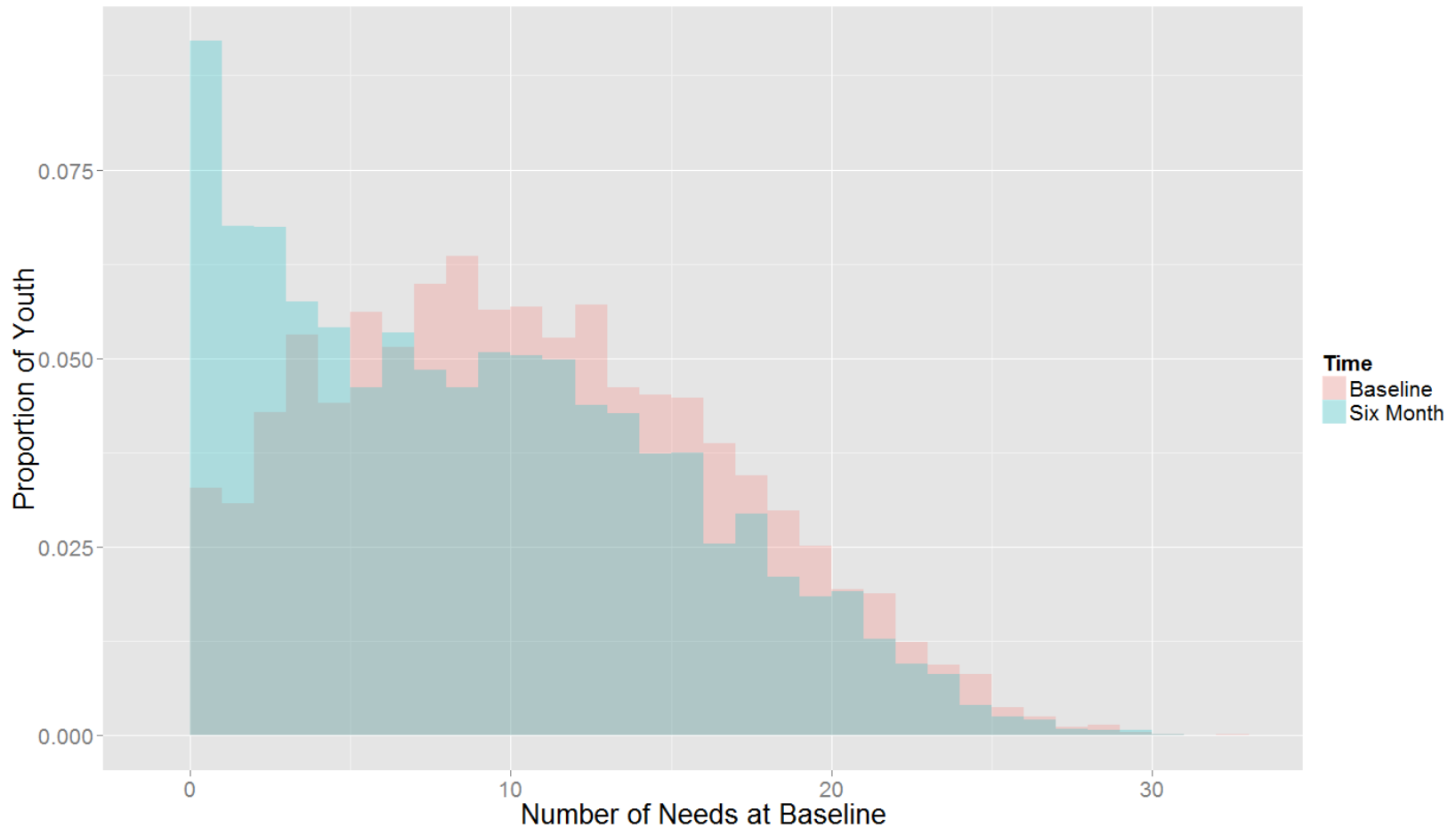


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Youth begin Wraparound with a wide range of actionable needs as assessed by CANS



Youth experience moderate change in the number of actionable needs after six months in Wraparound



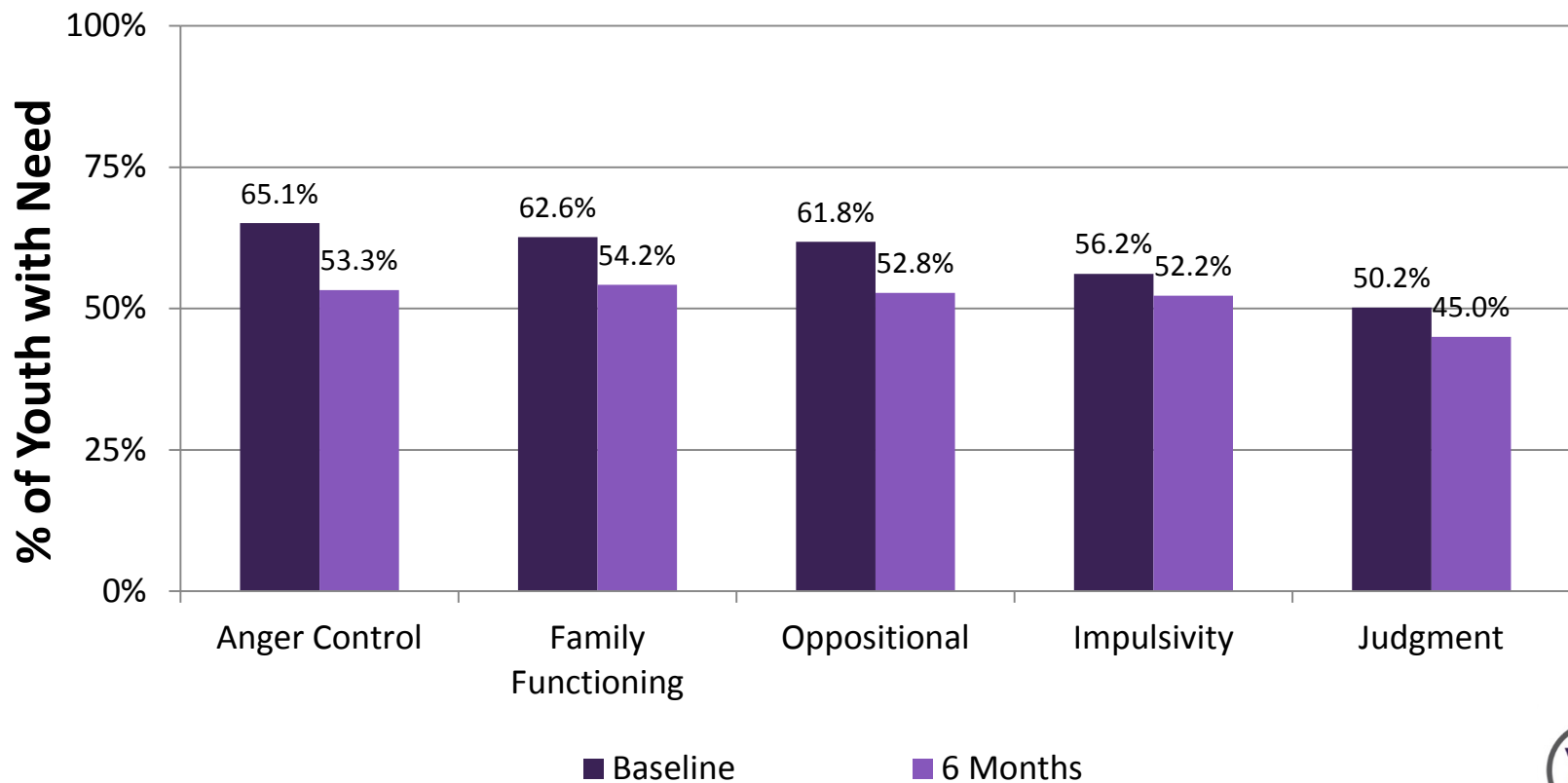
Ways to Conceptualize CANS Change over Time

- Any Mean Change: The difference between the average scores at baseline and discharge. A lower score at discharge indicates improvement.
- Dichotomized Response: The difference between the number of items with a score of 2 or 3 at baseline and discharge. Fewer items scored 2 or 3 at discharge indicates improvement.
- Reliable Change Index (Jacobson & Truax, 1991): Considers the standard error of the instrument at T1 in determining what degree of change at T2 can be considered reliable (i.e., not due to measurement error).

