


## Evaluation of Wraparound Services in Erie County:

### Translating Data into Quality Improvement



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March 3rd, 2009

## Agenda

- Brief description of what we do
- Evaluation details (method, sample, findings)
- Translating findings into system quality improvement (QI)

## Who we are, what we do

- Family Voices Network of Erie County, NY
- Community Connections of New York
- Program Evaluation Center at the University at Buffalo, the State University of New York

## About the abstract...

- The abstract submitted was from data as of April, 2008
- **A lot** has happened in the system since then and we want you to have the **most recent and relevant information**
- We will **reflect on the QI points** made in the abstract (disparity in outcomes by race, selection of specific services and time spent in home/residential settings)
- We also wanted to give you the most "bang for your buck"

## Method

- **Realist "real-time" evaluation** (Kazi, 2003)
  - Relating patterns in context to outcomes
  - Where the intervention is more or less likely to be effective
- **Utilization-Focused Evaluation** (Patton, 2004)
  - Incorporating stakeholders, tailoring dissemination to meet audience
  - Working iteratively with program staff to develop and implement QI strategies

## Primary variables explored

- Dependent (outcomes):
  - Change in level of impairment measured by the Child and Adolescent Functionality Assessment Scale (CAFAS)
  - **Length of stay**
  - **Objectives met or not** at discharge

## Primary variables explored...

- Independent (contextual)
- Receipt of services (amount and type by case)
- Demographics (race, gender, age at referral)

- Spearman **correlations** between outcome achievement and contextual variables with significant relationships entered into...

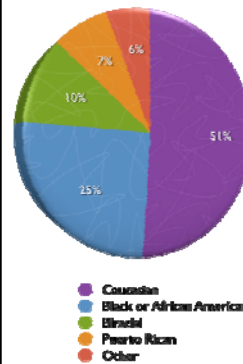
- Binary logistic regression** model, in which odds ratios are calculated. Gives us an odds ratio or probability that an outcome was achieved given certain circumstances

- Comparison of frequencies from 2007 to 2008 in CAFAS improvement by agency

## Sample Description

- Cases that had a discharge date between 1/1/08 and 11/1/08
- Had at least two CAFAS measures
- Resulted in 307 youth
- 61% were male
- 97.4% had a preferred language of English

Distribution of Race



Average age was 13.41 yrs. (SD = 3.07)

Distribution of Age at Referral by Category

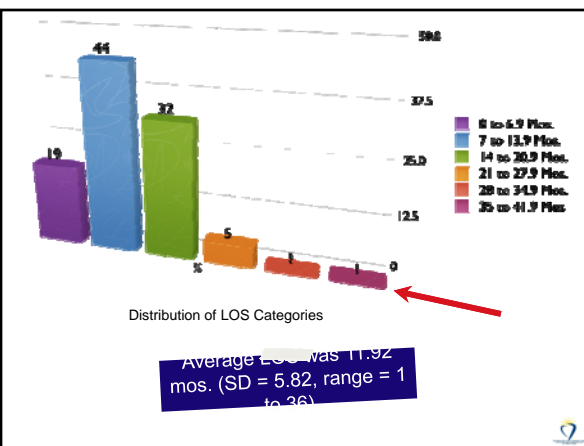
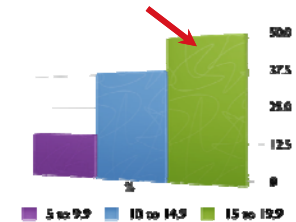
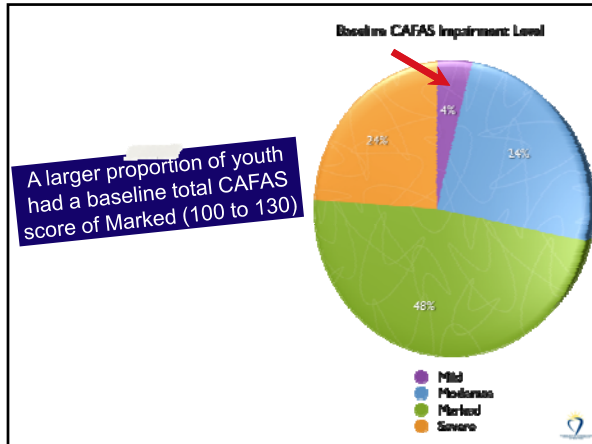


Table. Frequency of Living Situations at Referral.

