
Report:

**One Can Help and
Positive Financial
Externalities for the State**

180 Degrees: Boston University

One Can Help

March 27, 2019



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EXECUTIVE SUMMARY

In our attempt to quantify One Can Help's financial impact on the State we've performed multiple cost-benefit analyses comparing how much One Can Help (OCH) spends on its services to the potential financial alleviation from the taxpayer burden that results from these services. We used OCH's outcomes survey and application data for 2017 to conduct our analysis. **We estimate that OCH's services resources and interventions saved the state, and consequentially taxpayers, between \$9,419,989 and \$11,436,510 in 2017.** To help our analysis we've segmented OCH's potential impact into three main categories: foster care, courts, and miscellaneous.

We've estimated that OCH's intervention within foster care, including returning children from foster care sooner to their homes or keeping them out of foster care altogether, saves the state an estimated annual amount of **\$6,848,471.34** if we estimate the average cost to the state of a child in foster care to be \$29 for each day

In the court system, we believe that OCH's services help to provide "meaningful access to justice" and in doing so, help to decrease the amount of time some cases need to be in court in order to resolve as well as decrease the number of no-shows which result in additional court dates. We estimated that every court hour costs the state a minimum of \$857 in professional time (lawyers, judges, social workers) and that in 2017, the decrease in court time due to assistance from OCH saved the state between **\$2,016,521 and \$4,033,042.**

We've also categorized OCH's impacts outside of foster care and courts into miscellaneous. This includes benefits of OCH's services in regard to preventing homelessness, alleviating cost of childcare, improvements to mental health and deterrence from entering institutions and care facilities, preventing "at-risk" teens from re-entering the court system and improving education. We've estimated that it costs OCH 4 times less to keep families in their homes than it costs for the state to provide for that same family in a homeless shelter.

We've estimated that OCH alleviates the financial burden in regard to public welfare distributed for child care by **\$2,322 per year**. In regard to the state providing for those with mental health issues, OCH potentially saves the state **\$10,251 annually**. In providing services to prevent re-entry into the court system and the prison system, OCH potentially saves the state **\$172,824** annually. Lastly, in providing better access to education and encouraging the continuation of education for many of these children, OCH saves **\$292,000** of taxpayer money in total with each child. If OCH prevented even only 5% of its serviced children from dropping out of school, that is an annual benefit of **\$369,600** saved for the state.

Please note: This report is created by Boston University 180 Degrees Consulting. 180 Degrees Consulting is world's largest university-based consultancy. It is a student-run organization and the report was prepared by members of Boston University 180 Degrees

Consulting. Our consultants are carefully selected top university students with the right combination of expertise, creativity, and problem-solving ability. These consultants work on a volunteer basis because they believe in the work 180 Degrees Consulting is doing. They believe that improving the effectiveness of organizations can make a massive and meaningful difference to the people those organizations serve.

OUR APPROACH

Explanation

In the body of our report, we will explain in detail the steps and assumptions we made to arrive at each estimation. In general, our team tried to be as conservative as possible with the estimation, so to minimize the risk of overstating OCH's impact. Our team also acknowledges that in most cases, it cannot be proven, and is highly unlikely, that OCH's services *alone* caused these positive outcomes and thus taxpayer savings. However, we found that there is no real way to account for the multitude of factors that may play into each nuanced case. Since our objective was to measure OCH's impact, if any, we focused on measuring the outcomes associated that correlated with the organization's intervention, rather than exploring how and why each case ended the way it did.

Our team has also chosen not to focus on longer-term and dynamic effects. In conjunction with keeping our estimates conservative, we've tried to focus on the most concrete and direct effects. We are also aware that there are likely to be selection effects at play here. OCH provides its' services through lawyers and social workers who choose to request assistance on their client's behalf from OCH when they identify a missing need. Therefore, the services are completely dependent upon the juvenile court professional's discretion which could be biased. However, assistance is only provided to beneficiaries who are unable to overcome a poverty barrier preventing progress or a type of success.

IMPACT AREA: FOSTER CARE

Introduction

The foster care system represents a large portion of state expenditures on the Department of Children and Families (DCF). Our analysis suggests that OCH significantly reduces the tax-payer burden by reducing the risk of a child entering foster care and/or by expediting family reunification.

