The DATCAP Operations Module as a Tool to Examine Differences in Substance Abuse Treatment Costs: Instrumentation and Findings

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Introduction

• Policymakers are under increasing pressure to efficiently allocate limited public funds while improving substance abuse service delivery

• Although programs typically offer similar core services within each modality, significant differences can exist in ancillary or wraparound services

• Differences also exist in counselor caseloads, client characteristics, program objectives, location-specific prices, and other factors
Motivation

- Economic evaluation studies rarely investigate the sources of cost variability both within and across modalities.
- Primary objective of the Florida Cost Analysis of Addiction Programs (FCAAP) study is to estimate modality-specific weekly and episode treatment costs.
- Secondary objective is to determine which client and programmatic factors significantly contribute to variation in treatment costs.

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Instrumentation

• The DATCAP Operations Module was developed as a supplementary tool to complement the Brief DATCAP
• Enables analysts to examine four key areas that influence treatment costs
  • Client demographics
  • Client risk factors
  • Staff characteristics
  • Other program characteristics
Methods

• Administered the DATCAP Operations Module to agency representatives who agreed to complete the Brief DATCAP
• Conducted statistical analyses to determine which client, programmatic, and geographic factors are the strongest predictors of the economic cost of treatment
  • Average weekly cost per client
  • Average episode cost
• Applied various imputation methods to handle missing data
• Winsorizing (10% tails) to address extreme outliers
Summary of Key Findings

- Statistically significant differences by region and modality for both weekly and episode costs
- Programmatic factors influence episode costs
  - Group Sessions > 60 minutes
  - Number of unique service offered
  - Staff credentials
- Most demographic and client-specific indicators are not statistically significant
- Various sensitivity analyses confirm core results
Discussion

• Results show that agencies vary widely in client case mix and service delivery

• Descriptive analysis indicates that the largest variation occurs with program size, counselors with advanced degrees, group sessions, and clients referred by the criminal justice system

• Multivariate analysis shows that modality, region, gender distribution, services offered, and staff credentials have a statistically significant association with episode costs

• Most client and programmatic regressors are not statistically significant for weekly costs

• Imputation lowers the standard errors of the estimates, but has little effect on the coefficient estimates
Limitations

• Some agencies did not complete the Operations Module and item non-response was common
• Information was particularly lacking for clients with multiple co-occurring conditions, which can be very expensive to treat
• Unable to perform modality-specific multivariate analyses due to small N’s
• The current data do not allow us to determine whether programs with higher economic costs provide better or more effective treatment
**Conclusion**

- The DATCAP Operations Module is the first attempt to systematically collect data on client characteristics, program characteristics, and service delivery
  - Tantamount to a pilot study
- The second edition of the Operations Module will improve question clarity, eliminate a few difficult-to-answer questions, and expand coverage in certain areas
- Future substance abuse treatment studies can administer the Operations Module with or without the Brief DATCAP to obtain additional information on providers

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