From: Cosgrove, Lardner,
Lee, & Mallon, 2014

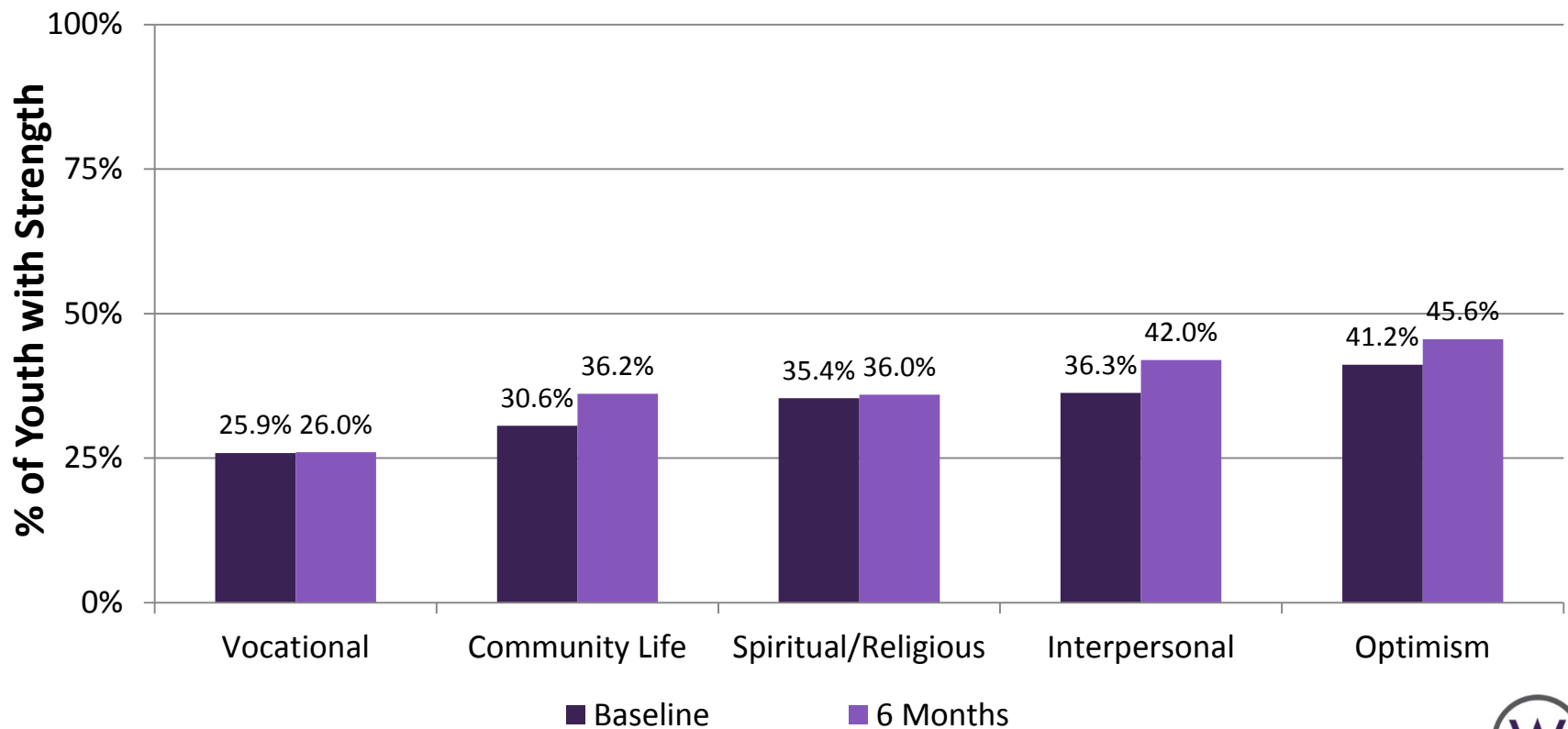
Some Needs are more prevalent than others

Most prevalent needs (rated 2 or 3) at Baseline and 6 Months (n=~4000)

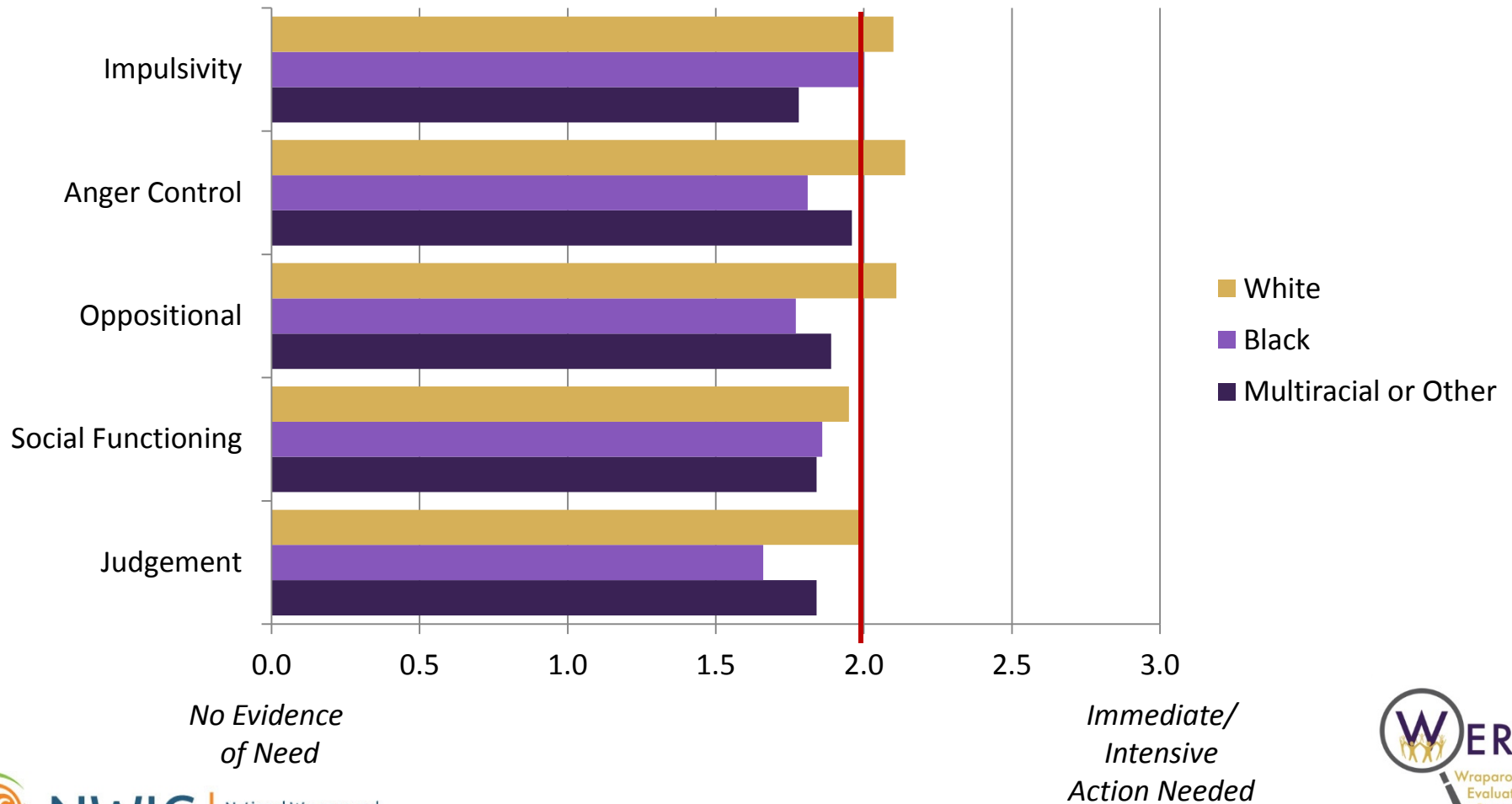


There is variation, also, in the prevalence of Child Strengths

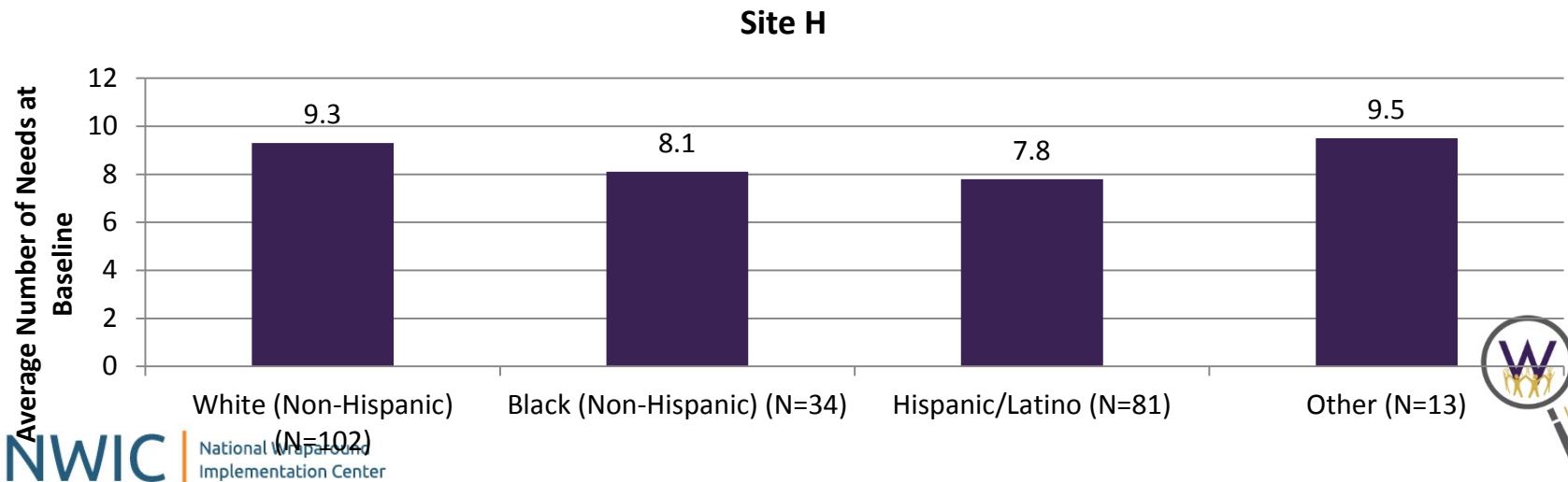
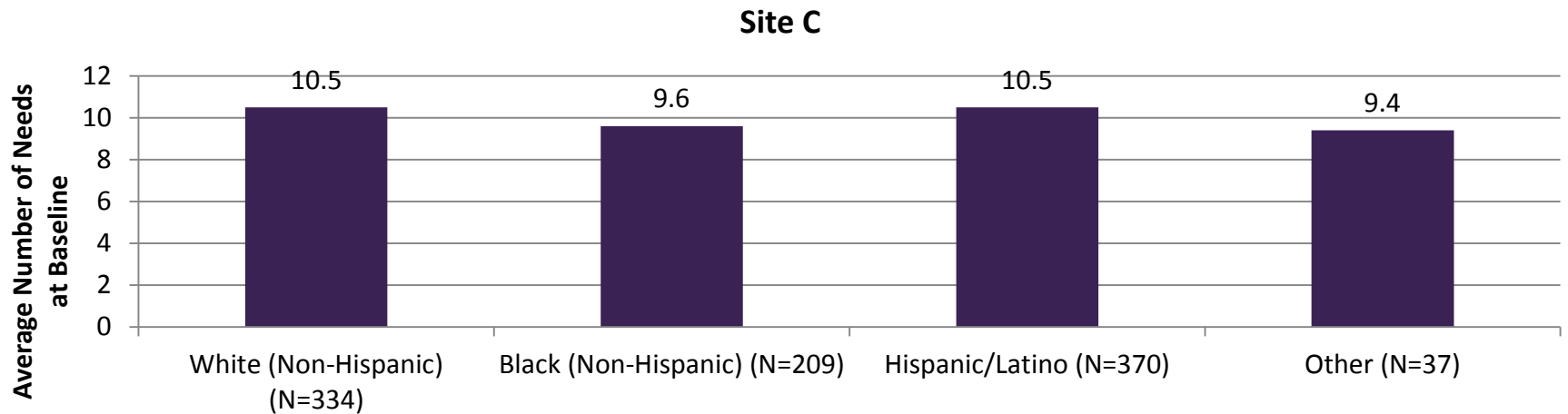
Least prevalent strengths (rated 0 or 1) at Baseline and 6 Months (n~4000)