This analysis will detail the main costs associated with the foster care system and then provide an estimate of the monthly cost per child. Then, data on families served by OCH will be processed in order to determine how many children were prevented from entering the foster care system or were removed from the system as a result of OCH's efforts. In order to determine how much OCH's actions save the state, this paper will compare state expenditures with and without OCH's intervention to show how had OCH not intervened, the cost to tax-payers would have been significantly higher.

This analysis will take the following structure:

- I.Context
- II.Main Foster Care Costs
- III.OCH Data analysis
- IV.Conclusions
- V.References

I.Context

Table 1.1 shows the official data for number of children in foster care in the state of Massachusetts. This analysis will use the data for the 2016 fiscal year (FY) in which there were 10,911 children in the foster care system and each child had a median length of stay of 14.3 months.

Table 1.1: Children in Foster Care and Length of Stay

| | In Foster Care on 9/30 FY | | | | |
|--------------------------------|---------------------------|-------|-------|--------|--------|
| | 2012 | 2013 | 2014 | 2015 | 2016 |
| Total Number | 8,522 | 8,537 | 9,937 | 10,278 | 10,911 |
| Median length of stay (months) | 12.3 | 12.6 | 12.0 | 13.8 | 14.3 |

Source: *U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, Child Welfare Outcomes Report Data*

II. Main Foster Care Costs

The main costs associated with funding the foster care system are the following:

- **Parent daily allowances:** foster care parents receive daily allowances for providing care. The rate varies depending on the age of the child in care. Relative (in the case of kinship foster care placements) as well as non-relative foster parents receive state allowances. Table 1.2 shows the daily rates for Massachusetts as well as the number of children currently in the system divided by age group.

Table 2.1: Daily Allowance to Foster Parents

| Ages | No. in care on 9/30/2016 | Daily Rate per child | Cost per month per child | Total cost per day | Total cost per year |
|------|--------------------------|----------------------|--------------------------|--------------------|---------------------|
| 0-5 | 4,288 | \$23.21 | \$707.905 | \$99,524.48 | \$36,326,435.3 |
| 6-12 | 3,328 | \$26.24 | \$800.32 | \$87,326.72 | \$31,874,252.8 |
| 13+ | 3,295 | \$27.47 | \$837.835 | \$90,513.65 | \$33,037,482.25 |

Source: [https://www.mass.gov/info-details/foster-and-adoptive-faqs#what-will-i-be-paid?-](https://www.mass.gov/info-details/foster-and-adoptive-faqs#what-will-i-be-paid?)

- **Quarterly clothing allotments:** children in foster care receive funds for clothing every four months. The amount awarded depends on the age of the child. Table 1.3 shows the current rates for Massachusetts divided by age group.

Table 2.3: Clothing Allotment

| Ages | No. in care on 9/30/2016 | Quarterly Rate per child | Cost per month per child |
|------|--------------------------|--------------------------|--------------------------|
| 0-5 | 4,288 | \$238.75 | \$59.6875 |
| 6-12 | 3,328 | \$246.24 | \$61.56 |
| 13+ | 3,295 | \$296.25 | \$74.0625 |

Source: [https://www.mass.gov/info-details/foster-and-adoptive-faqs#what-will-i-be-paid?-](https://www.mass.gov/info-details/foster-and-adoptive-faqs#what-will-i-be-paid?)

- **Administrative costs:** children in foster care are frequently monitored by a team comprised of social workers and attorneys, as well as other providers. In addition, a formal foster care review meeting is carried out every six months for every child in foster care which often includes additional collaterals. The review consists of an evaluation of the child's goals and compliance with his or her action plan. The foster care review results in a set of recommendations for the child going forward. According to the Massachusetts state budget, a total of **\$3,596,680** (Massachusetts Budget and Policy Center 2016) was spent on foster care review services in the FY 2016. Taking into account that there were 10,911 children in foster care in that same year, the administrative cost per child per year is \$329.63 and the monthly cost per child is \$27.47. (These costs do not include the cost of day to day monitoring)

Total cost of Foster Care System

Table 2.4: Total Foster Care Costs per child per month

| | Parent Allowances | Clothing Allotment | Administrative costs | Total |
|-----------|-------------------|--------------------|----------------------|----------|
| Age group | | | | |
| 0-5 | \$707.91 | \$59.69 | \$27.47 | \$795.06 |
| 6-12 | \$800.32 | \$61.56 | | \$889.35 |
| 13+ | \$837.84 | \$74.06 | | \$939.37 |

III. OCH Data Analysis

OCH provided us with two crucial sources of data for this analysis:

1. **OCH Application records** detailing the requested items or amounts of money, the number of children affected and their corresponding ages.
2. **OCH outcomes survey** where social workers or attorneys evaluated the impact of the service provided by OCH.

