

Modeling Aftercare Decision-Making for Hospitalized Adolescents

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Research Question

What are the factors that influence
aftercare decision-making ?

Are decisions about aftercare based
solely on clinical need or do other non-clinical
factors influence whether a child will have
access to services?

Background

Why examine aftercare decision-making?

- Decisions affect child outcomes
 - Where a child will be placed
 - Effectiveness of care
- Compromised decision-making
 - Insurance
 - Time pressure
 - Agency/organizational factors
 - Resource availability
 - Provider knowledge
- Lack of quality-of-care guidelines /decision-support tools

Guiding Principle on Quality of Care

*Children should have access to
appropriate care*

What is appropriate care?

- Placement in least restrictive treatment settings
- Level of care that best matches children's needs
- Services that are long enough in duration (dose) to achieve therapeutic benefit

Prior Research

Effect of Aftercare

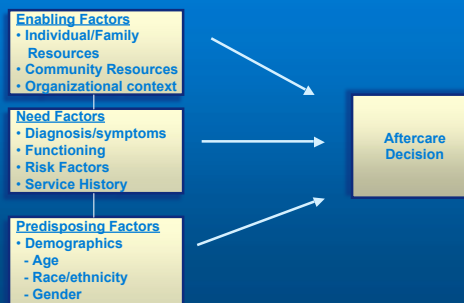
- Linkage to appropriate and timely aftercare associated with positive outcomes following hospitalization.

Clinical Decision-Making

- Little is known about decision-making processes in assigning children to different levels of care.
- Multiple factors other than clinical need influence decision-making:
 - Demographics
 - Provider characteristics
 - Organizational context

Conceptual Framework

Adapted From Andersen's Behavioral Health Model



Method

Design

- Retrospective cohort

Sample

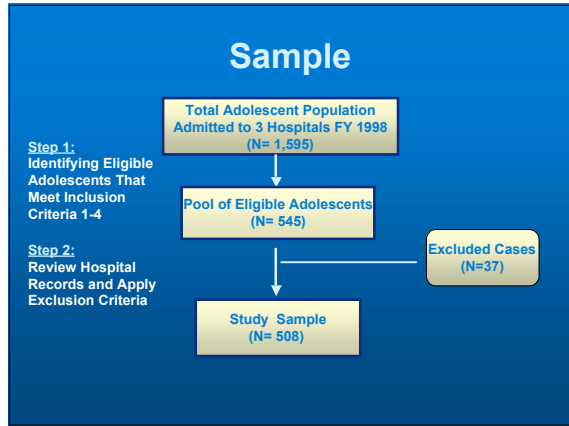
- Universe of Medicaid eligible adolescents
- Aged 11-17.99
- Admitted to 3 hospitals

Data Sources

- Hospital records
- Medicaid claims
- Area Resource File

Sample Description

- Mean age = 14.3
- Race/ethnicity
 - African-American = 51%
 - Caucasian = 45%
 - Other = 4%
- Gender
 - Male = 46%
 - Female = 54%
- State Custody = 38%



Measures

Dependent Variable

Recommended Type of Aftercare

Four Levels –

- Level 1: Outpatient Only (Reference Category)
- Level 2: Intermediate Non-Residential
- Level 3: Intermediate Residential
- Level 4: Residential Treatment Center

Measures

Independent Variables

Predisposing Factors

- Age
- Race/ethnicity
- Gender

Enabling Factors

- Availability of providers
 - Ratio of providers per 1,000 adolescents in county
- Hospital
- Custody status