Data from Total sample (2015): Black and multiracial youth enter Wraparound assessed with significantly fewer actionable needs



It turns out: Number of total actionable needs at baseline within sites is non-significant by race





Learning from CANS to Inform Wraparound Initiatives

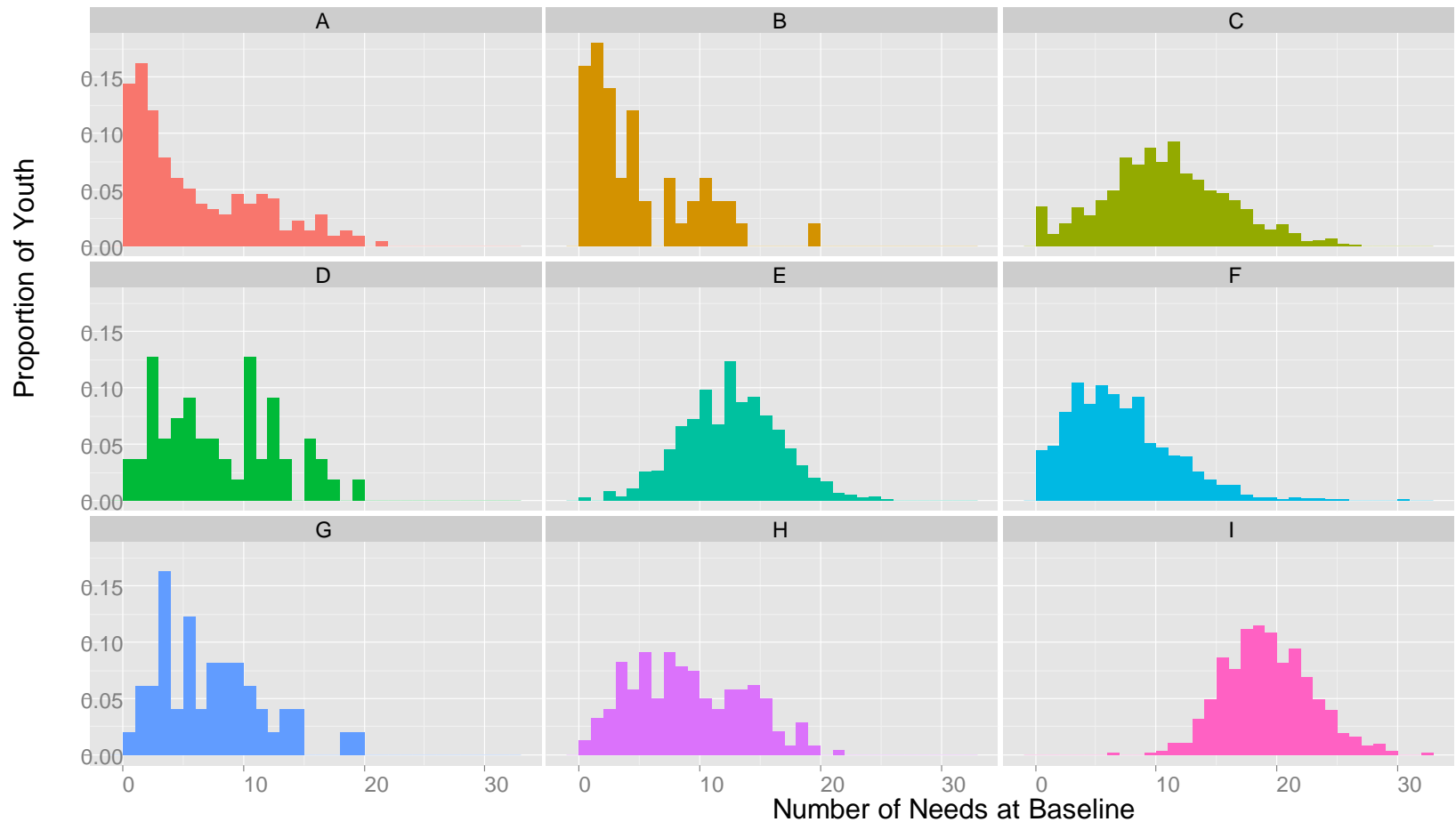
DIFFERENCES BY SITE

Proud co-partners of:

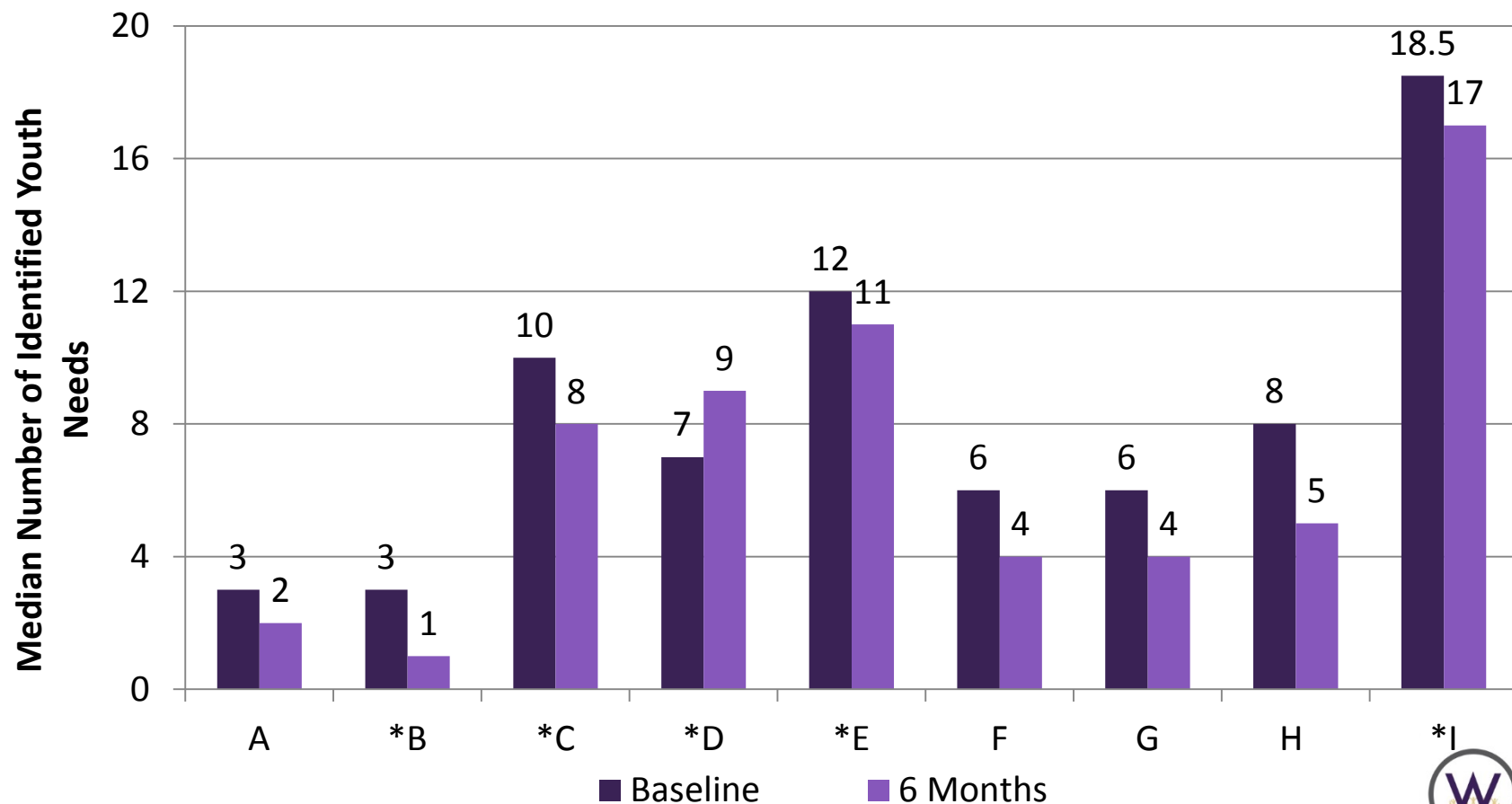


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Considerable site-level variation in the number of Baseline needs