The initial data processing consisted of data cleaning in order to isolate the cases specifically related to foster care. Then, each application was matched to its corresponding outcomes survey. This allowed us to track the service provided by OCH from beginning to end.

A qualitative review was carried out in order to determine if OCH's service contributed to the removal of a child from the foster care system or prevented a new entry. Outcomes such as the following were considered as evidence that OCH prevented a child from entering the system:

“Transportation costs was (sic) covered by One Can Help. My client was facing a termination of parental rights and missed court dates until he received funding. He then was able to attend court, testified, and learned last week his parental rights would not be terminated.”

Outcomes such as the following were considered as evidence that OCH's actions resulted in a child's exit from the foster care system:

“As a result of One Can Help's rental assistance to my client, she was able to keep her apartment despite losing public benefits when her child was removed.”

Her daughter was reunified last month, something that may have not been possible without the financial support to stabilize her housing!”

The data cleaning resulted in the identification of a grand total of 407 cases involving 659 children in 2017. Applications that were either denied or left incomplete by OCH were filtered out of the analysis. Additionally, there were 21 approved requests for more than \$40,000 . We treated these as data entry errors and subsequently eliminated them from the analysis as well.

We continued our analysis by breaking down the OCH cases by age groups. According to this analysis OCH served 220 children between the ages 0-5, 219 between the ages 6-12 and 214 children aged 13 and above. After adding these together, we totaled 653 instead of 659. The inconsistency in the total number of children is a result of missing data cells that we attributed to data entry errors. By separating the children by age group, we were able to create a more accurate analysis of the benefit that OCH could potentially have on the state of Massachusetts as the cost of foster care differs for foster children of different ages.

Table 3.1: OCH Total Potential Savings

| Age group | Children served by OCH | Monthly cost per child | Monthly Potential Savings | Annual Potential Savings |
|-----------|------------------------|------------------------|---------------------------|--------------------------|
| 0-5 | 220 | \$795.06 | \$174,913.20 | \$2,098,968.40 |
| 6-12 | 219 | \$889.35 | \$194,767.65 | \$2,337,211.80 |
| 13+ | 214 | \$939.37 | \$201,025.18 | \$2,412,302.16 |

Total potential savings provides an estimated savings to the state as the 659 children that OCH serviced are no longer in the state’s foster care budget. This in turn saves the state the money as without OCH intervention, those same children might still be in the foster care system today. As a result, by taking these children out of the system, the state is now able to use that budget surplus to either improve the foster care program or re-allocate those savings to a different department.

Table 3.1 shows the annual potential savings as a result from OCH’s interventions. To calculate this number we multiplied the number of children served by OCH by the monthly cost of foster care. Then, we multiplied this by 12 in order to get the annual potential savings. For example, we found that OCH served 220 children between the ages of 0-5 years. Therefore, we multiplied 220 by \$795.0625 which is the monthly cost of foster care associated with that age group. Finally, we multiplied the result from the previous calculation (\$174,913.65) by 12 to get the annual potential savings. This process was repeated for all the categories which resulted in a total of **\$6,848,471.34** in potential annual cost savings.

OCH spent a total of \$98,281 on cases that either reduced the need for children to enter foster care or prevented them from needing to remain there longer than absolutely

necessary. After our numerical breakdown, we found that OCH's efforts resulted in a potential \$6,848,471.34 cost savings for the state of Massachusetts.

Additionally, we discovered that OCH on average spends around \$242 per foster care case intervention.

IMPACT AREA: COURTS

Introduction and Methodology

Because OCH services the children and their families through juvenile court appointed lawyers' or social workers' requests, each case OCH deals with has a potential impact in the court system. A lot of what OCH does is provide a more "meaningful access to justice", which can be crucial for the success of the vast majority of clients in the juvenile court system where more than 80% of the population is considered indigent.

OCH is frequently asked to provide bus or train passes. Clients may be unable to attend court dates because the court hearing their case is some distance away and they have no means to get there. Missing a court date wastes state resources: social workers' time, lawyers' time, judges' time, general overhead, and court appointment slots that could've gone to other people. In addition, this analysis only takes into account the actual date that the client may have missed, not the professional preparation the initial court date required nor the make up dates or bad consequences that may result from the missed court date. Also, missing court dates may unfairly indicate to a court that a client is unmotivated when the real issue may be a lack of means.

