



Memo

Date: 01/31/2017

To: Chairs and DFL leads for the House Health and Human Services Finance; House Health and Human Services Reform; House Public Safety and Security Policy and Finance; Senate Human Services Reform Finance and Policy; Senate Health and Human Services Finance and Policy; and Senate Judiciary and Public Safety Finance and Policy committees.

From: Commissioner Myron Frans

Results First Update to the Legislature

Pursuant to [CHAPTER 77 S.F.No. 888 1.13.0](#), MMB is providing an update of progress, findings, and recommendations from the Results First Initiative.

By way of background, in 2015, legislation was passed instructing MMB to improve the quality of information about program effectiveness that is available to policymakers. Minnesota is one of 24 states collaborating with the Pew Charitable Trusts to undertake this work. Over the last year, we have worked with agencies, counties, associations, and other stakeholders to collect data and analyze services in Minnesota's criminal justice and mental health systems.

In late 2016, MMB published inventories and benefit-cost analysis for adult mental health and criminal justice service offerings. These releases highlight how effective services are at generating positive outcomes for Minnesotans and enumerated the return on investment for a subset of the services. In general, the reports find wide adoption of proven effective or promising services, though many opportunities exist for expansion.

Our inventories, reports, and background are attached and can be found at <https://mn.gov/mmb/results-first/>.

Adult Mental Health Findings

- 1) Of the 39 mental health services identified in the mental health inventory, 23 were rated proven effective (13) or promising (10). Six are theory-based. For the remaining ten, we did not rate them because they represent a category of possible services, determined by client need.
- 2) For the seven services that received a full benefit-cost analysis, all have a positive benefit-cost ratio. Six of the services also have a benefit-cost ratio that exceed investment (greater than \$1 for each \$1 invested). Benefits are broken into participants and taxpayers benefits with most benefits accruing to program participants. Two of seven services have taxpayer returns that also exceed \$1.
- 3) The ratios reflect gains from healthcare costs, employment, and crime. It does not consider other positive outcomes, such as improvement in psychiatric symptoms, quality of life, or parity with traditional health care. The report highlights these outcomes, but does not "monetize" them.

- 4) It is necessary to offer a continuum of care to individuals with mental illness. Most spending is in intensive care at the end of the continuum. It may be more cost-effective and improve client outcomes, to offer additional services earlier in the care continuum. Demand for mental health services often exceeds supply. In addition, availability of services varies widely from county to county.

Adult Criminal Justice Findings

- 1) Of the 71 criminal justice services identified in the inventory, 34 were rated proven effective (24) or promising (10). Twenty-three are theory-based. Three services have no effect. One had inconclusive research. For the remaining ten, we did not rate them because they represent a range of possible services, determined by offender need.
- 2) Of the 19 services that received a full benefit-cost analysis, 18 have benefit-cost ratios that exceed investment (greater than \$1 for each \$1 invested). Benefits consist of two components: taxpayer and other societal. Taxpayer benefits come from taxpayer costs savings from avoiding crime, including prison, jail, supervision, police, and courts costs. The vast majority of services have taxpayer benefits that also exceed \$1.
- 3) The ratios reflect gains from reductions in recidivism. It does not include any gains from employment.
- 4) Interviews revealed concerns that practitioners may not be delivering certain evidence-based practices with fidelity to the research model, particularly in supervision. If services fail to follow the model, the state may not gain the anticipated returns. For example, supervision caseloads exceed national standards for medium and high-risk offenders.

Results First Recommendations

- 1) MMB should continue to work with agencies and counties in new programmatic areas to assess the effectiveness and return on investment of service offerings.
- 2) MMB should support the legislature, agencies, and counties in using the best national evidence to support decision-making.

Conclusion

As policymakers face difficult budget choices, knowing which services have proven outcomes that lead to taxpayer savings is valuable. This ability to make informed choices when employing public resources maximizes the benefits to state residents. To provide this information, the Results First initiative will continue to investigate the effectiveness of service offerings in Minnesota and share these findings with the legislature, agencies, counties, and other stakeholders.

If you would like more information, feel free to contact me.