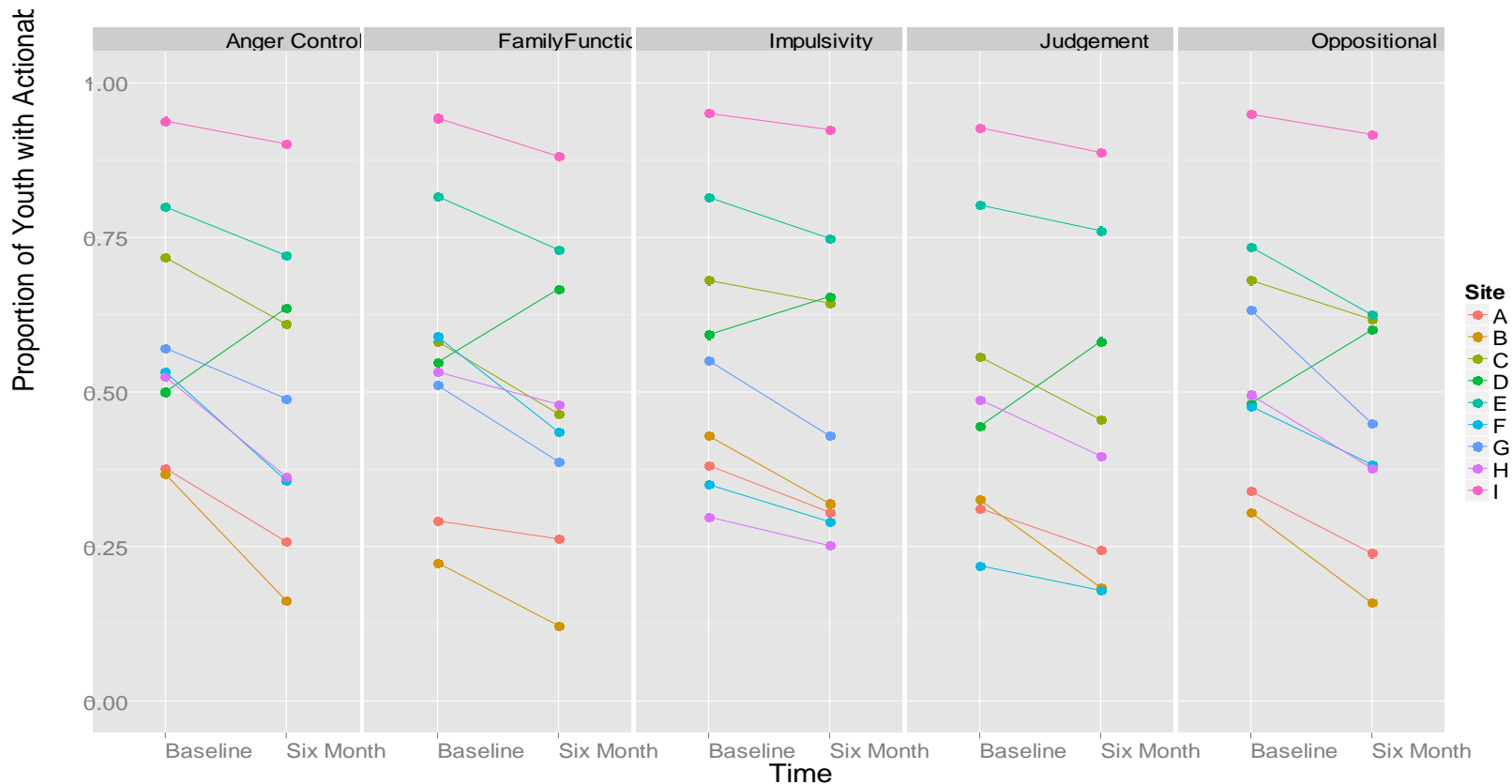


Median N baseline needs varies dramatically by site, but change at 6 mos is very similar



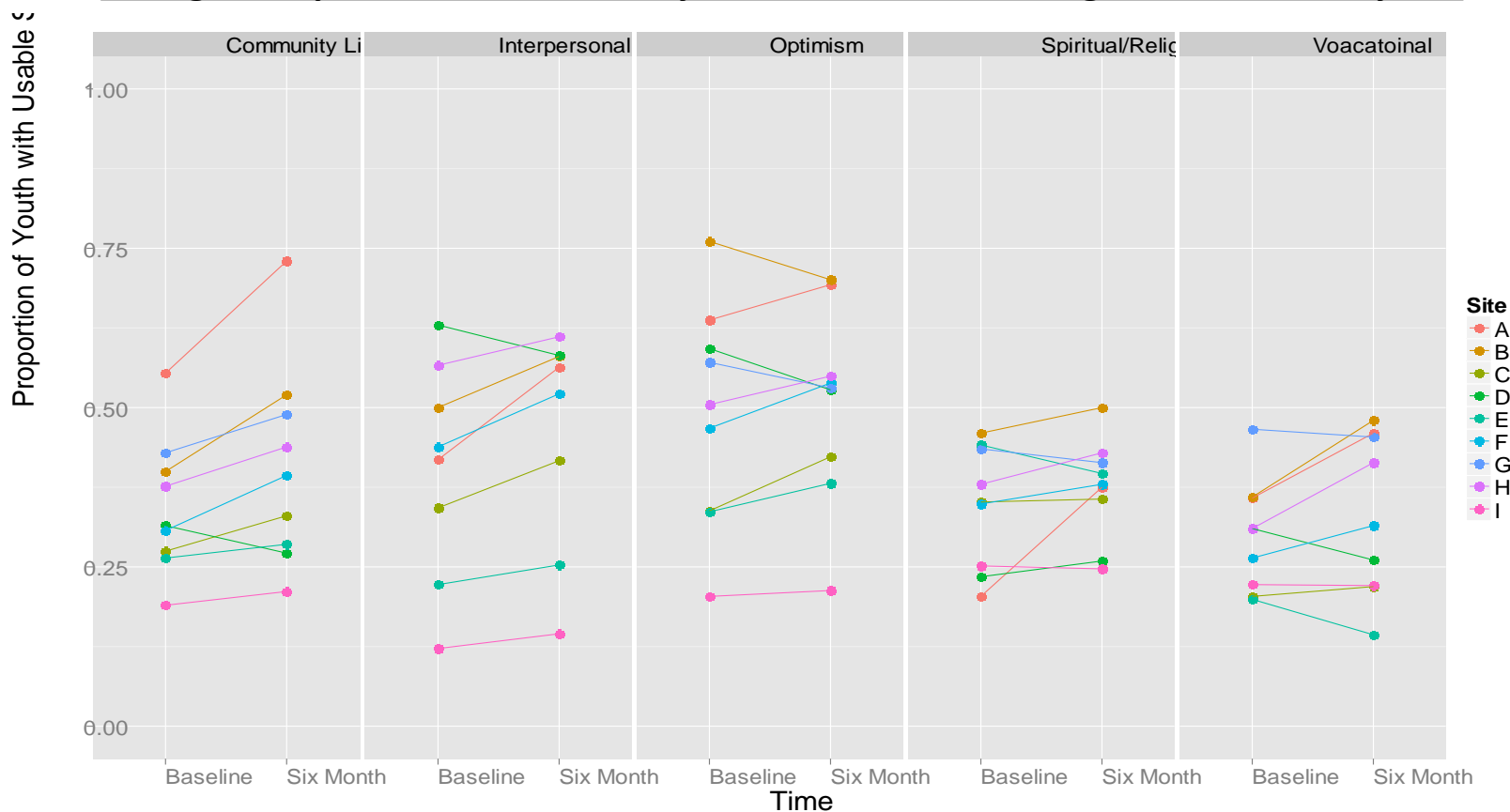
Initial likelihood of needs identification is highly related to site

