



Medicaid Risk Adjustment Methodologies

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M E R C E R

Human Resource Consulting



Agenda

- Goals of Presentation
- Background
- Case-Mix Methodology
- SMI Algorithm



Goals of Presentation

- Methodologies to Match Payment to Risk
 - SMI
- Factors/Criteria Considered (in developing methodology)
- Looking Forward
 - Value Based Purchasing
 - ◆ Cost Effective Care
 - Unified Funding/Systems of Care
 - Resource Allocation



Background

- Current Environment
 - Rising Medicaid costs
 - ◆ Increasing demand for services
- What Has Been Tried
 - Various reimbursement mechanisms
- Issues/Considerations



Background

Current Environment

- Status of Behavioral Health Medicaid Programs' Rising Costs Due to:
 - Increasing number of users
 - Increasing services per user
 - ◆ Increasing severity of needs (children)
 - Litigation impact
 - Stakeholder impact



Background

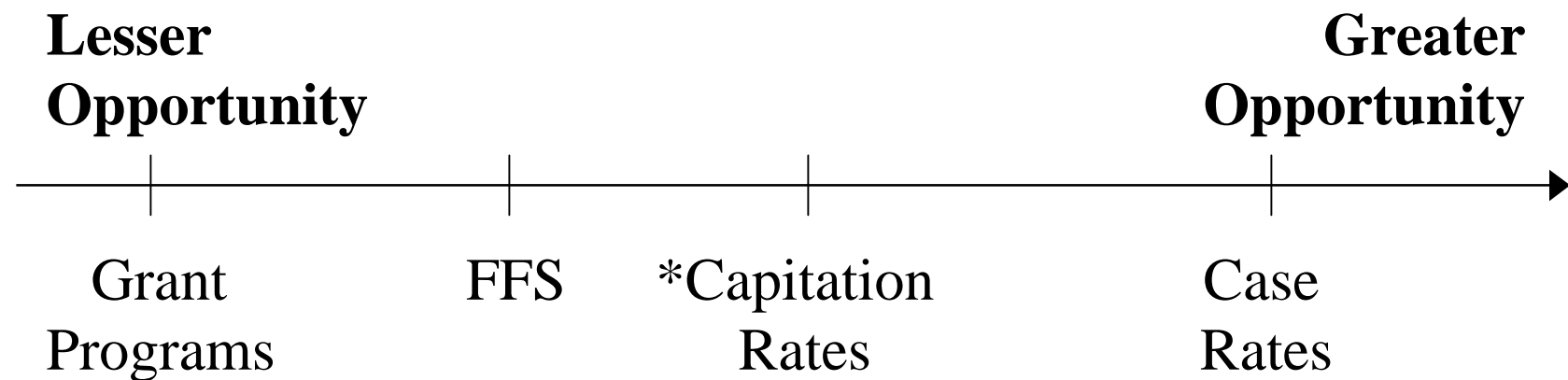
Current Environment

- How to Address these Costs
 - Change program design/benefits
 - Change eligibility requirements
 - Employ different reimbursement mechanisms



Background

*Opportunities to Match Payment to Risk
(Reimbursement Mechanisms)*



**Variant of this is Risk Adjusted Capitation Rates*



Background

What Has Been Tried (Other Settings)

- Physical Health - Medicaid
 - Risk Adjusted Rates
- Commercial vs. Government Sector
 - Litigation Constraints
 - Provider Profiling



Background

Issues/Considerations in Reimbursement Mechanisms

- Available Data
 - Benchmark data
- Stakeholder Values
- Benefits/Program Design
- Statewide or County-Based Systems
- System of Care
- Competition in Contracting



Case-Mix Methodology

Overview

- What is it?
- Strengths/Weaknesses (in terms of issues/considerations)



Case-Mix Methodology

SMI Algorithm

- Definition
- Key Issues (Questions Addressed)
- Data Results



Case Mix Methodology

What Has Been Tried?

- State Programs
 - MI
 - Others
- Comparison of Benefit Levels in Various Programs
- Commercial Experience
- Impact of Initiatives



Case Mix Methodology

Why Not Risk Adjusted Rates?