Sincerely,

Myron

Myron Frans, Commissioner

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Benefit-Cost Analysis Report: Adult Mental Health

January 2017

Minnesota’s Department of Human Services and county agencies administer a range of services designed to reduce the prevalence and severity of mental health conditions. Minnesota Management & Budget (MMB) created an inventory of these services and conducted benefit-cost analyses of the mental health offerings in the state. This summary of our findings complements a longer, full report that includes detailed explanation of the analysis, findings, and other key considerations. This report can be found at mn.gov/mmb/results-first.

The inventory identifies 39 mental health services in Minnesota. Of those, rigorous evidence shows that 23 of the services have proven effective or promising impacts on adult mental health outcomes. The remaining 16 need additional research to determine their effectiveness or represent settings that may employ a range of services, dependent on the needs of the client.

Seven services also received a full benefit-cost analysis, of which, six have estimated benefits that exceed their costs. Estimated benefits per dollar invested range from \$3.90 for mobile crisis response to \$0.80 for Wellness Recovery Action Plan. We also analyzed one type of clinical treatment, Cognitive Behavioral Therapy (CBT), for three mental health diagnoses (depression, anxiety, PTSD). For this treatment, returns ranged from \$66.00 to \$30.80. For most services, benefits accrue only while the participant receives treatment. This is true for all but CBT; the research shows improvements in client outcomes that persist after CBT treatment ends.

These estimates are based on findings from a national clearinghouse of rigorous evaluations of mental health services and treatments. The benefit-cost ratio assumes services in Minnesota are having the same impact found in those prior evaluations.

The benefit-cost ratio is for Minnesota stakeholders, including state and county payers. It does not include benefits or costs that accrue to federal taxpayers; these benefits and costs are broken out separately in the full report.

Figure 1: What is a benefit-cost ratio?

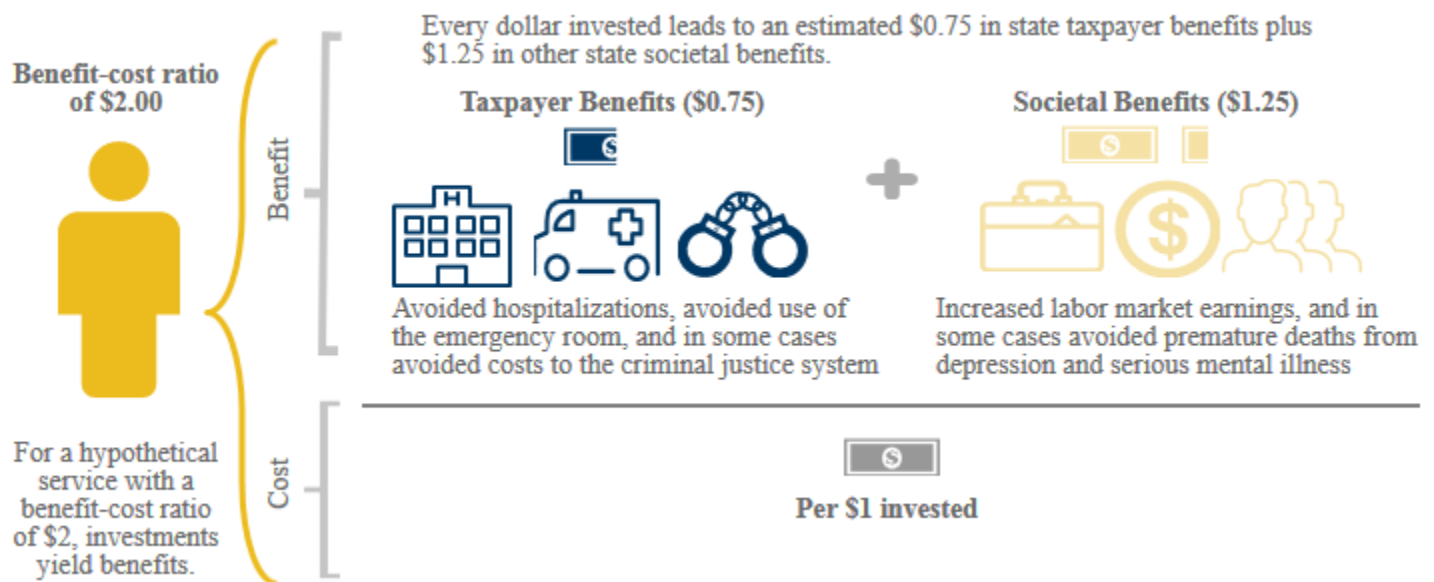


Table 1: Summary of benefit-cost analysis
Comparison of estimated benefits and costs for Crisis Response Services