Ratings of Top Five Most Commonly Prevalent Actionable Needs at Baseline by Site



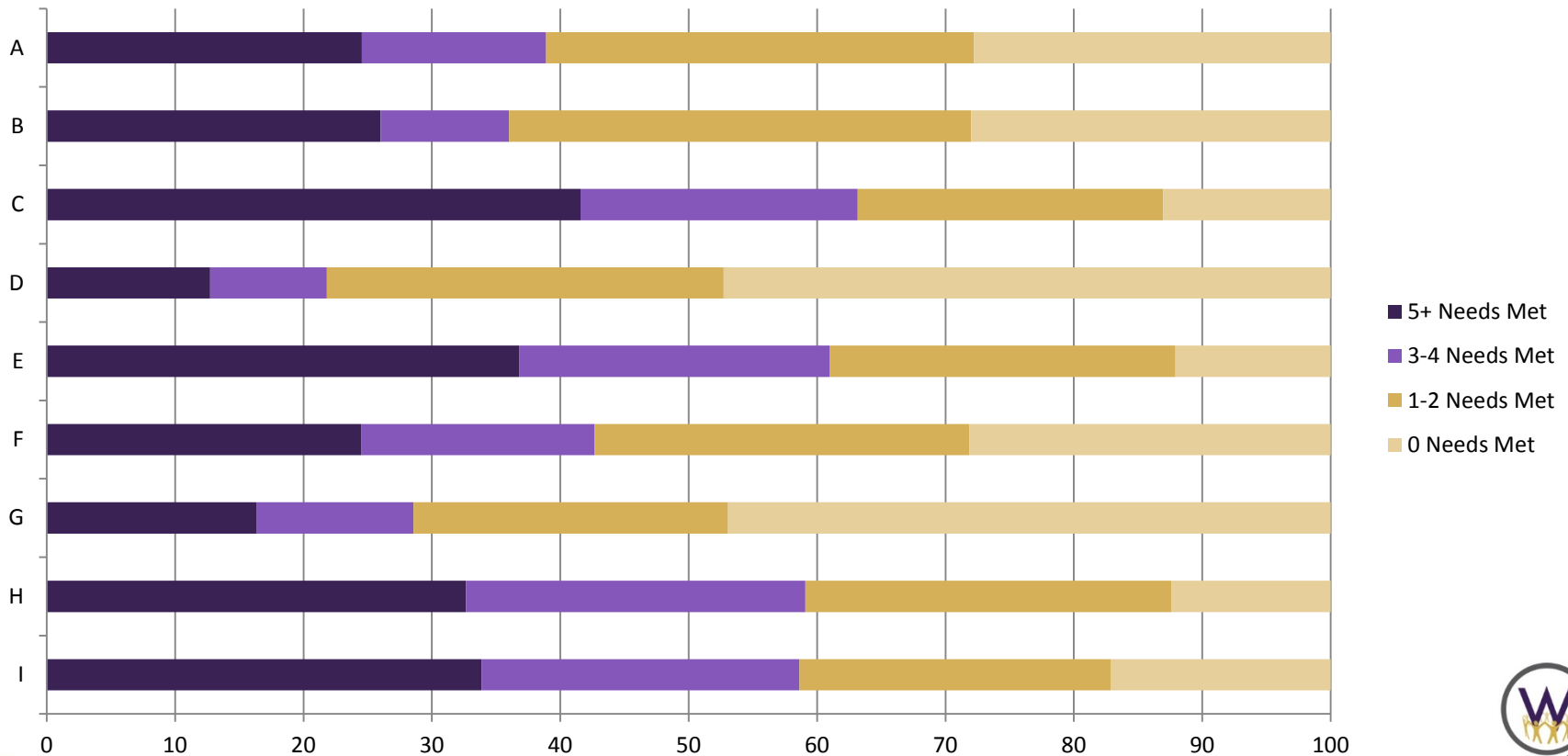
A similar pattern emerges with strengths identification

Ratings of Top Five Least Commonly Prevalent Usable Strengths at Baseline by Site

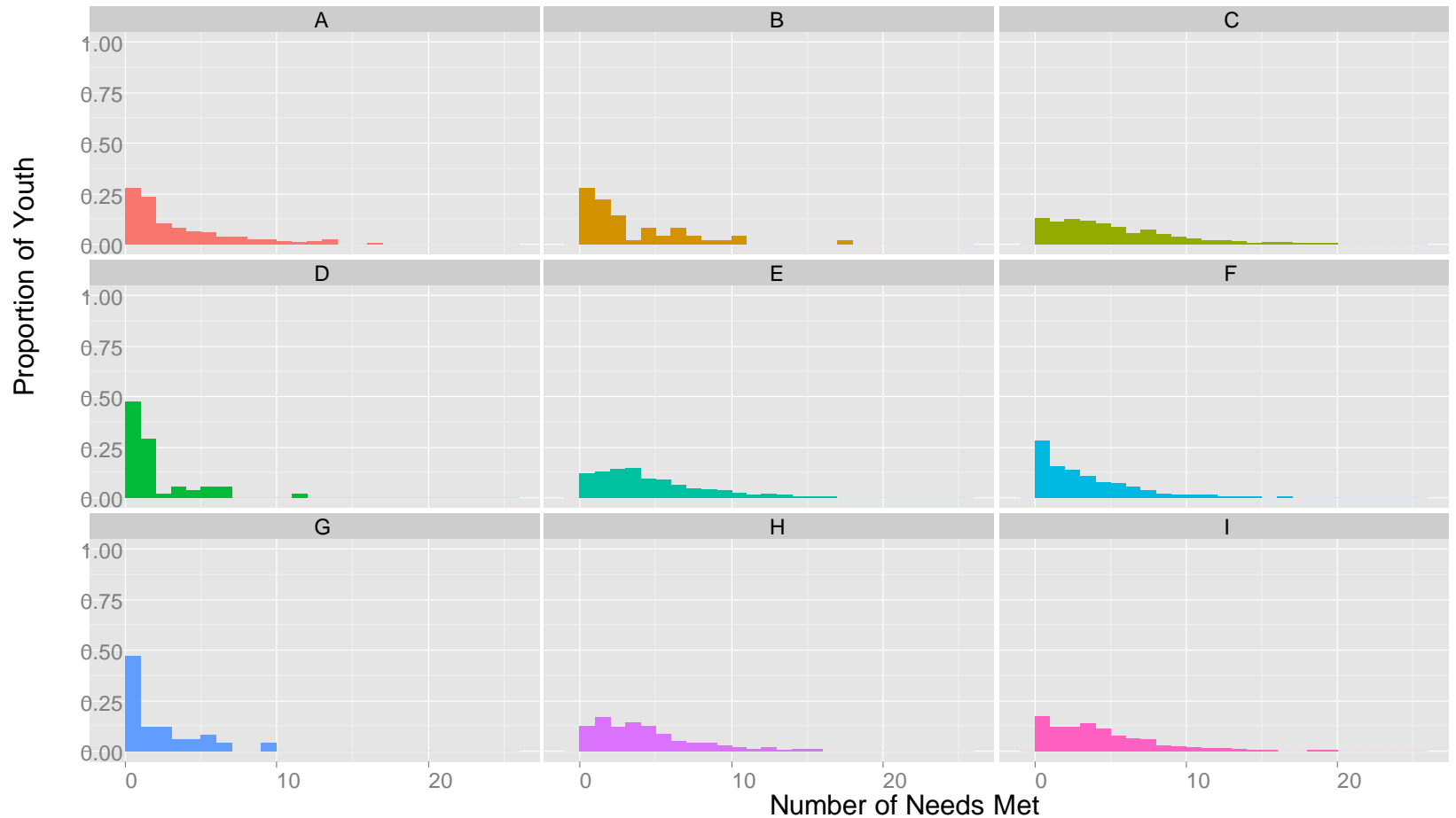


Most youth had at least 1 need met after six months of Wraparound

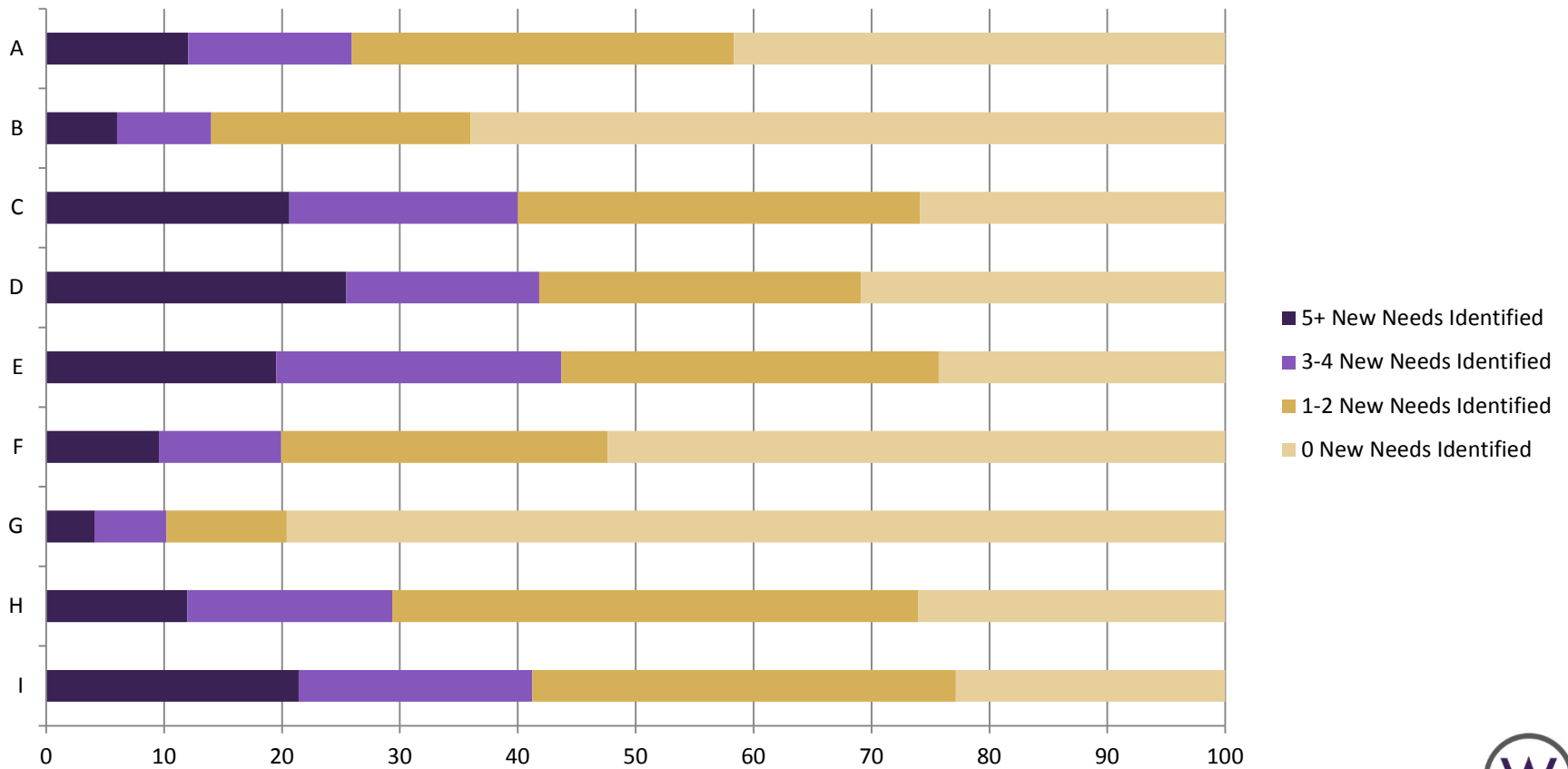
Categorical Breakdown of Number of Youth Needs Met by Site



Most youth had at least 1 need met after six months of Wraparound



Rate of identification of *new needs* at six months varied greatly by site





Learning from CANS to Inform Wraparound Initiatives

WHAT IS ASSOCIATED WITH SITE-LEVEL DIFFERENCES?

