Anchor

Community-Based Intensive Psychiatric Treatment for Children and Adolescents

Division of Child and Adolescent Psychiatry
Maine Medical Center
Portland, Maine

- Douglas R. Robbins, M.D.
- Barbara Fowler, LCSW, Team Leader
- Lindsey Tweed, M.D.
- William Cook, Ph.D.
- John Bell, M.D.
- Julie Claffey
- Kevin Dagnese
- Jay Yoe, Ph.D.
  - Maine Dept. of Behavioral and Developmental Services

Goals of Intensive Community-Based Treatment

- Increased access to care
  - Engagement of families at risk for not continuing treatment
- Preservation of the child's relationship with family
- Engagement of the family and community as agents of change
- Generalization of gains and skills to real life
- More effective use of resources

Treatment Objectives

- Improved function
  - Home and Family
  - School
  - Community
- Decreased symptoms or behaviors associated with risk for out-of-home placement
- Decreased days of out-of-home placement

Anchor Treatment Principles

- Treatment where and when acceptable for the family and patient
- Analysis of key symptom patterns which put the child at risk for removal from home - e.g. hospital, residential, jail
- Emphasis on the parent as the primary agent of change
- Working on-site with all arenas of function and all potential supports - schools, jobs, extended family, agencies, and other clinicians

Target Population

- Age 3 – 18 years
- Medicaid
- Psychiatric disorder – DSM IV Axis I
- Unresponsive to conventional outpatient treatment
- At high risk for out-of-home placement or treatment
  - Hospital
  - Residential Treatment
  - Jail

Anchor – Team Composition

- Team Leader – Social Worker
- Child and Adolescent Psychiatrist – 20 hrs.
- Primary Clinicians – 3 Social Workers
- Primary Clinician – Clinical Nurse Specialist
- Community Support Workers – 2
- Vocational Specialist

Treatment Overview

- 5 families per clinician
- 3 – 6 month treatment duration
- 3 to 7 hours contact per week
- Safety and Substance Abuse Assessments
- Treatment contact includes:
  - Parents
  - Identified patient
  - Family and extended family
  - Community activities
    - Practicing Skills – e.g. social, emotional regulation, anger management
    - Desensitization
    - Observation and assessment - In situ

Hypotheses

1. Anchor patients improve in psychosocial functioning more than patients with case management and usual treatment.
2. Anchor patients have fewer days out of home than usual treatment. (not tested)
3. Untreated psychiatric disorder in the parent is associated with poor outcome.

Comparison Group. N=249

- Children and adolescents with Axis I Disorders, on Medicaid
- In Case Management
- Matched for:
  - Entry rating of psychosocial function (CAFAS Total > 90 – "Likely needs care more intensive than outpatient, or… multiple sources of supportive care")
  - Age
  - Gender

Child and Adolescent Functional Assessment Scale (CAFAS)

- T1 = Entry to Anchor or Case Management
- T2
  - Anchor – End of treatment – 3-6 months
  - Case Management – 6 months

Child and Adolescent Functional Assessment Scale (CAFAS)

- 0 = Minimal or no Impairment
- 30 = Severe Impairment

- Domains/Scales for Youth's Functioning
  - School/Work Role Performance
  - Home Role Performance
  - Community Role Performance
  - Behavior Towards Others
  - Moods/Emotions
  - Self-Harmful Behavior
  - Substance Abuse
  - Thinking

Child Characteristics

	Anchor (n = 92)	Case Management (n = 249)
Gender (male)	50%	71%**
Age	12.81	12.52
(sd)	(3.5)	(3.0)

**p < .05 chi-square for proportionately more males in Case Management group. Matching on gender included all Anchor cases, but the comparison of the two treatments only included cases with data at two time points. The Anchor group with CAFAS scores at two time points differed from those with only baseline data in having fewer community problems, $t_{144} = -2.45$, $p < .02$,, and more problems in the mood domain, $t_{144} = 2.14$, $p < .04$.

Child Diagnoses - Anchor

Diagnosis	N = 70	Percent
Mood	43	61%
Anxiety	17	24%
ADHD	54	77%
Psychosis	4	6%
Substance Use	6	9%
MR / PDD	5	7%
PTSD	6	9%

Caregiver Diagnoses - Anchor

Diagnosis	N = 70	Percent
Mood	38	54%
Anxiety	22	31%
ADHD	10	14%
Psychosis	2	3%
Substance Use	20	29%
MR / PDD	2	3%
PTSD	20	29%

CAFAS Baseline Differences

(non-equivalent control group design)

	Anchor (n = 92)	Case Man (n = 249)	*t*	*p*
School / Work	25.11	21.85	3.07	.002
Home	24.89	25.06	-0.16	ns
Community	7.83	11.37	-2.63	.009
Behavior Towards Others	19.89	20.84	-0.92	ns
Mood / Emotions	22.61	19.80	3.56	.001
Self-Harm	9.13	9.64	-0.38	ns
Substance Use	3.70	3.09	0.66	ns
Thinking	6.41	6.91	-0.43	ns
Total	119.57	118.51	0.31	ns

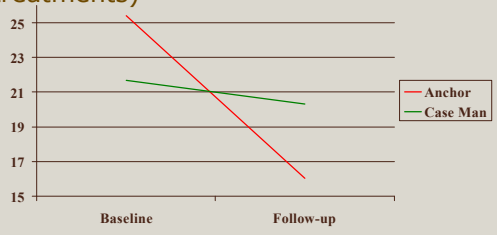
Statistical Analysis

(comparison of treatment programs)

- Repeated Measures Analysis of Covariance
  - Covariates were gender, age.
- Omnibus multivariate test of program effect for difference between baseline and follow-up CAFAS scores was significant, $F_{8,328} = 7.184$, $p < .001$.
  - Across CAFAS scores taken as a whole, Anchor had statistically significantly greater therapeutic effect than Case Management.