In assessing the costs associated with Juvenile Court hearing dates, we identified three major sources, which were all personnel costs. There are many other costs associated with courts, however we focused on quantifying the case where a client missed a court date because of a lack of accessibility that could've been prevented with the help of OCH. Costs that weren't included may include general overhead for the court and the cost of rescheduling court times, along with many others. We chose not to include these because they were difficult to quantify and attribute to OCH. In addition, our conservative approach led us to believe that trying to quantify and include these costs may inflate our estimates.

The first of such costs involved the social workers that needed to be present at each court hearing. We assumed that, on average, during a typical court hearing, two social workers would be present, earning \$30/hr each.

The second major cost lies in the state-funded public attorneys that represent both the defendant and the State. We assumed that, on average, four attorneys would be present during a typical Juvenile Court hearing - two for each side. We used an estimate of \$50 an hour to calculate costs associated with attorneys' time (note that \$53-\$55 is the current

state average cost per hour of these professionals, but costs were deliberately kept low for this analysis.)

Finally, the last major cost involves the judge that oversees these Juvenile Court hearings. We found that these judges earn around \$160,000 annually and if we assume a typical 40-hour work week, we find that their hourly rate is \$77/hr.

Furthermore, upon the advice of industry professionals and the results of a survey we conducted (discussed in further detail below), in coming up with a figure of how much OCH saves the State in court costs on an hourly basis, we assumed that for every hour of court time, the attorneys and social workers would spend an additional two hours for preparation.

Table 1.1: Calculation of Hourly Court Cost

| | Number of People Present | Hourly Cost | Total Hours Spent per Hour of Court | Total Cost per Hour of Court |
|-------------------|--------------------------|-------------|-------------------------------------|------------------------------|
| Social Workers | 2 | \$30 | 3 | \$180 |
| Attorneys | 4 | \$50 | 3 | \$600 |
| Judge | 1 | \$77 | 1 | \$77 |
| Total Cost | | | | \$857 |

OCH Data Analysis

As with our analysis of foster care costs, the data we used were OCH’s application records and outcomes survey. Our initial data processing involved filtering out all the applications that were denied by OCH because they did not meet OCH’s standardized criteria requirements. Then, we manually combed through each individual case in order to find instances where OCH’s intervention **directly** resulted in materialized State savings of court costs. We targeted mainly transportation cases where OCH directly facilitated the plaintiff’s ability to attend a court date, such as providing funds for the plaintiff to purchase a train ticket, and where the plaintiff would not have been able to attend the court date otherwise. These cases ended up being easy to identify as in the outcomes survey, the attorneys would directly attest to the success of OCH’s contribution. In total, we identified 4 cases in 2017. The average contribution of OCH was \$40 per case.

Hence, for every court hour that OCH saves the State through its interventions, OCH is saving the State **\$857**.

One Can Help Impact Survey

In order to better estimate the court time and professional time saved with the intervention of OCH we created a survey to be distributed to the attorneys and social workers that were clients of OCH in 2017. After removing inactive email addresses and email repeats, the survey was delivered to around 100 professional applicants.

The survey focuses on understanding the impact of OCH's assistance regarding court dates, professional time, need of foster care, and the outcome of the case. For purposes of our court saving analysis, this section of the report focuses primarily on responses 1,2,3, and 6.

We received 57 total responses within a week of distributing the survey. 80.7% of all respondents (or 46 out of 57 respondents) report that the assistance from OCH leads/led to their cases being resolved sooner.

Out of the responses that indicated that court dates are/were saved because of OCH's assistance, we removed entries that are qualitative (for example, "CRA was dropped") and entries that don't give a certain answer (for example, "unknown"). We cleaned the remaining data through simplifying entries (changing "at least one if not more" to "1"), and through taking an average when a range is given as an answer (i.e. changing "2-4" to "3"). We performed the same data cleaning methods for responses that indicated that professional time is/was saved from OCH's assistance. After cleaning, we obtained 39 data points for the number of court dates that were/are likely avoided by OCH intervention, and 41 data points for the number of professional hours that were/are likely saved by OCH intervention.

For the number of court dates likely saved by OCH intervention, the mean value is 135.1 (court dates), the median is 3 (court dates), and the standard deviation is 810.5. This is resulting from a high outlier number of "5000" in the #24 survey respondent. When the outlier is omitted, the average is 3.62, the median is 3, and the standard deviation is 3.025.