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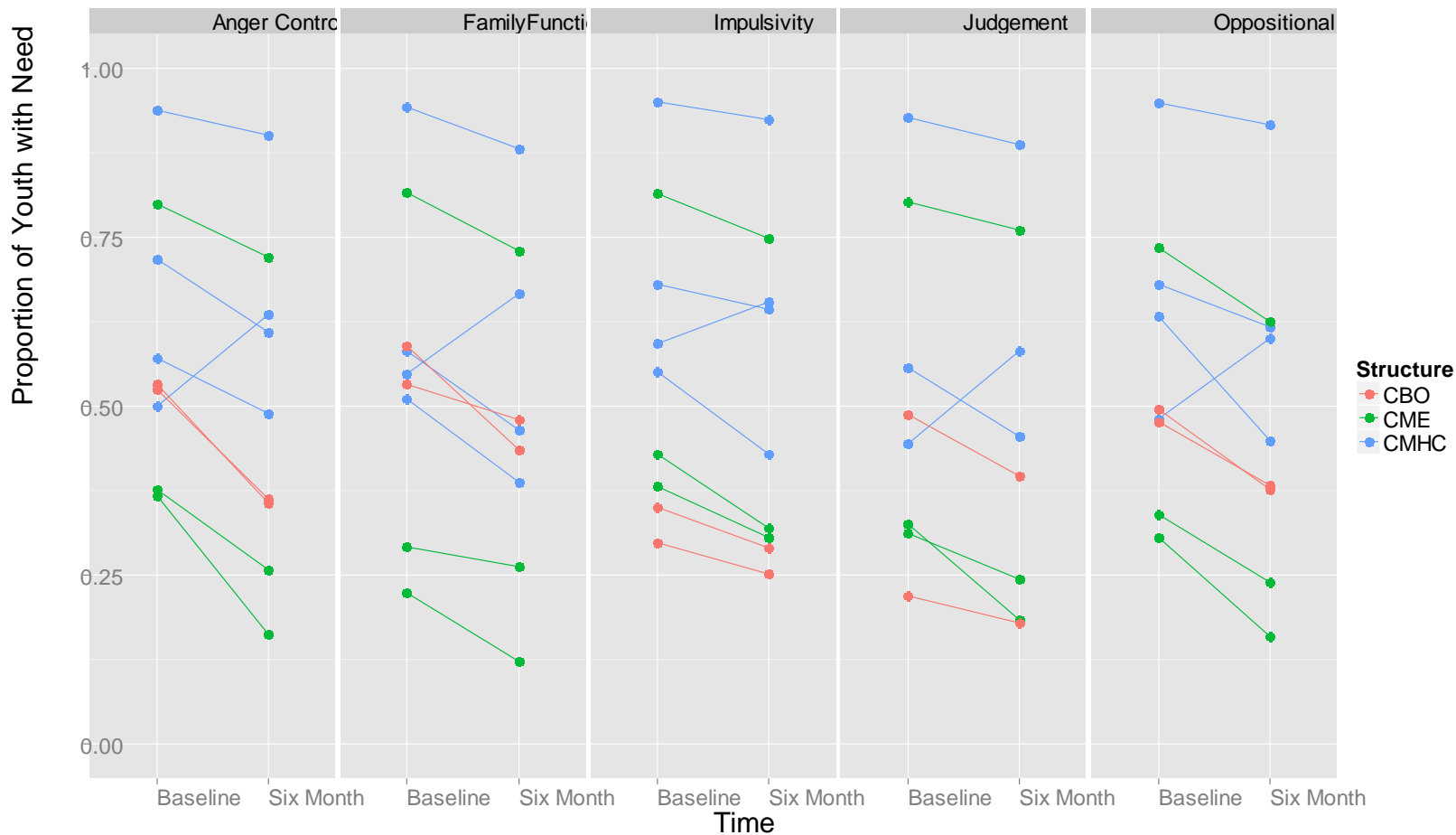


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There are several possible reasons that CANS scores vary by site

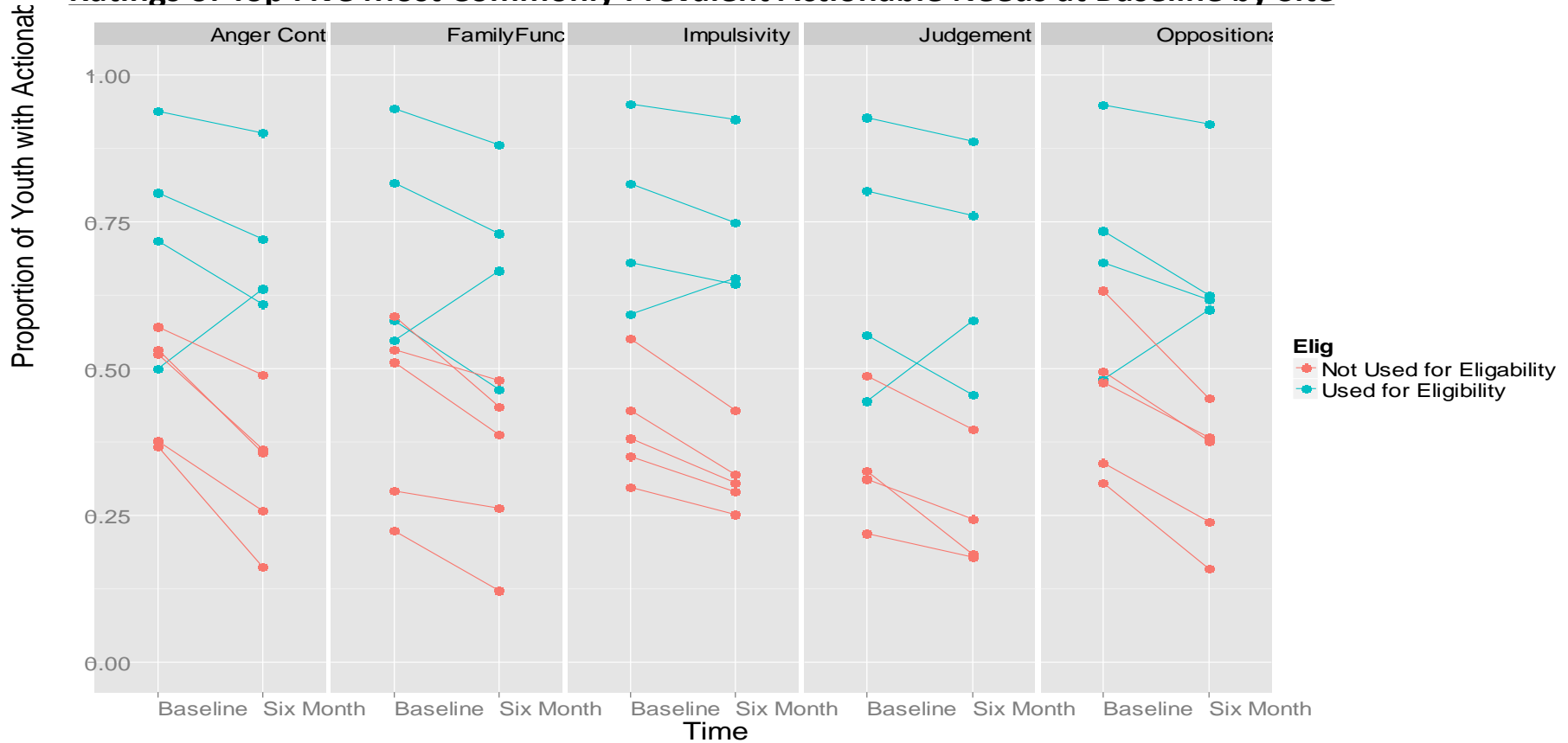
- Differences in youth at the sites
 - System(s) of focus of Wraparound initiative
 - Demographic differences
 - Actual complexity of youth needs
- Differences in CANS administration and use
 - Who administers the tool
 - Whether the CANS is used for initial and ongoing program eligibility
 - Level and type of CANS and Wrap Training / coaching
 - Customization of tool (ratings scale, N items, etc)