Service	Per participant benefit minus cost	Benefit-cost ratio	Taxpayer benefits	Other societal benefits
Mobile Crisis Response	\$1,280	\$3.90	\$1.20	\$2.70

Comparison of estimated benefits and costs for Community Services & Supports

Service	Per participant benefit minus cost	Benefit-cost ratio	Taxpayer benefits	Other societal benefits
Behavioral Health Home Services	\$50	\$1.40	\$0.80	\$0.60
Certified Peer Specialist	\$1,310	\$3.60	\$0.50	\$3.10
Illness Management Recovery	\$370	\$1.40	\$0.30	\$1.10
Individual Placement and Supports	\$810	\$2.10	\$0.30	\$1.80
Wellness Recovery Action Plan	(\$90)	\$0.80	\$0.10	\$0.70

Assumption: Benefits only accrue in the year of treatment for these six services.

The benefit-cost ratios in Table 1 assume that benefits only accrue in the year of treatment. For Cognitive Behavioral Therapy, research shows it can have a lasting impact on persistence of the underlying condition with benefits accruing over the lifetime of the participant.

Table 2: Summary of benefit-cost analysis – Cognitive Behavioral Therapy
Comparison of estimated benefits and costs for Basic Clinical Services

Service	Per participant benefit minus cost	Benefit-cost ratio	Taxpayer benefits	Other societal benefits
Cognitive Behavioral Therapy Adult Anxiety	\$36,930	\$66.00	\$8.80	\$57.20
Cognitive Behavioral Therapy PTSD	\$16,920	\$30.80	\$8.30	\$22.50
Cognitive Behavioral Therapy Adult Depression	\$20,120	\$36.40	\$5.00	\$31.40

Assumption: Benefits continue to accrue throughout the lifetime of the participant.

Source: Minnesota Management & Budget

Figure 2: Understanding the results

Per participant benefit minus cost is the difference between the present value of cash inflows (anticipated benefits) from a given service and the present value of cash outflows (costs).

The benefit-cost ratio is the net present value of anticipated benefits to state residents for every dollar invested in the service.

Taxpayer benefits are costs avoided or new benefits accrued by units of government because of the service. These benefits include reductions in health care costs, increases in taxes from changes in labor market earnings, and reductions in crime.

Other societal benefits are gains for participants and citizens from increased labor market earnings, reductions in crime, and avoided premature death.

Background

A bipartisan provision enacted during the 2015 legislative session instructs MMB to estimate the benefits and costs for corrections and human services practices, using the Pew-MacArthur Results First Initiative framework. By using rigorous evidence to inform decision-making, policymakers can achieve better results by funding and operating public services proven to work.

Website: mn.gov/mmb/results-first
 Contact: ResultsFirstMN@state.mn.us

Benefit-Cost Analysis Report: Adult Criminal Justice

January 2017

Minnesota’s Department of Corrections and county correction agencies provide a range of services designed to rehabilitate offenders and reduce their likelihood of future criminal activity. Minnesota Management & Budget conducted benefit-cost analyses of select corrections services in the state. This summary of our findings complements a longer, full report that includes a detailed explanation of the analyses and findings.