For the hours of professional time likely saved by OCH intervention, the mean value is 22.44 (hours), the median is 17.5 (hours), and the standard deviation is 26.399.

Court Savings Per Case Using Survey Data (based on hourly wages of parties involved in court)

Based on 80.7% of the responses indicating that OCH has helped their cases to resolve sooner, and that the average number of court dates avoided is 3.62 from the survey, we can calculate an estimated court saving per case with the help of OCH from survey responses. The total cost of wages for all government-paid parties during court is estimated to be \$857 per hour of court. Assuming that an average court date is 2-4 hours per case including wait time and negotiations, we can obtain a high estimation and a low estimation of court savings.

If all the court dates avoided with the help of OCH are four-hour hearings, an average of 28.96 hours (3.62×4) is saved per case. Therefore, around \$12,409.36 is saved per case ($14.48 \times \$857$). OCH approved 403 cases in 2017. If 80.7% of the cases that OCH helped in 2017 also found that OCH helped their cases to resolve sooner, around 325 cases ($403 \times 80.7\%$) would be able to avoid court dates. Using the average court saving per case calculated earlier, in 2017 OCH saved the government \$4,033,042 ($325 \times \$12,409.36$) regarding to costs of government paid parties being in court.

If all the court dates avoided with the help of OCH are two-hour hearings, the same calculation can be done as above. In 2017, OCH saved the government \$2,016,521 regarding to costs of government paid parties being in court. ($3.62 \times 2 \times \$857 \times (403 \times 80.7\%)$).

In summary, OCH saved the government between \$2,016,521 to \$4,033,042 regarding costs of government paid professional parties being in court in 2017.

IMPACT AREA: MISCELLANEOUS

Introduction & Methodology:

Throughout this analysis, we conducted a cost analysis where we first separated the 2017 year fiscal data given to us by the OCH database. While segmenting OCH's impact for analysis, we found that though foster care and the court systems were the largest areas of impact, the uniqueness of OCH's servicing led to impacts in additional countless areas. While the following may not be as concrete and quantitative as the previous areas of impact, in an effort to be as comprehensive as possible, we have included any other possible impacts that we believe OCH could reasonably have.

By filtering out the data points that did not correlate with court spending like on lawyers/social workers as well as foster care, we were able to then further divide the entries based on the following points:

- Costs relating to preventing homelessness
- Costs relating to child care and support
- Costs of mental health and psychological distress or trauma
- Costs of incarceration
- Costs of education

From these costs, an analysis and breakdown was done which was split into two parts: quantitative and qualitative analyses. For the qualitative side, each individual data point was filtered out to see whether it was truly relevant to this section and did not overlap with the other two sections. For the quantitative analysis, the amount of money per client was found and averaged to produce the average cost OCH pays per client.

Moving on to the benefits analysis, online research was done from sources such as

external studies and governmental databases to find key statistics about youth who require help, the prevalence and affordability and availability of said resources, and the average costs per client by the state of Massachusetts in comparison with national averages.

Finally, a maximum theoretical benefit analysis was done in which the costs per state for the client in this subcategory is taken and the costs by OCH is subtracted. This analysis resulted in a fairly large number, highlighting the potential OCH can save for the state and the prevalence and importance of further funding for this organization as a potential means to do good while maximizing efficiency and reducing huge amounts of short-term and potential long-term costs incurred by the state.

Homelessness

In 2017 alone, OCH has spent \$26,740.25 to help prevent 85 people from becoming homeless. This can be seen in the appendix included below. OCH is targeting people who are at a high risk of becoming homeless if certain needs are not met or financed. They achieve this by providing funds for those needs such as paying for the rent, utilities or furniture. Indicators we looked for in application data to detect cases that could've ended in homelessness of the client without the intervention of OCH included payments for rent, utility bills, furniture, or storage and moving costs. An example of this is the following:

“Our client has been working very hard to be reunified with her daughter. She has been compliant with expectations set forth by DCF. She was homeless for a period of time, but found a job and now she is paying for a motel room. With the expectation of having the custody of her daughter back, our client has been looking for housing to rent privately. She found a two bedroom apartment for \$1,250 [...] but she cannot afford [both the] first month and security.”

In this case, OCH provided funding for the security deposit. By providing these kinds of services, they help prevent some people from needing to move into homeless shelters and making it possible for them to move into their own apartments sooner.