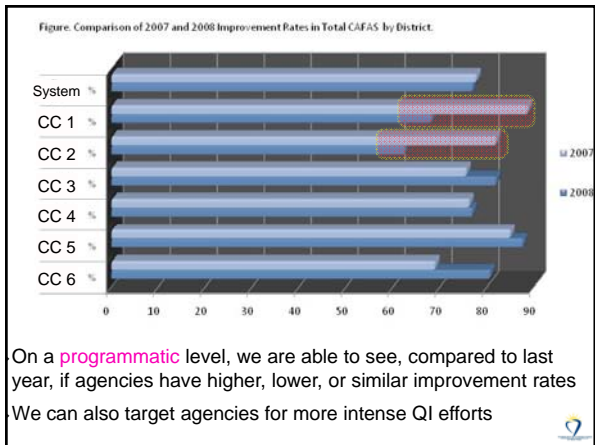
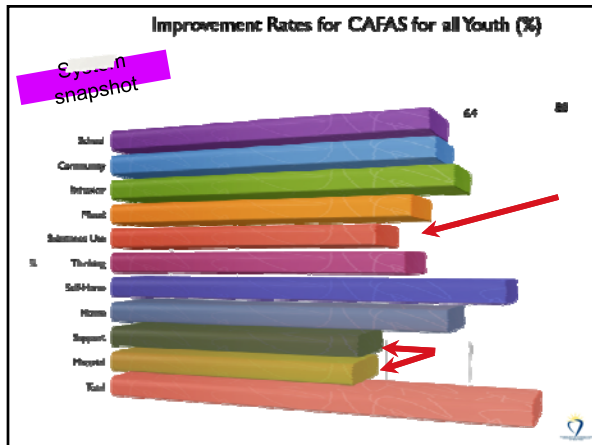
Living Situation	Frequency	%
One Parent Family	129	42
Two Parent Adoptive Family	12	4
One Parent Adoptive Family	11	4
Other Relative's Home	9	3
DSS/OCFS Family Foster Care	7	2
DSS/OCFS Group Home	2	1
Residential Treatment Facility (OMH)	4	1
State Psychiatric Inpatient	9	3
Residential Treatment Center (DSS/OCFS)	34	11
Therapeutic Foster Care	2	1
Other (specify)	2	1
Two Parent Family	57	19
Detention	2	1
Grandparent(s)	22	7
Acute Care Inpatient	5	2
Total	307	100

The largest proportion of youth were living in one parent families at time of referral (42%), followed by two parent families (19%)



## Findings

- We explored the outcomes in two ways:
  - Single system designs to discover where an outcome was more or less likely to occur
  - Change in each subscale by case (difference between first and last)
  - Comparing the rates of improvement in a CAFAS subscale for an agency in 2007 and 2008
  - General program 'barometer'
  - Used aggregate results of single system designs



On a programmatic level, we are able to see, compared to last year, if agencies have higher, lower, or similar improvement rates. We can also target agencies for more intense QI efforts.



## Patterns and Relationships

- The percent of time a youth was placed in a home setting was related to improvement in a handful of subscales
  - Total CAFAS ( $r = .219, n = 298, p < .001$ ); ( $B = .018, p < .001$ ).
  - School Subscale ( $r = .195, n = 284, p < .01$ ); ( $B = .017, p < .01$ ).
  - Community Subscale ( $r = .232, n = 214, p < .01$ ); ( $B = .019, p < .01$ ).
  - Home Subscale ( $r = .165, n = 288, p < .01$ ); ( $B = -.013, p < .05$ ).
  - Mood Subscale ( $r = .167, n = 273, p < .05$ ); ( $B = .013, p < .05$ ).
  - Thinking Subscale ( $r = .244, n = 120, p < .01$ ); ( $B = .026, p < .01$ ).
  - Self-Harm Subscale ( $r = .311, n = 116, p < .01$ ); ( $B = .026, p < .01$ ).
- In summary, the greater the percent of time of a youth's time in care spent at home, the greater the odds of improving in that subscale.

- Receipt of **in-home treatment**
  - Youth who did not receive this service were 2.3 times more likely to not improve in the **behavior subscale** compared to youth that received the service ( $r = .194, n = 297, p < .001$ ); ( $B = .847, p < .01$ ).
  - Youth who did not receive in home treatment were 2 times more likely to not improve in the **support subscale** than those who received the service ( $r = .168, n = 228, p < .05$ ); ( $B = .727, p < .05$ ).
- Receipt of **mentoring**
  - Youth who did not receive mentoring services were almost 2 times more likely to not improve in the **home subscale** than those who received the service ( $r = .139, n = 301, p < .05$ ); ( $B = .675, p < .01$ ).


Three services were related to objectives being met at discharge

- Receipt of **in-home treatment**
  - Youth who did not receive this service were 2.2 times more likely to be discharged with objectives not met compared to youth that received the service ( $r = .168, n = 307, p < .01$ ); ( $B = .782, p < .01$ )
- Receipt of **mentoring**
  - Youth who did not receive this service were 1.8 times more likely to be discharged with objectives not met compared to youth that received the service ( $r = .149, n = 307, p < .01$ ); ( $B = .615, p < .05$ ).
  - Receipt of **outings/socialization activities** For this sample, youth who did not receive this service were 2 times more likely to be discharged with objectives not met compared to youth that received the service ( $r = .152, n = 307, p < .01$ ); ( $B = .728, p < .01$ )


## Nice data, but now what?

- Findings **are more than numbers**: Age; length of stay; living situation at start; baseline CAFAS impairment
- System level
  - Low improvement rates in:
    - Substance Use Subscale**: led to identification and development of resources for assessment and treatment
    - Material and Support** (caregiver scales): led to development of a shared learning group within a team of supervisors (assessment and delivery)
    - In home treatment and mentoring** service development
    - Baseline CAFAS** ratings found at SPOA and case opening



## Care Coordination QI


- Program level
  - Those that had lower improvement rates in 2008 compared to 2007 participated in **process mapping** and **fishbone diagrams** (cause and effect) that focus on key practice elements and fidelity
  - With CCNY, all agencies developed **QI plans** based on individual agency reports and system level findings
  - Monthly QI check-ins** in between the quarterly reports



## Care Coordinator QI

- Quarterly QI supervision document based on CAFAS subscales and improvement for each case

	LOS	Substance	Thinking	Material	Support	Total
Case Name	s	0 ↑ 30	10 ↓ 10	10 = 0	20 = 0	110 ↑ 10



## Summary

- Consistent evaluation with integrated quality improvement efforts
- Participation in these efforts from every level in the system
- Ongoing monitoring of practice using data

Thank You!  
Questions?