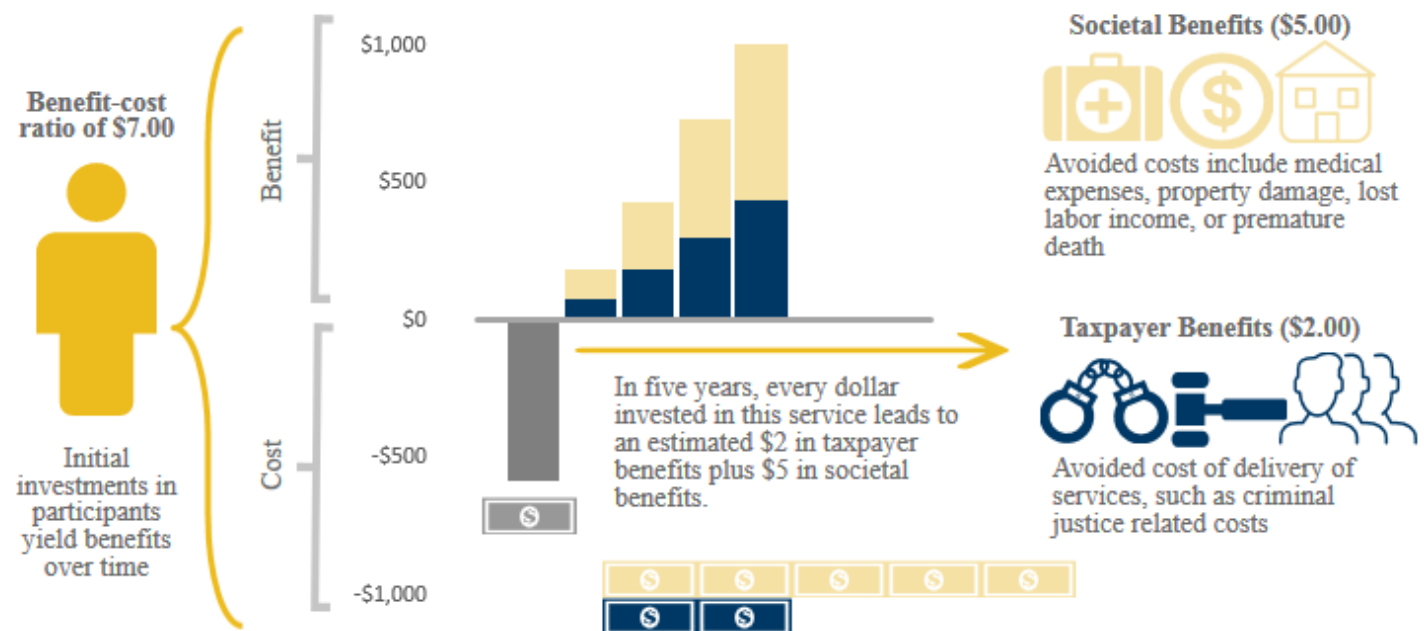
All of the supervision services analyzed have benefits that exceed their costs. Estimated 5-year benefits range from \$11.40 to \$1.80 for each dollar spent on the service. Ten of the eleven prison services analyzed have benefits that exceed their costs. For these services, estimated benefits range from \$15.90 to \$0.40 for each dollar spent.

These estimates are based on findings from a national clearinghouse of rigorous evaluations of criminal justice practices. We only analyzed services in Minnesota that matched those in the clearinghouse. The benefit-cost ratio reflects what Minnesota can expect based on those prior, national studies.

Findings on page 2 include services under local supervision in one or more of the counties represented in this initial analysis. Five counties, comprising three jurisdictions (Dakota County, Stearns County, and Dodge-Filmore-Olmsted), that administer all of their county’s local supervision are included. In the other 54 counties, the state Department of Corrections supervises all or a portion of probationers and parolees. While the findings presented on page 2 are not representative of every county in the state, they may hold lessons on evidence-based policies that are applicable to all areas of the state.

Findings on page 3 include services administered by the Minnesota Department of Corrections in state prisons.

Figure 1: What is a benefit-cost ratio?



Findings – Supervision Services

For all supervision-associated services analyzed, the estimated benefits exceed costs for the five-year period of study. The benefit-cost ratios range from \$11.40 for employment & job training to \$1.80 for non-residential chemical dependency treatment. The most expensive service to administer, intensive supervision (net cost of \$4,740 per participant), generates the second highest per participant benefit minus cost (\$13,460). Electronic monitoring for probationers does not have a benefit-cost ratio because the net cost of service is negative (i.e., the use of electronic monitoring is less expensive than if the client remained in jail). To calculate a ratio, the net cost (denominator) must be positive. The report also differentiates the portion of benefits experienced by taxpayers versus society more broadly.

Table 1: Comparison of benefits and costs five years after supervision begins

For the first service below, a benefit-cost ratio is not applicable.