Cost of OCH vs Cost for State



Homeless shelters are funded by the state and thus OCH’s efforts to prevent homelessness provides additional benefits to the state. As a result, we have chosen to look at the cost of homeless shelters as a reference to how much the state spends. This is because most people under OCH’s client list are more likely to go to a shelter if unable to get the assistance requested. As a result, they fall under the “temporary” homeless group. According to the U.S Department of Housing and Urban Development of Policy Development and Research, temporary homeless-ness is defined “*Families who use shelters or transitional housing for a single, relatively short, period of time and do not return to the residential system for homeless people after leaving*”¹ From Exhibit 5.1, we can see that average costs of a temporary homeless person in a shelter in Massachusetts is \$11,550. The cost of helping 85 people only cost OCH around \$26,000. Therefore, if we are to look at each case independently and subtract \$11,550 from the amount spent by OCH; we can see the total amount of benefits OCH is providing.

Now before continuing further into our analysis, we must account for the likely possibility that not all 100% of these cases would’ve ended up in homelessness without OCH’s intervention. However, even if we assume that even 10% of these cases become homeless; the state will have spent close to \$100k for around 9 people. This is a stark contrast as it is 4 times more than what OCH has spent to keep over 85 people in their homes. This portrays how OCH’s expenditure for homelessness prevention is more cost effective than the state providing a homeless shelter. OCH is directly providing temporary solutions to help families access housing supports is more effective and cheaper than the state providing a homeless shelter.

¹ https://www.huduser.gov/publications/pdf/costs_homeless.pdf (Exhibit 5.1)

Costs of Child Care

Massachusetts has some of the most expensive child care costs in the country, and many low income families cannot afford this expense. OCH often provides funding for summer camp to give children a safe environment or temporary childcare so parents can work and become more independent as soon as possible. An example of one of the cases we considered in this category is:

“My client [...]found summer employment at a pool in Watertown and needs childcare for her daughters. She found a camp near her job and would like to bring her daughters there so she can work.”

From 2007-2016, there has been a relatively stable and slightly increasing trend of children who are in poverty, which has been hovering at around 20%. This is a huge problem, especially when such high levels of poverty are traditionally associated with second and third world countries; because of this, there is less awareness and seems to escape the eye of the middle-class family here in Massachusetts. Yet for the impoverished, life is hard and very harsh.

- The Midwest average is \$17,733 and is the largest expense for families.
- In the Northeast child care averages \$22,415 and is also the largest expense.
- In the South child care averages \$13,861 and is the second largest expense after housing.
- In the West child care averages \$17,625 and is the second largest expense after housing.

From this analysis of the costs of household expenses, the northeast has the highest out of all the regions, with child care being the highest at \$24,815. This is exacerbated by the fact that Massachusetts is at the top of the cost list even in the Northeast region, something that is very detrimental for families who need help with child care, especially if said families are not earning the most.

KEY NUMBERS

1. MASS: \$2,739 per capita on public welfare
2. Cost Per Client: =\$416.29
3. Benefit to State: \$2,739-\$416.29=\$2,322.71 saved on public welfare

Analysis: for the key analysis, these numbers were obtained from the 2017 fiscal year data for OCH, where we filtered out the data based on category. For instance, we separated use of funds based on child care expenditures, education, after-school or summer programs (which indirectly affects mental health) and determined the average

cost per client for OCH to be \$416.29. Then, taking numbers from the chart above that detailed state data and did an average subtraction to determine maximum benefit or money saved by the state on public welfare.

The calculation of voucher and contract expenses were taken from appendix one and divided by the number of slots to determine the average expense per client for the state costs in the fiscal year of 2001 to get a rough estimate. Next, the amount OCH spends on average per client is subtracted from this to determine maximum theoretical benefit for the state.

Conclusion: OCH can theoretically save the state millions a year just on Child Care alone while doing something socially and philanthropically beneficial to the state and to the betterment of the nation. For child care, which consists of the largest amount of costs in the nation based on household expense per region, coupled with the fact that MA has a significantly higher spending average than the national average, the amount of money that OCH can potentially save for the state is very substantial, which warrants further analysis and consideration by the state as a viable means to reduce afflicted families with children in need as well as to do so in a financially-sound manner.