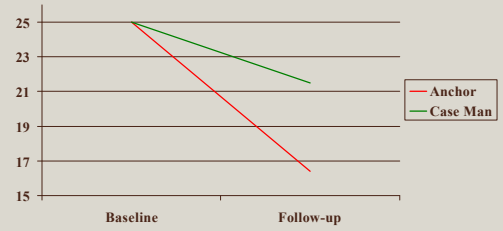
CAFAS School/Work Functioning

(univariate comparison of treatments)



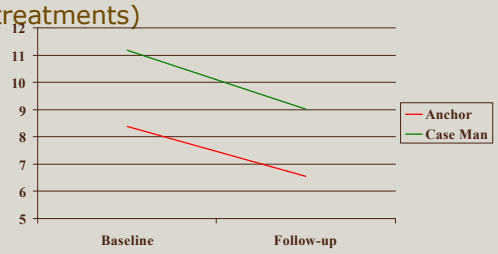
Univariate $F_{1,335} = 37.893$, $p = .001$

CAFAS Home Functioning
(univariate comparison of treatments)



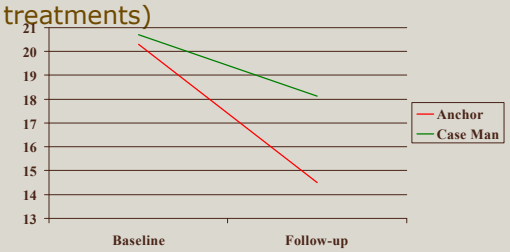
Univariate $F_{1,335} = 15.627$, $p = .001$

CAFAS Community Behavior
(univariate comparison of treatments)



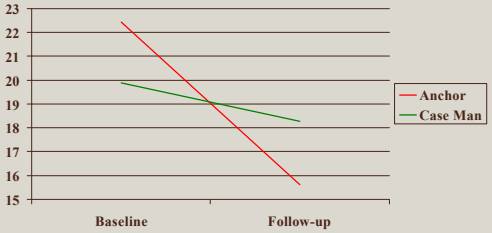
Univariate $F_{1,335} = 074$, $p = .785$

CAFAS Behavior Towards Others
(univariate comparison of treatments)



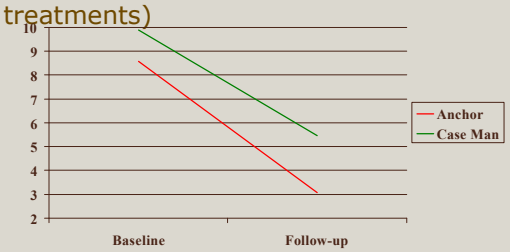
Univariate $F_{1,335} = 8.378$, $p = .004$

CAFAS Moods/Emotions
(univariate comparison of treatments)



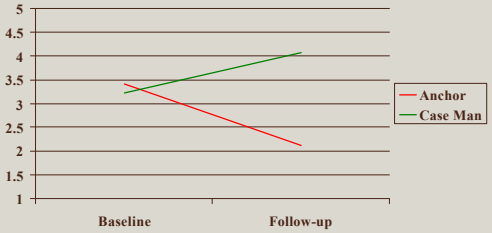
Univariate $F_{1,335} = 25.012$, $p = .001$

CAFAS Self-Harmful Behavior
(univariate comparison of treatments)



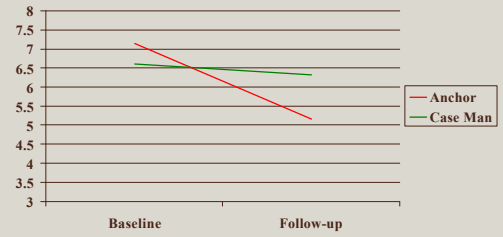
Univariate $F_{1,335} = 0.613$, $p = .434$

CAFAS Substance Use
(univariate treatment comparison)



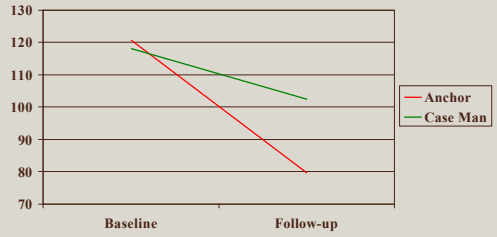
Univariate $F_{1,335} = 4.908$, $p = .027$

CAFAS Thinking
(univariate comparison of treatments)



Univariate $F_{1,335} = 2.668, p = .103$

Total Score on CAFAS
(univariate comparison of treatments)



Univariate $F_{1,335} = 26.841, p = .001$

Conclusions - 1

- Anchor patients improved more than the Case Management group in psychosocial functioning in:
  - School/Work
  - Home
  - Moods/Emotions
  - Substance Abuse
  - Total functioning

Conclusions - 2

- Anchor patients did not improve more in:
  - Community (e.g. delinquent behavior, police involvement)
  - Self-Harmful Behavior
  - Thinking

Conclusions - 3

- Presence of a psychiatric disorder in the parent/primary caretaker (64% of Anchor families) was not associated with the degree of improvement in CAFAS scores

Study Limitations

- Potential differences in group characteristics. Not a randomized controlled trial.
- Analysis of those completing treatment, rather than intent-to-treat analysis
- Absence of structured diagnostic assessments of patient and caretaker
- Days of out-of-home placement not assessed
- Continuation of improvement beyond treatment not assessed