- Difference Between Behavioral Health (BH) and Physical Health Programs



SMI Algorithm

Overview

- To measure cost and service utilization patterns for SMI adults in a Medicaid managed BH program in order to address the concern that the SMI population may not be sufficiently prioritized for services
- To examine validity of the “SMI algorithm” as a risk adjustment variable for rate setting and clinical/program performance measurement in a Medicaid managed BH program in order to develop financial incentives for prioritizing services for the SMI population



SMI Algorithm

Data Sources

- Encounter Records with End Dates of Service in Calendar Year (CY) 2000
- Clinical Status Records in CY 2000
- CY 2000 Eligibility Files



SMI Algorithm

How was SMI Defined?

- SMI Group Determined Based on Diagnoses (primary and secondary) and Service Utilization Profile
 - SMI Group 1
 - SMI Group 2
 - SMI Group 3



SMI Algorithm

SMI Group 1

- SMI Diagnosis (schizophrenia, major mood disorder, psychoses NOS, borderline personality disorder)
- With or Without “Coexisting Condition” of Mental Retardation or Substance Abuse
- CY 2000 Service Utilization



SMI Algorithm

CY 2000 Service Utilization

- **Psychiatric Inpatient Users:** One or more psychiatric inpatient admission dates within the CY and cumulative bed days with end date(s) of service within the CY greater than or equal to 10
- **Psychiatric Partial Hospitalization Users:** One or more psychiatric partial hospitalization encounters with end date(s) of service within the CY and cumulative hours greater than or equal to 30
- **Targeted Case Management Users:** One or more targeted case management encounters with end date(s) of service within the CY and cumulative quarter hours greater than or equal to 30
- **Crisis Intervention Users:** More than one crisis intervention encounter with end date(s) of service within the CY



SMI Algorithm

CY 2000 Service Utilization

- **Continuous Users of MH Services:** An encounter with end date(s) of service at least one month within every three months within the CY
- **State Mental Hospital Utilization:** Living arrangement at intake was a state mental hospital
- **Homeless:** Living arrangement at intake was homeless
- **Criminal Detention:** Living arrangement at intake was criminal detention



SMI Algorithm

SMI Group 2

- SMI Diagnosis (schizophrenia, major mood disorder, psychoses NOS, borderline personality disorder)
- “Coexisting Condition” of Mental Retardation or Substance Abuse
- No Treatment History



SMI Algorithm

SMI Group 3

- SMI Diagnosis (schizophrenia, major mood disorder, psychoses NOS, borderline personality disorder)
- No SMI Treatment History
- No “Coexisting Condition” of Mental Retardation or Substance Abuse



SMI Algorithm

Key Questions Addressed

- What percentage of adults (age 18-64) served are SMI?
- What percentage of expenditures for adults are for services to the SMI population?
- What is the average annual cost per user for the SMI versus non-SMI populations?
- Which eligibility groups do the SMI populations fall under?