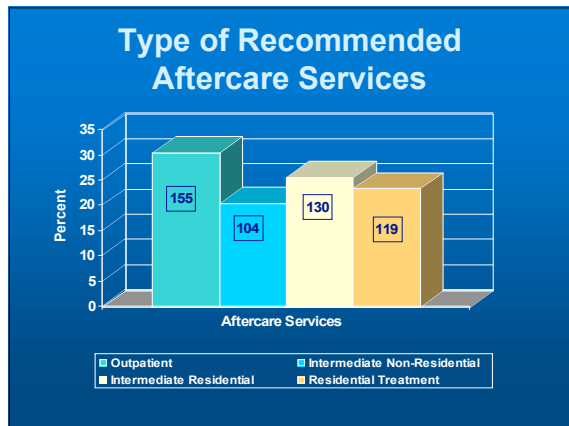
Need Factors

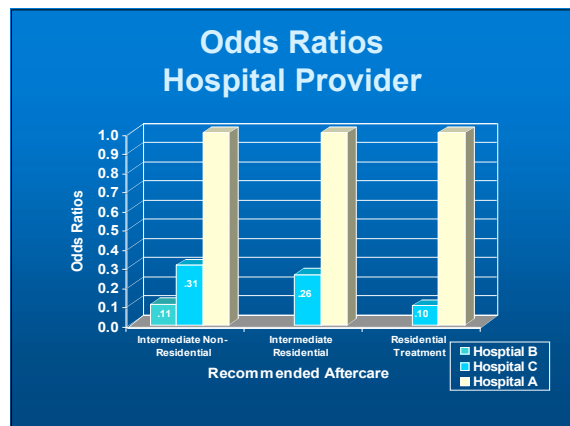
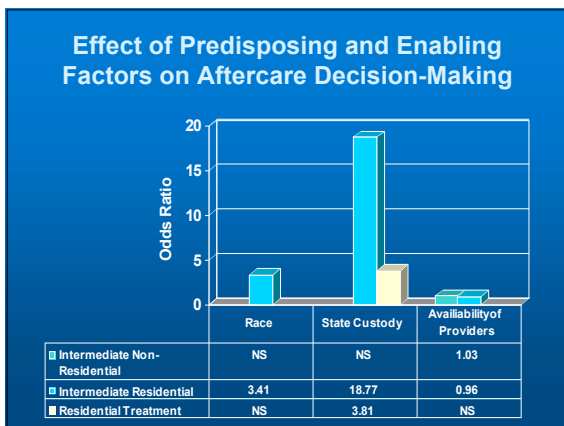
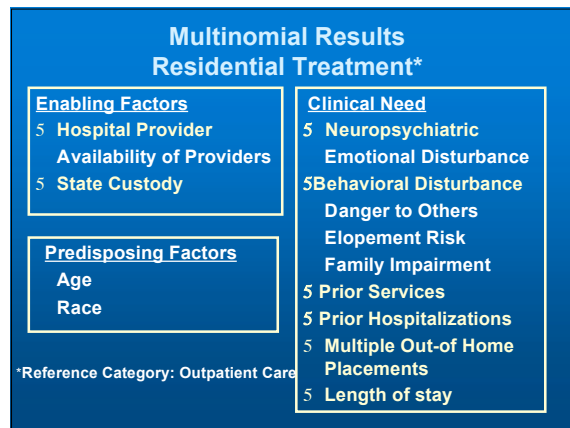
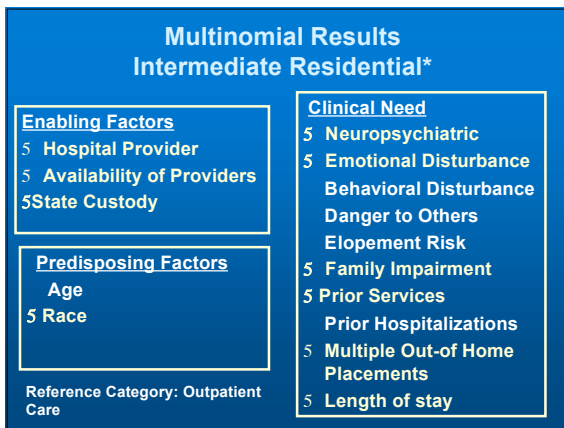
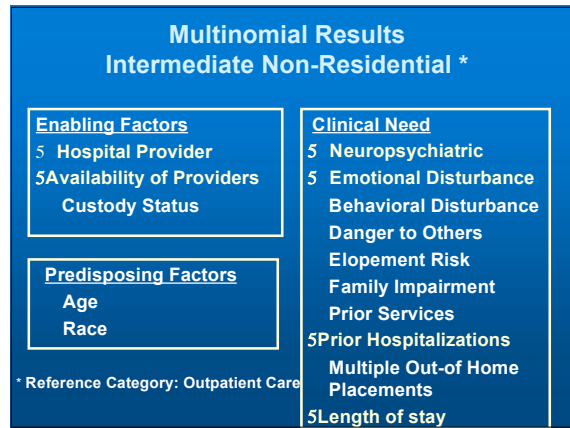
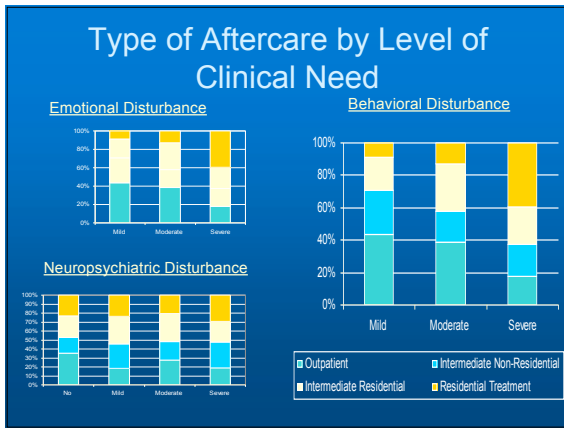
- Symptom severity*
 - Emotional
 - Behavioral
 - Neuropsychiatric
- Risk behaviors*
 - Suicidality
 - Dangerousness
 - Elopement
- Family Functioning*
- Length of stay‡
- Prior services
 - Past 30 days (Type)
 - Out of home placements
 - Prior hospitalizations

