Evidence Base for Systems of Care

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Evidence of Improved Outcomes and Investments
• Federal Children’s Mental Health Initiative established by Congress in 1993 to fund communities, tribes, and territories to implement the system of care (SOC) approach
• National evaluation of the CMHI and other studies have found:
  – Positive outcomes for children and families
  – Improvements in systems and services
  – Better investment of limited resources
• Results have led to efforts to expand implementation of the approach so more children and families benefit

Stroul, Goldman, Pires, & Manteuffel, 2012

SOCs Improve the Lives of Children and Youth
• Decrease behavioral and emotional problems (depression, anxiety, aggression)
• Decrease suicide rates
• Decrease substance use
• Improve school attendance and grades
• Decrease involvement with juvenile justice
• Increase stability of living situations
• Increase strengths

Stroul, Goldman, Pires, & Manteuffel, 2012

SOCs Improve the Lives of Families
• Decrease caregiver strain
• Increase capacity to handle their child’s challenging behavior
• Improve problem-solving skills
• Increase ability to work
• Increase peer-to-peer support
• Increase family education and supports
• Improve the service experience of caregivers and youth

SOCs Improve Service Systems
• Improve system management
• Create interagency partnerships (structures, agreements, braided funding)
• Result in systematic development and implementation of strategic plans to improve services
• Improve requirements in contracts with MCOs, providers, regulations, Medicaid rules, standards, practice protocols
• Improve accountability and use of data for quality improvement and decision making

SOCs Improve Services
• Expand services to broad array of home- and community-based services
• Customize services with individualized, wraparound approach to service planning and delivery
• Improve care management and coordination (especially for youth with most complex, costly problems)
• Increase family-driven, youth-guided services
• Increase cultural and linguistic competence of services
• Increase use of evidence-informed practices
• Increase training of children’s mental health workforce
**SOCs Provide Positive Return on Investment (ROI)**

- **Redeploy resources** from higher cost restrictive services to lower cost home- and community-based services and supports
- **Increased utilization** of home- and community-based treatment services and supports
- **Decreased admissions and lengths** of stay in out-of-home treatment settings (e.g., psychiatric hospitals, residential treatment, juvenile justice, and out-of-school placements)
- Cost data demonstrating impact on **costs across systems** (e.g., reduced out-of-home placements in child welfare and juvenile justice with substantial per capita savings)
- **ROI document** shows savings in short term and future

**ROI Examples: National CMHI Evaluation**

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<tr>
<th>Outcome</th>
<th>Cost Savings</th>
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| Reduced Inpatient Use            | • Average cost/child reduced by 42%  
                                 |   • $37 million saved when applied to all children in funded SOCs |
| Reduced ER Use                   | • Average cost/child reduced by 57%  
                                 |   • $15 million saved when applied to all children in funded SOCs |
| Reduced Arrests                  | • Average cost/child reduced by 39%  
                                 |   • $10.6 million saved when applied to all children in funded SOCs |
| Reduced School Dropout           | • Fewer school dropouts in SOCs (8.6%) than national population (20%)  
                                 |   • Potential $380 million saved when applied to all children in funded SOCs (Based on monetizing average annual earnings and earnings over lifetime) |
| Reduced Caregiver Missed Work    | • Estimated 39% reduction in average cost of lost productivity (Based on imputed average daily wage of caregivers) |

**ROI Examples**

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<tr>
<th>State or Community</th>
<th>Cost Savings</th>
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| Evaluation of Medicaid PRTF Waiver Demonstration – 9 States | • Waiver expenditures cost 32% of services provided in PRTFs (home- and community-based services with wraparound process)  
                                 |   • Average savings of 68%  
                                 |   • Average per child savings of between $35,000 and $40,000 |
| Georgia                          | • Inpatient hospital use declined 86% - 89%  
                                 |   • PRTF use declined 62% - 73%  
                                 |   • Costs declined by 56%, with estimated savings of $44,008 annually per youth  
                                 |   • Juvenile correction facility costs declined by 45%, with savings of $3,180 per youth |
| Maine: THRIVE System of Care     | • Inpatient use decreased by half, 51% savings in Medicaid inpatient hospital costs  
                                 |   • Average per child per month costs decreased by 30%  
                                 |   • Costs for ER visits decreased by 40% |
| Massachusetts, Mental Health Services Program for Youth (MHSPY) | • Total per child per month Medicaid claims expense less than half for SOC group vs. comparison group (both physical and behavioral health)  
                                 |   • Claims 31% lower for ER, 73% lower for inpatient |
| Oklahoma                         | • 41% reduction in average total behavioral health charges vs. 17% reduction for control group  
                                 |   • 60% reduction in average inpatient charges vs. 17% for control group  
                                 |   • Savings of $357 per youth per month, projected $18 million savings if all youth in study participated in SOC |
| Wraparound Milwaukee             | • $3,200 average total all-inclusive cost per child per month vs. $6,083 group home, $8,821 correctional facility, $9,460 residential treatment, $39,100 inpatient |