Managing Risk and Costs Using Data-Based Decision Making

Shannon Van Deman & Knute Rotto
Choices, Inc.
The Dawn Project
Indianapolis, IN

**Dawn Project**
- Serves youth with serious emotional disorders
- Youth are at risk for or have a history of residential placement
- Receives referrals from several child serving systems
  - i.e., child welfare, juvenile justice, education, and mental health

**Managing Costs**
- Per client per month case rate ($4379)
  - Benefits:
    - Flexibility
    - Child and family teams make the decisions and purchases needed services
    - Helps system partners manage costs
  - Pitfalls:
    - Presupposes that you will make money in some instances and lose money in others
    - Balancing out is NOT guaranteed
    - ...It’s risky!

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**Purpose of Study**
- Dawn Project costs were soaring and we needed to learn how to manage risk
  - Hypothesized:
    - methods used by managed care organizations to manage costs and risk could be employed successfully
    - Employing such risk management methods would not adversely impact youth outcomes
Managing Risk
- How many youth will use services?
- How many units of services will each youth use?
- How much does one unit of service cost?

Method
- Each of the risk determining factors were examined by using residential treatment data
- Data was analyzed by looking for changes over time
  - Time was defined in terms of the year of Dawn Project enrollment
- Outcomes were tracked overtime by using the CAFAS

Method
- All juvenile justice and child welfare youth referrals between May 1, 1997 and April 30, 2005 were examined (N=667)
- Data were obtained from The Clinical Manager (TCM)
- Analyzed using SPSS
- Statistical significance relies on an alpha level of .05

Results and Discussion
- How many youth will use services?

Proportion of Youth in Residential Tx. at Dawn Project Enrollment

Year 7 to year 8... $\chi^2 (1, N=185) = 19.5, p = .00$
Results and Discussion
- How many youth will use services?
- How many units of services will each youth use?

Results and Discussion
- ANOVA revealed average per day rate for residential treatment did not vary by year of service cost
  - $F(7, 558) = 1.3, p = .24$
  - Average per day rate was $239 (SD=52.5)$

Results and Discussion
- Did reducing cost negatively impact the client’s outcomes?
  - Assessed using the CAFAS
  - Difference scores computed by taking the total score at disenrollment from the total score at enrollment
  - Compared years 7 and 8

Results and Discussion
- Average per day rate was $239 (SD=52.5)$
Results and Discussion

- Did reducing cost negatively impact the client’s outcomes?
  - Year 7 difference score was 44.2 (SD=49.7)
    \[ t(56) = 6.7, p = .00 \]
  - Year 8 difference score was 24.2 (SD=64.3)
    \[ t(23) = 1.8, p = .08 \]
  - Year 7 to year 8
    \[ t(79) = 1.5, p = .13 \]

Conclusions

- Methods used by managed care organization to manage costs and risk could be employed successfully at the Dawn Project
- Risk management methods did not adversely impact youth outcomes

Conclusions

- Suggests that risk management methods used by managed care organizations can successfully be used in a system of care environment
- Risk management methods decrease costs and help manage the inherent risk when using a case rate