Using administrative CANS data for benchmarking and outcomes monitoring in state-wide Wraparound initiatives

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CANS is one of many assessments of youth functioning used in SOCs

- Developed by Dr. John Lyons
- Often customized for each site
  - Comprised of 40-50 core items, divided into 5-6 domains
  - In-depth modules can also be used for more information on topics relevant to the particular youth
- A professional administers the tool based on their knowledge of the youth and family, typically every 3-6 months from enrollment
  - Needs are rated from 0, “No evidence” to 3, “Immediate/Intensive Action Needed”
  - Strengths are scored from 0, “Centerpiece Strength” to 3, “No Strength Identified”
CANS and Wraparound are being implemented in nearly every state.
CANS and Wraparound: Points of connection

• Focus on the whole family, not just the “identified child”
• Base planning on presence of Needs and Strengths rather than symptoms or deficits
• Aim to identify issues that demand action (Needs) or that could be leveraged into productive strategies that bolster the family’s existing capacities (Strengths)
CANS and Wraparound: Points of connection

- Data-informed planning
- Measurement-based treatment to target
- Accountability
- Promoting transparency
- Teamwork
- Individualization of care
## Decision support promoted by CANS

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*From Lyons, 2012*
Use of CANS in Wraparound

Phase 1: Engagement and Support

**Phase 1A:** CANS used for eligibility/authorization

**Phase 1B:** “Immediate action” items prioritized for crisis plan

**Engagement and Support**

**Team Preparation**

CC uses CANS data to:
- Research options for strategies, supports, and evidence based treatments to be discussed at first team meeting
- Consider who may be critical to invite to first team meeting

CC uses CANS to help engage family, learn their story, and discover strengths and needs in a comprehensive, ecologically based way.
Use of CANS in Wraparound

**Phase 2: Plan Development**

- CANS used as a basis for exploring/expanding on family strengths and needs at first team meeting
- CANS is used as one basis for brainstorming services and supports for Plan of Care
- CANS is considered as an option for monitoring progress toward needs and achieving priority outcomes
Use of CANS in Wraparound

Phase 3: Implementation

- CANS data are reviewed in team meetings as one way of monitoring progress toward meeting needs, achieving outcomes.
- CANS data are reviewed against strategies in the Plan of Care.
- CANS data are used to evaluate whether to begin transition.
Use of CANS in Wraparounds

Phase 4: Transition

CANS data are used as one basis for beginning transition out of formal wraparound.

History of CANS scores are included in the documentation prepared for the family as they exit formal wraparound.
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National CANS and Wrap data project: provide guidance for program and system-level CANS usage

• What are the typical strengths and needs of wraparound-enrolled youth and families?
• What services are needed in service arrays in care management entities (CMEs) and wraparound initiatives?
• What are “benchmarks” for trajectories of improvement on CANS over time?
• What is the variation in CANS profiles across states and sites?
2843 Wraparound youth from 5 states with Baseline and 6 Month CANS

- Average age of 12.2 years
- Assessments done within 45 days (on either side) of Wraparound enrollment date and 6-months
- Majority of items appear in all four datasets, but may be listed under different domains or modules, therefore data analyzed at an item-level
Most prevalent strengths (rated 0 or 1) at Baseline and 6 Months

% with Strength

- Involvement with Care
- Access to Services
- Organization
- Cultural Spiritual Ritual
- Knowledge
- Educational
- Social Resources
- Youth Involvement
- Relat. Permanence
- Supervision

Baseline vs 6 Months
Most prevalent needs (rated 2 or 3) at Baseline and 6 Months
At 6 months, the top 5 most prevalent needs are met for 12-16% of youth.

- 10-20% of youth get at least one need met within 6 months.
- 7-9% of youth have newly identified needs at 6 months, compared to baseline.

### Change from Baseline to 6 Months for Top 5 most Prevalent Needs (n=~2800)

- **Impulsivity**: 7 newly identified, 65 continuity of need, 12 need met, 15 maintenance.
- **Anger Control**: 7 newly identified, 62 continuity of need, 15 need met, 15 maintenance.
- **Oppositional**: 9 newly identified, 59 continuity of need, 15 need met, 17 maintenance.
- **Social Functioning**: 10 newly identified, 56 continuity of need, 16 need met, 18 maintenance.
- **Judgement**: 9 newly identified, 55 continuity of need, 16 need met, 20 maintenance.
Males have significantly higher needs scores at baseline than females.
Younger youth who enter Wraparound have significantly more intense needs.
Black and multiracial youth enter Wraparound with significantly lower levels of needs

- Impulsivity
- Anger Control
- Oppositional
- Social Functioning
- Judgement

No Evidence of Need
Immediate/Intensive Action Needed

- White
- Black
- Multiracial or Other
Despite demographic differences, site/state predicts scores a lot more

• Preliminary regression analyses indicate that site/state explains more variance in CANS scores than race, age, or gender, combined
  – Differences in CANS implementation may impact scores

• Analysis on data from the three states with the largest samples
  – Each had 700-900 youth with matched baseline and 6-month CANS data; total n = 2581
There are significant differences in intensity of needs by state.
Top strengths are also significantly different across implementation contexts.
What is driving state-level differences?

**States A & C**
- **Population?**
  - Data from all youth receiving Wraparound in state, regardless of funding stream
- **Timeframe?**
  - Data from 2014 & 2015
- **Implementation?**
  - External reviewer responsible for completing baseline CANS for authorization (and often reauthorization)

**State B**
- **Population?**
  - Data from youth receiving Wraparound through 1915i waiver
- **Timeframe?**
  - Data from 2008-2012
- **Implementation?**
  - Staff internal to the Wraparound provider organization (often the facilitator) responsible for completing the CANS
Initial implications for systems

• Analyze demographic trends locally to explore and remedy underlying dynamics
  – Is the system racially biased? Are the algorithms? Are there less-intensive alternatives?

• Monitor and foster data integrity
  – Have consistent, possibly external, CANS administrators
  – Consider how CANS implementation and use may impact data
  – Encourage meaningful use of data for practice
    • Feed information back at all levels
    • Incorporate into supervision
Still a lot of un-answered questions and analyses needed

• Can national benchmarks be established?
  – Especially given state-level differences

• What accounts for the most variance in scores?

• What amount of change can be expected at 12 months?

• What predicts change over time?
  • Are there particular needs and strengths that are more easily resolved?

• Can youth be categorized into different profiles based on their needs and/or strengths?
  – Do those need/strength clusters predict change?