MENTAL HEALTH



Mental Health

- Cost is \$249 for One Can Help
- Theoretical Maximum Benefit: $\$10,500 - \$249 = \$10,251$ total benefit saved for state
- Average Cost Per Capita of State Mental Health Agencies: \$114

Almost every case OCH deals with has clients who are in poverty or at risk of being impoverished. Studies have shown that those in poverty are much more at risk for mental health issues. In addition, many of the children OCH deals with are in unstable homes or in critical situations. All of these stressors lead to an increase in the likelihood of developing or exacerbating a mental health disorder. The cost of placing children with mental disorders into special schools or care centers is very expensive to the taxpayers. An example of a case that we classified as OCH having a positive impact on a client's mental health is the following:

“My 14 year old client loves art projects. She has a lot of anxiety and finds it hard to go to school because of this and her fears about leaving her mother alone (which stems from

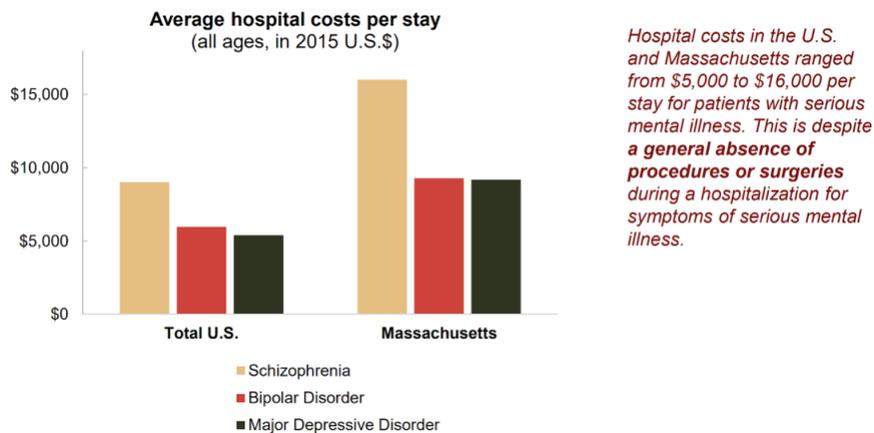
a past family history of domestic violence) . She tells me that these "therapy coloring books" -ie. the ones with inspirational quotes inserted throughout the book, really help her calm down when she gets overwhelmed. "

In this case, OCH provided funding for coloring books and art materials.

We've analyzed the impact that OCH's service has had on the mental health area and its treatment within Massachusetts. We've done this by:

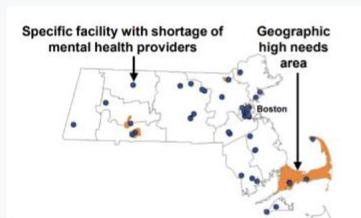
1. Providing data and charts highlighting the prevalence of US mental health as well as lack of care
2. Providing data from government and external sources showing the high costs this incurs (\$10,500)
3. Conducting a costs analysis to show how much money OCH is providing (\$249)
4. Conducting a benefits analysis to find maximum benefit by subtraction to get: **\$10,251** possibly saved for the state
(Note* analysis based on theoretical maximum benefit and leaves out confounding factors)

Boston does not have a strong mental health program with a shortage of facilities, especially in high need areas. Thus, many people cannot get the help they need, leading to more costs in prison with prisoners who have mental health issues. Thus, OCH can potentially prevent a detrimental path and save a substantial amount of money.



**FUTURE
AT-RISK
TEENS**

Massachusetts: Incurred Costs due the Mental Health Issues



Mental Health Provider Shortage
Especially Detrimental in High Need Areas



Prison Inmates with Mental Health Disorders
High Annual Costs for Massachusetts Alone

OCH works with those who are already in the juvenile court system. Many of these are at-risk teens. We attempt to analyze their impact on the potential outcomes for

these teens. We estimate that OCH’s intervention saves the state \$473.49 a day and **\$172,824** per year in MA.

This analysis was done by taking the annual Massachusetts data on money spent per person who is at risk and ended up going to prison. Thus, if OCH did not help, it is likely that some of the children would go down the same path as illustrated on the 2017 fiscal year excel database by client anecdotes. Assuming the worst (juvenile detention), this would incur a lot of costs for the state and for taxpayers, since the US is infamously known for its high spending on detainees.