Service or practice*	Per participant benefit minus cost	Benefit-cost ratio		
Electronic monitoring (probation)	\$3,480	Service is less expensive than the alternative and generates benefits from reducing recidivism.		
Service or practice*	Per participant benefit minus cost	Benefit-cost ratio	Taxpayer benefits	Other societal benefits
Employment & job training assistance	\$6,740	\$11.40	\$3.60	\$7.80
Cognitive Behavioral Therapy	\$3,020	\$6.20	\$3.00	\$3.20
Electronic monitoring (supervised release)	\$2,170	\$6.60	\$2.60	\$4.00
Supervision with Risk-Need-Responsivity	\$4,610	\$5.50	\$2.60	\$2.90
Sex offender treatment	\$23,300	\$7.80	\$2.40	\$5.30
Intensive supervision - surveillance & treatment	\$13,460	\$3.80	\$1.20	\$2.60
Non-residential chemical dependency treatment	\$2,860	\$1.80	\$0.60	\$1.20

Source: Minnesota Management & Budget

*Evidence-based services and practices operating in Minnesota that aim to reduce recidivism

Figure 2: Understanding the results

Per participant benefit minus cost is the difference between the present value of cash inflows (anticipated benefits) from a given service and the present value of cash outflows (costs).

The benefit-cost ratio is the net present value of anticipated benefits to state residents for every dollar invested in the service, for a five-year period.

Taxpayer benefits (blue) accumulate to Minnesota taxpayers through avoided costs to the criminal justice system. These include resources used for police arrests, the cost of prosecutors, defenders, and courts, and the costs of jails, prisons, and supervision (supervised release and probation).

Other societal benefits (yellow) are victim costs avoided when crime is not committed. These vary depending on the crime avoided, but could include medical expenses, cash losses, property theft or damage, lost earnings from injury, and others.

Findings – Prison Services

For ten of the eleven prison-associated services analyzed, the estimated benefits exceed costs for the five-year period of study. The benefit-cost ratio ranges from \$15.90 for EMPLOY to \$0.40 for correctional adult basic education. The Challenge Incarceration Program, Affordable Homes Program, and Work Release do not have a benefit-cost ratio because the net cost of service is negative. In other words, inmate participation generates a benefit to the state because it is cheaper to provide than the alternative service. InnerChange Freedom Initiative uses outside grant dollars to administer the program. We did not estimate the cost for correctional industries, but anticipate it also has a net negative cost.

The report also highlights who accrues the various benefits, taxpayer, or society. The percentage of benefits accruing to taxpayers versus the broader society varies as each service has different impacts on the likelihood an offender will be reconvicted and, if so, of what type of offense.

Table 2: Comparison of estimated benefits and costs five years after release from prison

For the first five services below, a benefit-cost ratio is not applicable.

Service or Practice	Per participant benefit minus cost	Benefit-cost ratio
Challenge Incarceration Program	\$20,870	Service is less expensive than the alternative and generates benefits from reducing recidivism.
InnerChange Freedom Initiative	\$20,870	Service is costless to the state and generates benefits from reducing recidivism.
Affordable Homes Program	\$7,570	Service is less expensive than the alternative and generates benefits from reducing recidivism.
Work release	\$6,910	Service is less expensive than the alternative and generates benefits from reducing recidivism.
Correctional industries	not applicable	We were unable to estimate the cost of this service, but it generates benefits from reducing recidivism.

Service or Practice	Per participant benefit minus cost	Benefit-cost ratio	Taxpayer benefits	Other societal benefits
EMPLOY	\$18,010	\$15.90	\$5.10	\$10.80
Cognitive Behavioral Therapy	\$12,120	\$13.40	\$4.20	\$9.20
Chemical dependency treatment	\$8,630	\$2.80	\$0.90	\$1.90
Career and technical education	\$5,080	\$2.50	\$0.80	\$1.70
MnCOSA	\$17,440	\$1.80	\$0.60	\$1.20
Correctional adult basic education	(\$1,370)	\$0.40	\$0.10	\$0.30