SMI Algorithm

Key Questions Addressed

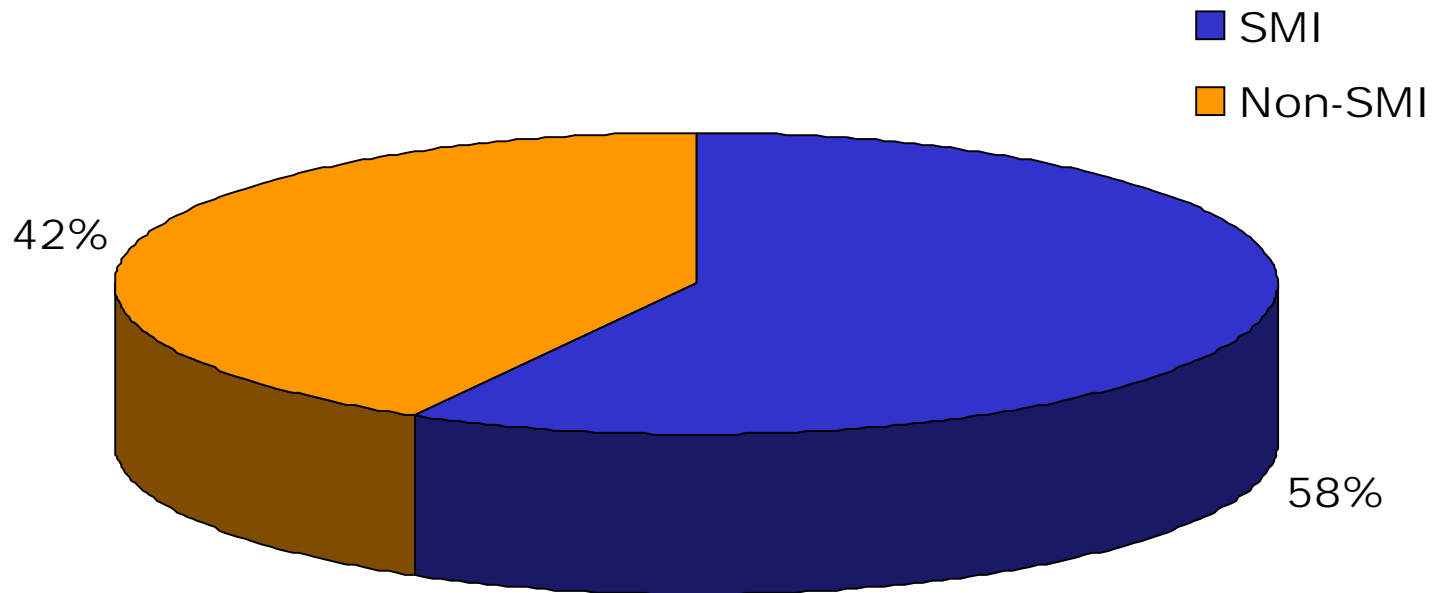
- How does the “SMI algorithm” group assignments compare to the BH-MCO “SMI status” assignments?
- How do SMI “heavy user” expenditures compare to non-SMI heavy user expenditures?
- What services does the SMI population utilize as compared to the non-SMI population?

All SMI algorithm findings reported here should be considered preliminary findings pending a re-analysis of more current and complete encounter data.



SMI Algorithm

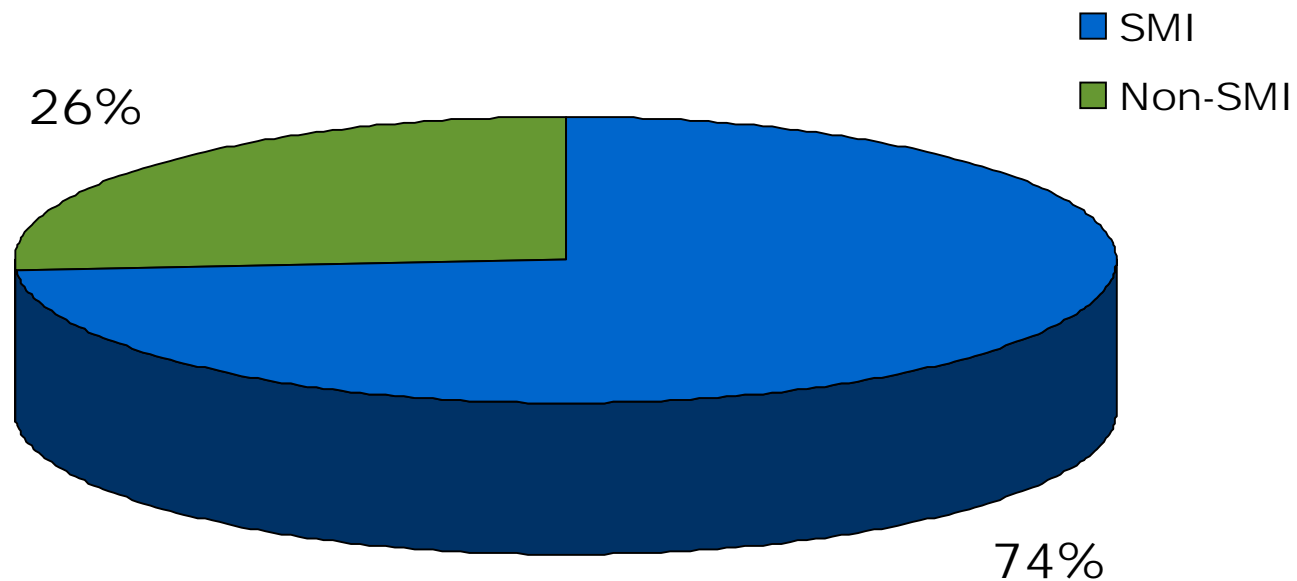
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SMI Algorithm