* From the Childhood Severity Psychiatric Illness Scale
‡ Variable is log transformed

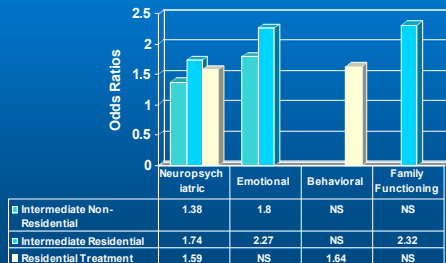
Analysis Strategy

- Multinomial logistic regression of aftercare decisions
- Model specification
 - Model 1:** Predisposing factors
 - Age, race/ethnicity, gender
 - Model 2:** Need factors
 - Symptom severity, risk behaviors, family functioning, prior services, length of stay
 - Model 3:** Enabling factors
 - Availability of providers, hospital, custody status





Effect of Selected Need Factors on Aftercare Decision-Making



Odds Ratios Prior Service Use

	Intermediate Non-Residential	Intermediate Residential	Residential Treatment
Prior hospitalizations	2.12*	NS	3.36**
Prior residential ‡	NS	20.61***	11.02***
Multiple out of home placements	NS	4.25**	5.71***

‡Reference Category: No Prior Services
* p<.05 ** p<.01 ***p<.001

Summary and Conclusions

- Findings indicate that aftercare decision-making is strongly influenced by non-clinical factors:
 - Sociodemographics
 - Resource Availability
 - Service system characteristics
 - Provider and organization characteristics
- Differential access to services for minorities and racial bias in decision-making
- Different standards of care for youths who are wards of the state
- Availability of services reduces the likelihood of placement in more restrictive levels of care
- Placement decisions are influenced by provider behavior.

Strengths and Limitations

- Strengths
 - Large sample from three hospitals
 - Controls for multiple confounding factors
 - Examines contextual factors
 - Multiple data sources
- Limitations
 - Data quality
 - Medical records
 - Medicaid claims
 - Generalizability

Clinical and Policy Implications

Study findings underscore the need for:

- Standardized assessment tools and level of care criteria to guide decision-making
- Access to a continuum of mental health services
- Improvements in quality of care