Source: Minnesota Management & Budget

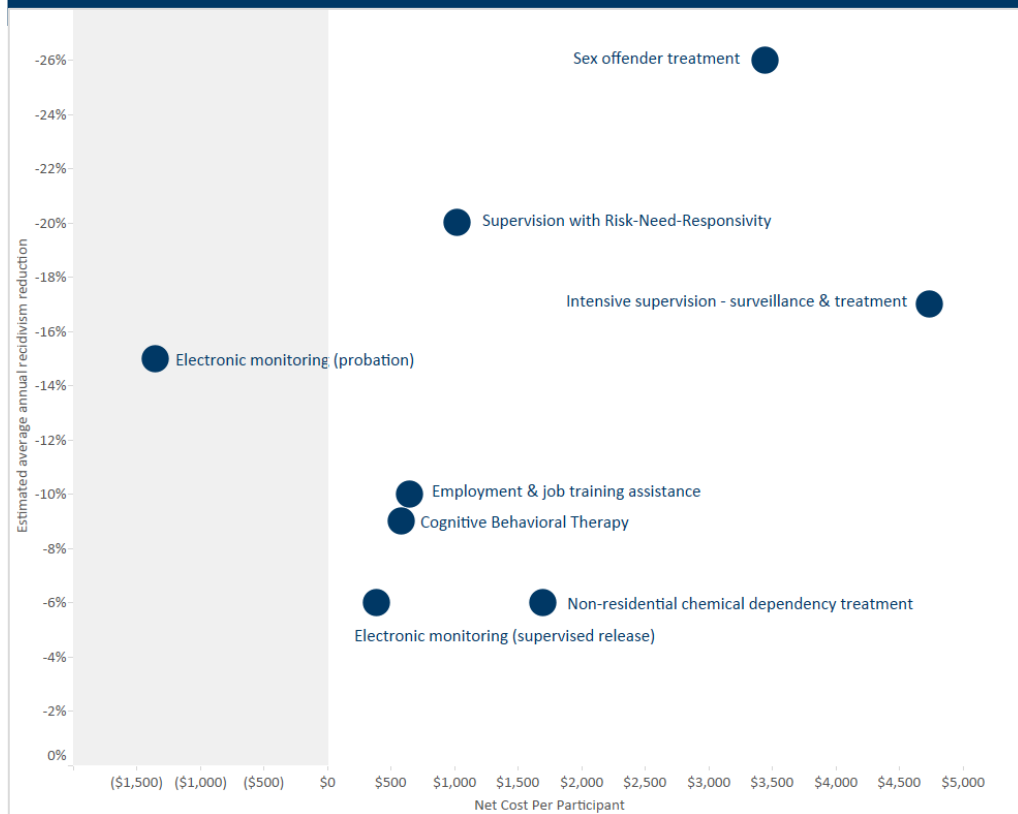
*Evidence-based services and practices operating in Minnesota prisons that aim to reduce recidivism.

Note: Definitions in “Figure 2: Understanding the results” also apply to “Table 2”.

Weighing costs and benefits

Corrections staff tailor effective programming to offender risk level and needs. This means services are not perfect substitutes for each other, and it is not always possible to switch an offender from a service with a low benefit-cost ratio to one with a higher benefit cost ratio. Some services have a large effect on recidivism for a difficult to impact population, and a relatively high cost per participant. For jurisdictions using this service, it may be the most cost-effective treatment option despite the high price tag. Policymakers should consider this context when comparing benefit-cost ratios.

Figure 3: Net costs & anticipated recidivism impact - Supervision



Note: Services with a negative cost per participant save the state more dollars than the alternative.

Background

A bipartisan provision enacted during the 2015 legislative session instructs Minnesota Management & Budget to estimate the benefits and costs for corrections and human services practices, using the Pew-MacArthur Results First Initiative framework. Minnesota is one of 24 states using this approach.

By using rigorous evidence to inform decision-making, policymakers can achieve better results by funding and

operating public services proven to work. This ability to make informed choices when employing scarce public resources maximizes the benefits to Minnesotans. Future iterations of this initiative will study child welfare, health care, juvenile justice, mental health, and substance abuse.

Figure 4: A Framework for Evidence-Based Decision Making

The nationally recognized Results First Initiative framework uses a three-step process:

1. **Use high quality research** from across the nation to identify what works and what does not
2. **Use this research and state-specific data** to project the anticipated effect
3. **Compare services' costs and projected benefits** to identify the best return on investment of public dollars

The Washington State Institute for Public Policy developed the benefit-cost analysis model. The Pew-MacArthur Results First Initiative collaborated with Washington State to encourage its use in other states.

To read more information about the Results First Initiative in Minnesota and access the adult criminal justice full report, please visit mn.gov/mmb/results-first

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