Some site-level features appear to be unrelated to CANS scores

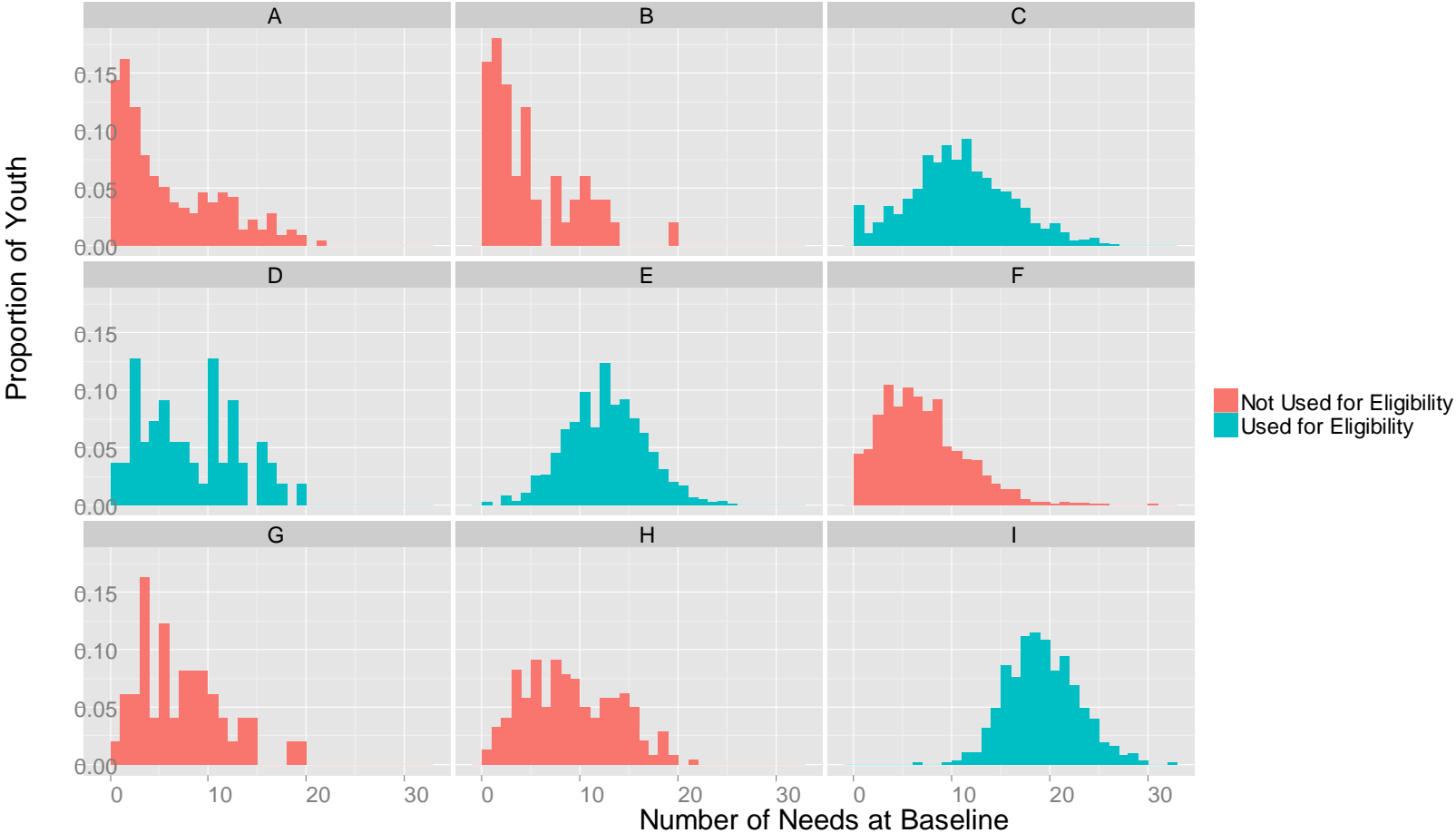


Wrap-enrolled youth in sites that use the CANS for eligibility were more likely to be rated as having actionable needs

Ratings of Top Five Most Commonly Prevalent Actionable Needs at Baseline by Site

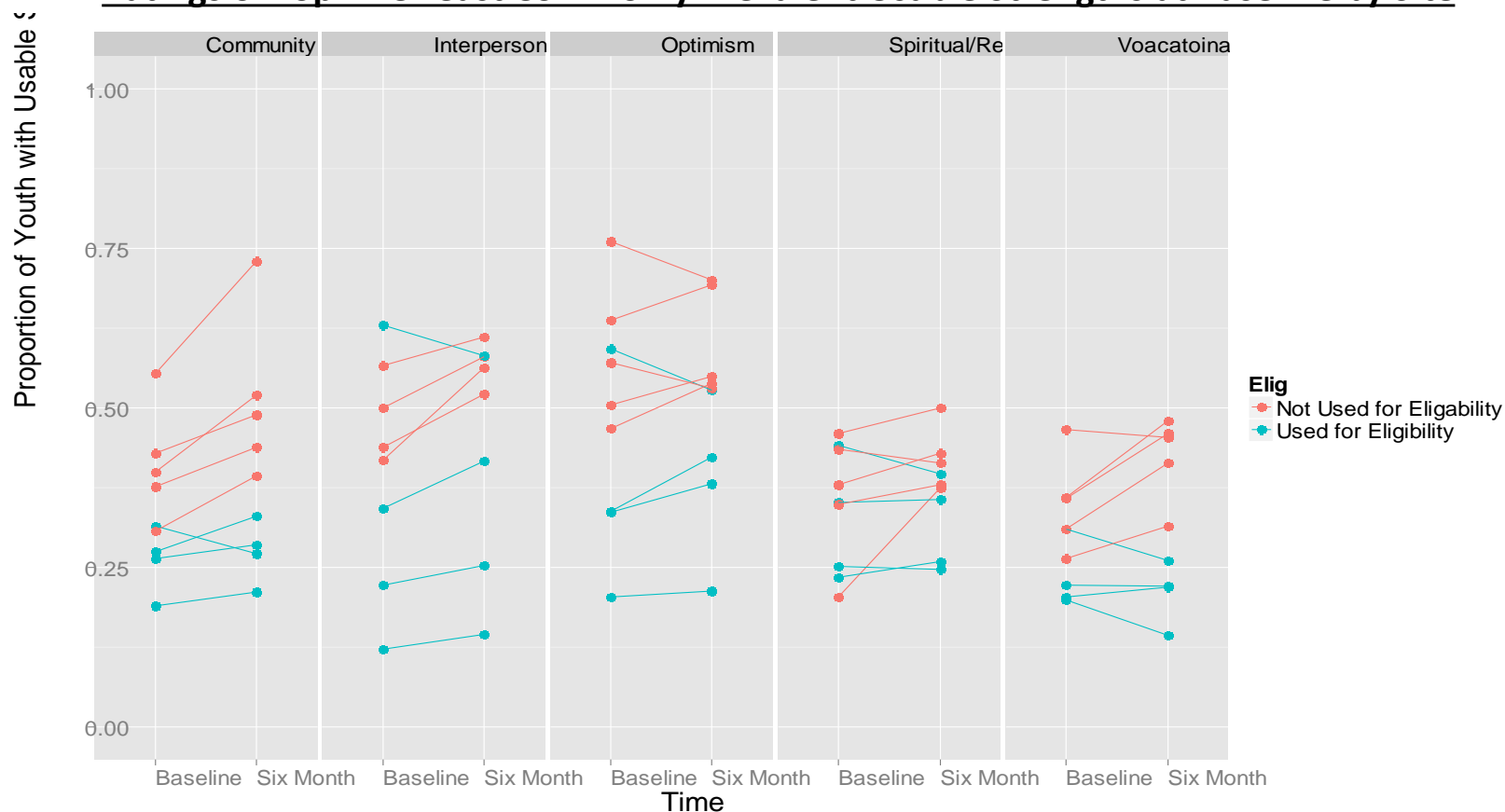


Number of baseline needs varies by whether CANS is used to determine eligibility

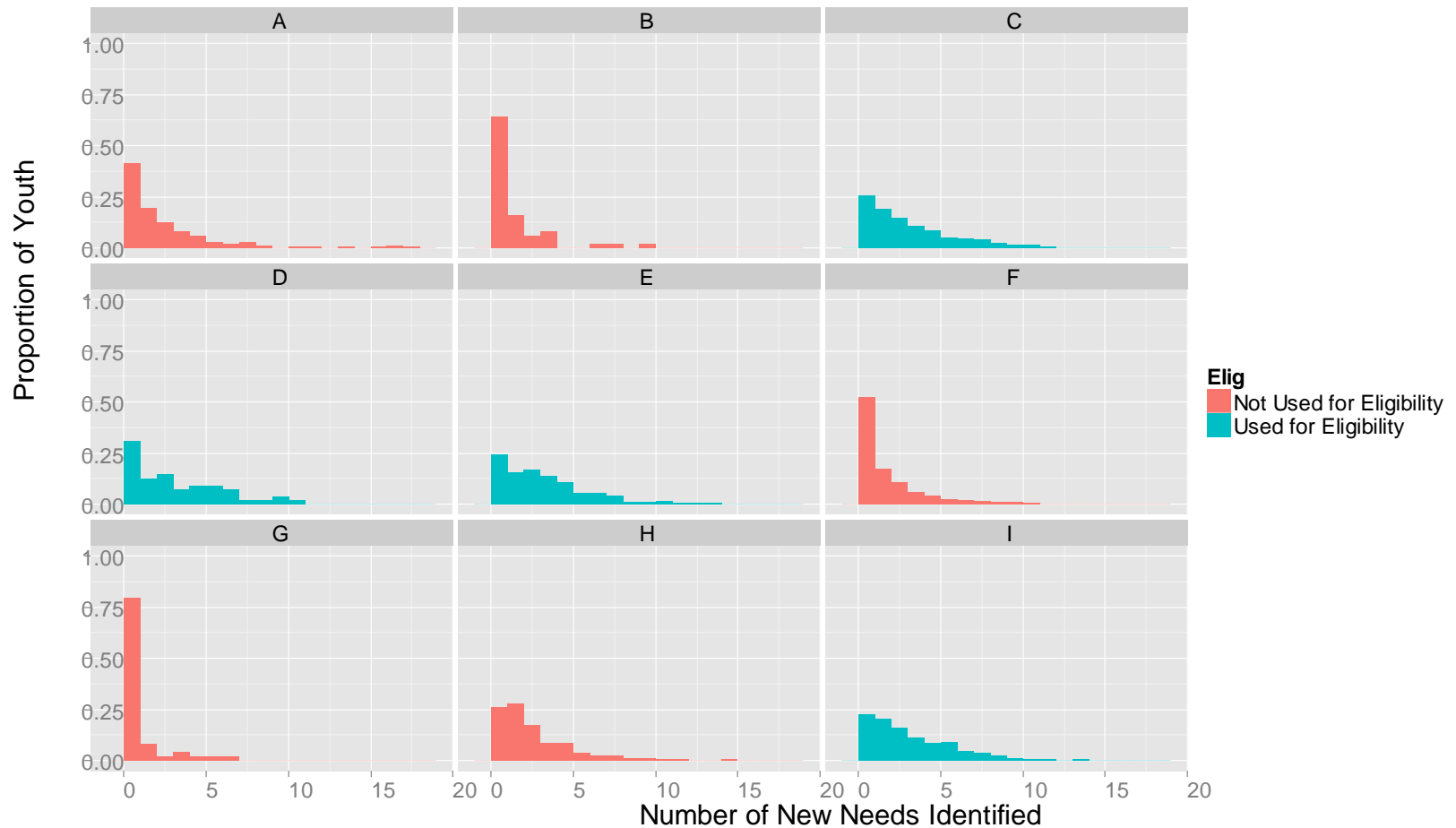


Conversely, youth in sites that use the CANS for eligibility were less likely to be rated as having usable strengths

Ratings of Top Five Least Commonly Prevalent Usable Strengths at Baseline by Site



Identification of new needs also seems to vary by CANS use for eligibility



Why may CANS use for eligibility be related to Wrap youth's CANS scores?