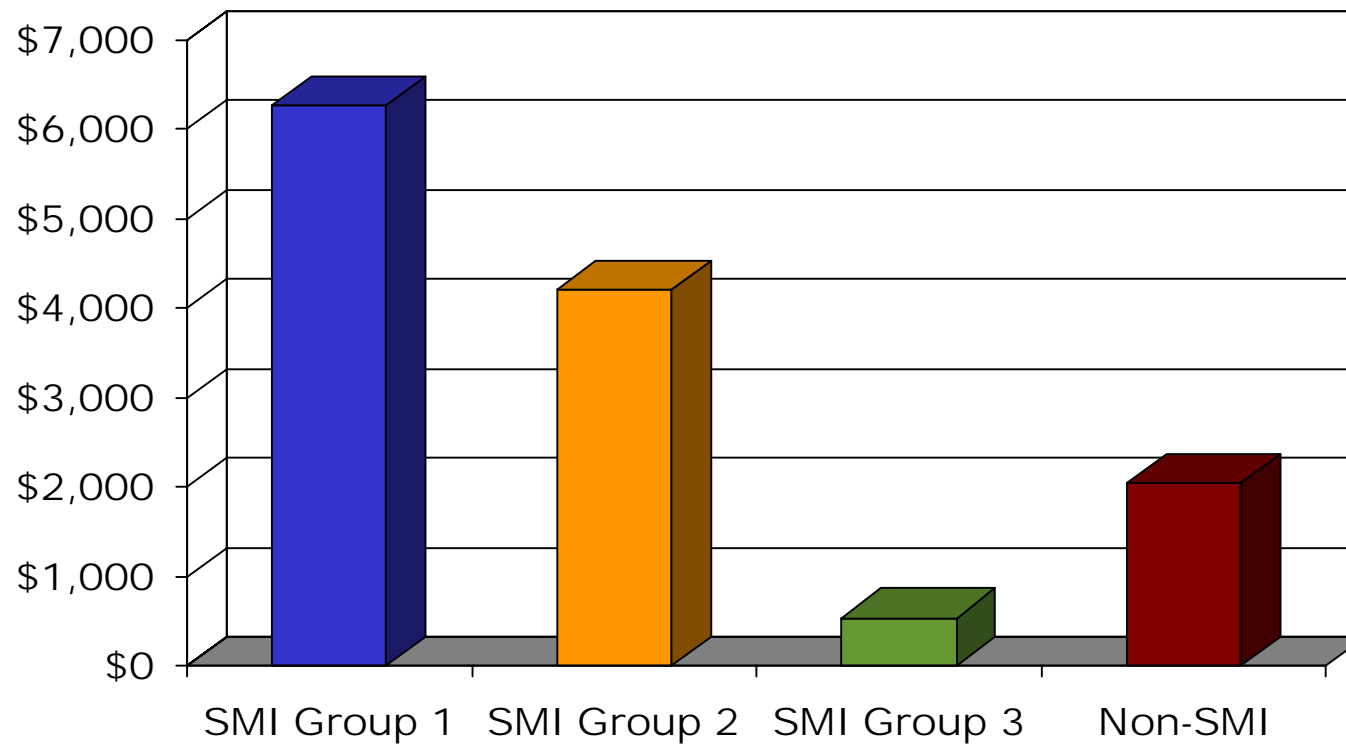
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SMI Algorithm