Costs of confinement: Forty-six states and jurisdictions reporting

| State | Per day | Per 3 months | Per 6 months | Per year |
|-----------------------------|----------|--------------|--------------|-----------|
| Louisiana ²⁰ | \$127.84 | \$11,506 | \$23,011 | \$46,662 |
| Florida ²¹ | \$151.80 | \$13,662 | \$27,324 | \$55,407 |
| Alabama ²² | \$159.00 | \$14,310 | \$28,620 | \$58,035 |
| Massachusetts ²³ | \$473.49 | \$42,614 | \$85,228 | \$172,824 |

Victim and taxpayer costs from recidivism due to youth incarceration can reach \$7.034 billion in 2011 dollars.

| | Low End of Range | High End of Range |
|--|------------------|------------------------|
| Change in re-offending due to youth incarceration | 0% | +26% |
| Jury Award Methodology | | |
| Costs to harmed party | \$0 | \$3.155 billion |
| Taxpayer Juvenile Justice System Costs | \$0 | \$0.374 billion |
| Total, costs of incarceration-related recidivism | \$0 | \$3.529 billion |
| Willingness to Pay Methodology | | |
| Costs to harmed party | \$0 | \$6.660 billion |
| Taxpayer Juvenile Justice System Costs | \$0 | \$0.374 billion |
| Total, costs of incarceration-related recidivism | \$0 | \$7.034 billion |

EDUCATION

Since OCH services children in the juvenile court system and their families, we decided to try to analyze their impact on children's education. Much of OCH's services go towards making education more accessible and feasible for children. The majority of the people that OCH serves come from low-income households and according to an EPI brief from University of South Florida, are thus 2.4 times as likely as middle-income kids and over 10 times more likely than high-income kids to drop out.

There was a joblessness rate of 54% of the nation's high school dropouts in 2008. This is not only lost money in income tax, but also costly in welfare and other financial support systems by the state. In examining the societal cost of high school drop-outs we refer to a 2009 study by Northeastern University:

Over their working lives, the average high school dropout will have a negative net fiscal contribution to society of nearly -\$5,200 while the average high school graduate generates a positive lifetime net fiscal contribution of \$287,000. The average high school dropout will cost taxpayers over \$292,000 in lower tax revenues, higher cash and in-kind transfer costs, and imposed incarceration costs relative to an average high school graduate.

The nature of OCH's service is short-term and difficult to measure, due to lack of data. However, if even just 5% of the children OCH has serviced over the years graduated from high school due to the help and support from OCH, that would be a long-term societal benefit of **\$29,200,000** (using an approximation of 2,000 kids serviced by OCH multiplied by 5% and \$292,000 per case). For a more specific estimate, we calculate the cost of the average high school dropout to taxpayers annually by dividing \$292,000 by the average American life expectancy of 79 years to get an annual savings per dropout of \$3,696. Thus again using the 5% approximation of OCH's intervention leading to would-be dropouts graduating high school, OCH saves the taxpayers an additional **\$369,600** annually.

TEAM TAKEAWAYS

The following are some of the team's takeaways after doing this research and writing the report. This section is our opportunity to reflect on this project and should be taken as opinion.

Much of our team was unfamiliar with the juvenile court system and thus learned a lot from doing this project. It didn't take much research to see that the system made it very difficult for anyone in poverty to get out of the system or out of poverty. In addition, while we were not very surprised at how inefficient the government was, we were surprised at how easy it was to fix these inefficiencies and how large the positive impact could be by providing these small resource interventions. We were also surprised at the lack of resources this population has as well as the extremely limited availability of access to these resources elsewhere.

We saw how quickly how now being able to overcome even one relatively low cost poverty barrier, could quickly escalate into a downward spiral that keeps this population in poverty and mired in the court system. However, we also saw how one small service provided, like buying a laptop, could be a gamechanger and result in many future successes for someone. We think that the impact OCH provides, while difficult to quantify exactly because of the unique needs and circumstances of the individuals involved is very significant. It is not hard to imagine how the resources OCH provides could be the crucial things that help clients get back on their feet.

ADDITIONAL REVIEW

The following is a review of this report by Rebecca Karp, lecturer of Strategy and Innovation at the Questrom School of Business.

“180 Degrees robustly highlights the challenges children and families face when attempting to navigate the juvenile court system. The report helps bring to light the role One Can Help actively plays in mitigating these challenges. 180 Degrees’ report is well crafted and logical. It lays out the analytical assumptions made and the boundaries around those assumptions. It shows that One Can Help not only alleviates family turmoil, but can inculcate high potential positive financial impact for the broader system.”

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