- Sites that use CANS for eligibility determination:
 - Assess youth as having more needs and fewer strengths at baseline
 - Are more likely to identify new needs at 6 months
- What can explain these differences?
 - Different types of training/raters?
 - Lower-needs youth being appropriately screened out of high-intensity Wraparound?
 - Assessors inflating scores to ensure service eligibility/continuation?
 - Some (as yet) unmeasured confound that varies by sites' use of the CANS?

Some Questions

- **How many actionable needs can be identified for attention and then meaningfully used?**
 - At a team level?
 - At a program/system level?

Underlying Need
Matthew needs to know people can be permanent parts of his life

Global Rating of Progress toward Meeting need
0-4

Baseline: 1
Tracking: Rated by each family member at beginning of each CFTM

Goal
Increase in positive days at home

Baseline: 2 per week
Tracking: Each family member will note perceived number in a notebook each Sunday morning

Goal
Decrease in office referrals at school

Baseline: 3 per week
Tracking: Facilitator will check in with school weekly

Relevant CANS Items for Monitoring
0-3

Danger to Others
Social Behavior
Depression
Family School
CG-Family Stress
Str-Relat. Permanence

Action Step
John will take Matthew back to his old neighborhood and share stories of how he grew up

Task
John will check his work schedule and find a Saturday within the next 3 weeks for the trip

Task
Mona will check in when they get back to see how it went

Action Step
Adam (therapist) will work with family to explain depression and trauma and how these are related to the aggressive behaviors

Task
Adam to provide psychoeducation around depression, trauma, and disruptive behaviors and how these could be related to the behaviors the family is experiencing

Action Step
Matthew will be Coach Smith's assistant and help out with other sports between football activities

Task
Coach Smith will provide the team with a schedule of coaching events including games, practices, etc.

Task
Mona and John will work out a transportation schedule

Action Step
The family will create an "I liked it when..." box that all family members will put notes in daily about something they liked that another family member did

Task
Michelle (Mona's friend) will give a raffle box to Mona to use

Task
Matthew will find a 'place' for the box and will cut paper strips for family members to write on

Strengths
Matthew is a leader on the football field, is able to build relationships with adults he trusts, etc. Mona asks for help when needed, etc., John believes doing things as a family keeps the family strong...
CANS Useful Strengths Items: Family, Talents/Interests, Natural Supports

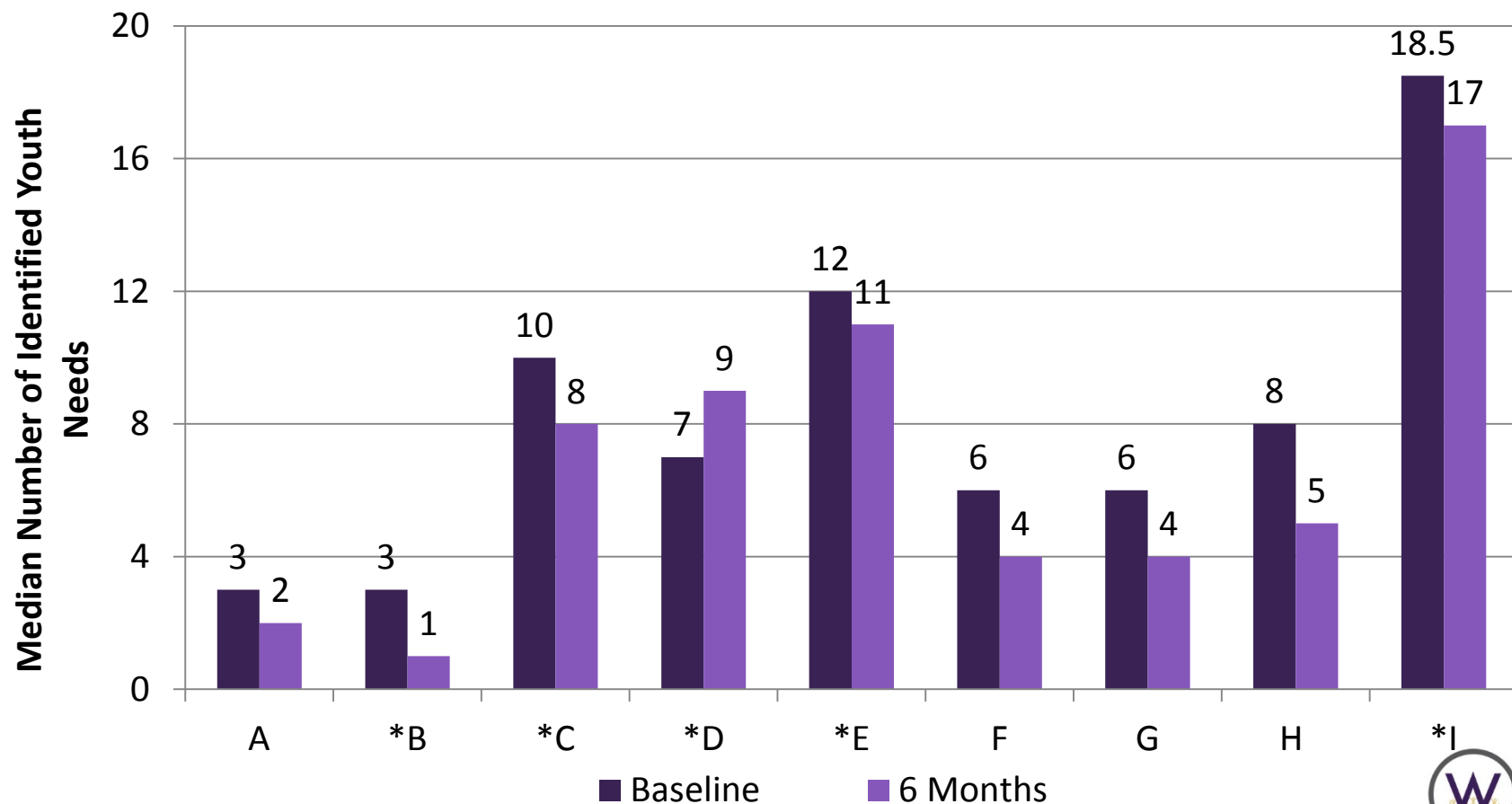
Some Questions

- How many actionable needs can be identified for attention and then meaningfully used?
 - At a team level?
 - At a program/system level?
- **Can summary CANS data (e.g., median or mean Total Actionable Items or TAI) be used to describe seriousness of needs of population served?**
- Do we have expectations for how much improvement we should be seeing?
 - After 6 months of Wraparound, most youth only have 1-3 needs addressed... Is this sufficient?

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 - **After 6 months of Wraparound, most youth only have 1-3 needs addressed... Is this sufficient?**

Median N baseline needs varies dramatically by site, but change at 6 mos is very similar



Some Questions

- Is the way CANS is used (e.g., for eligibility, reimbursement) associated with patterns of ratings? Or is this a confound/artifact?
 - Do we need different benchmarks / comparators based on site-level implementation factors
- Would a consistent set of core CANS items facilitate...
 - Research on child/family services?
 - Decision support at higher system levels?

This CANS dataset provides many additional analytical opportunities

- How are differences in CANS and Wraparound implementation driving site-level differences in CANS scores and change over time?
- What services need to be focused on in wraparound initiatives, based on patterns of needs and strengths, and improvement (or lack thereof)?
 - Use methods pioneered by Kordell et al. (2015)

Patterns and priorities of service need identified through the Child and Adolescent Needs and Strengths (CANS...

Article *in* Children and Youth Services Review · November 2015

DOI: 10.1016/j.chilyouth.2015.11.020

CITATION

1

READS

45

3 authors, including:



Katharan Cordell

University of California, Berkeley



Lonnie Snowden

University of California, Berkeley

This CANS dataset provides many additional analytical opportunities

- Explore youth-level differences in change over time
 - How much do demographics explain differences, when site-level variation is controlled?
 - Are there clusters of youth with different types of baseline need and strengths profiles?
 - Do they have differential change trajectories?
 - For youth with additional reassessments available, what does longitudinal change look like?
- Continue to assess impact of CANS customization on ability to use tool for performance monitoring, and program and system-level decision-making

Quote of the day

- *“A good cult delivers on its promises. A good cult nourishes the needs of its members, has transparency and integrity, and creates provisions for challenging its leadership openly. A good cult expands the freedoms and well-being of its members rather than limits them”*

– Philip Zimbardo