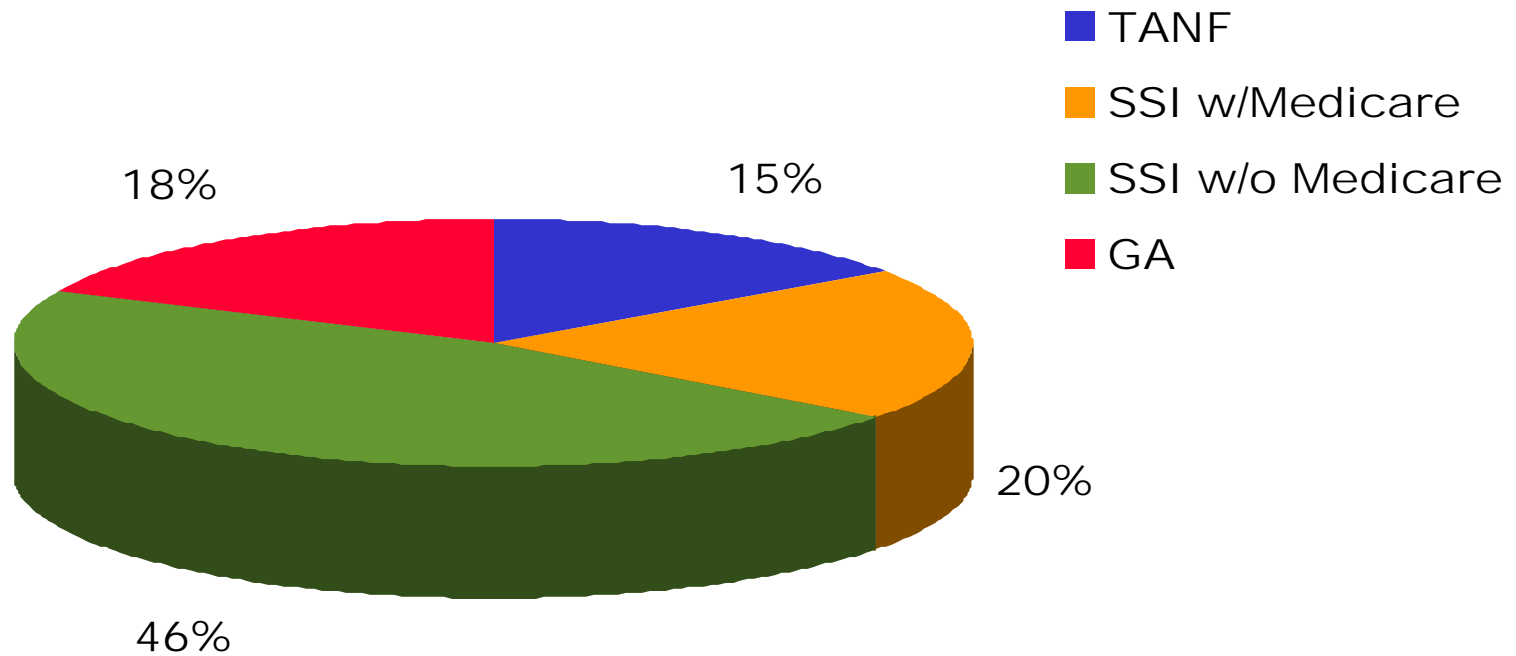
What is the average annual cost per user for the SMI versus non-SMI populations?





SMI Algorithm

Which eligibility groups do the SMI populations fall under?





SMI Algorithm

How does the “SMI algorithm” group assignments compare to the BH-MCO “SMI status” assignments?

- 86% Agreement on SMI Algorithm Assignment
- 64% Disagreement on Non-SMI Algorithm Assignment
- **49% of All Service Users in CY 2000 had Unknown Adult Priority Group**



SMI Algorithm

How do SMI “heavy user” expenditures compare to non-SMI heavy user expenditures?

- Percent of Expenditures for Users with Over \$10,000 Per Year

SMI Group #1	63%
Non-SMI	35%



SMI Algorithm

Service Utilization Profile: Percentage of Expenditures for SMI versus Non-SMI Populations

Category of Service	SMI Group 1	Non-SMI
Psychiatric Inpatient	44%	8%
Partial Hospitalization	13%	2%
Non-Inpatient Detox	8%	42%
Outpatient Psychiatric	6%	9%
Outpatient D&A	2%	15%
TCM	18%	3%