

An analysis for:



Impact Analysis and Social Return on Investment: Addiction Management Coaching for Persons with Addiction & Their Loved Ones

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
<u>Technical Documentation</u>	
INTRODUCTION AND RESEARCH QUESTIONS	3
THEORY OF CHANGE	3
KEY PERFORMANCE INDICATORS	5
ASSUMPTIONS AND KEY FINDINGS	5
SOCIAL RETURN ON INVESTMENT	9
DISCUSSION ON METHODOLOGY AND DATA QUALITY	10
TAKEAWAYS AND STRATEGIC RECOMMENDATIONS	12
FUTURE RESEARCH AND PROPOSED NEXT STEPS	13
ATTACHMENT A: IMPACT VALUE SUMMARIES	
ATTACHMENT B: CALCULATIONS AND SUPPLEMENTARY ANALYSIS	
ATTACHMENT C: LEVELS OF EVIDENCE AND BIBLIOGRAPHY	
ATTACHMENT D: UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS	

Executive Summary

Ecotone Analytics conducted an impact analysis and calculated a social return on investment (SROI) for Face it TOGETHER (FIT) and their two types of addiction management coaching clients, persons with addiction (PWA) and loved ones (LO) of a person with addiction. The analysis takes a unique approach to combining external literature of the highest available level of evidence of causality with FIT's internal organization data to estimate total social value generated per client given FIT's cost of providing coaching services.

The analysis began with an agreed upon depiction of FIT's Theory of Change, i.e. the organization's plan for how it aims to generate the change it seeks. From there, Key Performance Indicators (KPIs) from FIT's program data were identified and aligned with the external literature's study of the effects of substance abuse on various long-term outcomes such as earnings, physical and mental healthcare costs, and costs to employers, amongst others. KPIs utilized were derived from FIT's Recovery Capital Index (RCI) and their Risk Assessment (RA) either in total or based on specific metrics that make up the RCI or RA.

In choosing the appropriate KPIs as well as the data points from the external literature, a series of assumptions were necessary. This included selecting a standard length of each client type's engagement with FIT, given that each client has a different experience and may receive coaching services for widely varying amounts of time. For this analysis, it was assumed that the PWA's would be engaged for 120 days and the LO's would be engaged for 60 days. Additional assumptions made include the duration of impacts of each benefit with time periods reaching up to 3 years (and a discount rate of 3% in those cases for the monetized values), that the coaches operate at full capacity, and that the cost of coaching each client is constant.

Based on this setup, seven different long-term outcomes were valued for the PWA and five for the LO (see Attachment 2: Coaching Impact Value Maps). The resulting social return on investments were \$12.40 for PWAs and \$2.58 for LOs. While there is currently a large difference in the monetized impacts of peer coaching between the two client types this is in large part due to the relative lack of data, both quantitative and qualitative, associated with LOs in general and regarding the effects of coaching LOs. It should be noted there are also many opportunities for improved data quality regarding the PWAs. In either case however, the SROIs are strongly positive, with total social value benefit created (the valued summed across all stakeholders that benefit from FIT's services) is greater than the costs of providing the coaching.

With the recognition of these findings and their limitations we recommend continuing to grow the FIT program. It is providing a cost-effective intervention and filling a void in the market. Future external research should be developed to improve the evidence base as well as increase the level of evidence of studies used – this will then strengthen the SROI estimates for FIT and provide a clearer image of the scale and duration of impact that can be attributed to FIT.

Detailed Technical Documentation

INTRODUCTION AND RESEARCH QUESTIONS

Face it TOGETHER (FIT) provides one-on-one Addiction Management Coaching (AMC), based on best practice models for peer-based support and proven, field tested tools and techniques. AMC helps clients manage the complex issues around addiction, with a focus on achieving wellness in all respects. Coaches have lived experience with addiction and are matched with clients based on best fit.

This documentation provides a detailed description of the methodology and calculations that went into estimating the social value created by Face it TOGETHER via a social return on investment (SROI) determined for FIT's coaching of Persons with Addiction (PWA) and Loved Ones (LO) of a person with addiction. These are two separate clients, coached individually, with unique sets of needs. For the analysis, a unique set of assumptions is used for each client, effectively creating an "average" client, although in reality every client is unique and thereby benefits in varying amounts from their experience with FIT. The estimate derived is thus meant to be a conservative, but average, estimate which some clients will surpass while others will not.

The following sections will describe the Theory of Change applied to FIT's work, major assumptions, an identification of Key Performance Indicators, a discussion of the SROI calculated and finally a few recommendations going forward. But first, the question we set out to answer.

Research Question: What is the return on investment from providing addiction management coaching to Persons with Addiction as well as Loved Ones of a person with addiction?

THEORY OF CHANGE

The following tables shows each program's theory of change (also referred to as a logic model), mapping the planned inputs, activities, and outputs for the program and importantly, from there, describing the outcomes for those who participated in the program. These outcomes can be distinguished by whether they were intermediate outcomes (those achieved directly from participation in FIT's coaching) or long-term outcomes (those achieved indirectly from the behavior change catalyzed by FIT). Last are the impacts directly attributed to each program – those noted here are generalized based on the outcomes previously noted however direct attribution to each program is a difficult process that requires experimental or quasi-experimental analysis.

PWA Strategy: Provide personalized coaching sessions to clients who suffer from addiction to help improve their well-being.

Inputs	Activities	Outputs	Intermediate Outcomes	Long-term Outcomes	Impact
Annual Operating Expenses	In person coaching sessions	Mean length of participation	Average % change in RCI	Increased Earnings/ Productivity	
Client Fee		Median length of participation	Change in Personal Capital (RCI)	Improved Health and reduced Healthcare Costs	People will get well and stay well
Coaches with lived experience	Client acquisition	# of in person sessions	Change in Cultural Capital (RCI)	Improved Mental Health	
Caseload per coach	Fundraising	# of call sessions	Change in Social Capital (RCI)	Improved Quality of Life	People will seek help
		# of SMS	Average % change in Risk score	Avoided Criminal Activity	
				Substance Use Savings	FIT will provide high quality
				Reduced costs to the PWA's employer	services while being actively connected to communities in which they provide services
				Stabilized Living Situation	

LO Strategy: Provide personalized coaching sessions to clients whose loved ones suffer from addiction to help improve their well-being.

Inputs	Activities	Outputs	Intermediate Outcomes	Long-term Outcomes	Impact
Annual Operating Expenses	In person coaching sessions	Mean length of participation	Average % change in RCI	Improved Mental Health and Physical Health	
Client Fee	Client acquisition	Median length of participation	Average % change in Risk score	Improved Quality of Life	Increased well-being for the Loved One
Coaches with lived experience	Fundraising	# of in person sessions	Improved boundaries set	Improved productivity for Employer	
Caseload per coach		# of call sessions	Improved hope and understanding	Reduced Spending on their loved one with an addiction	People will seek help
		# of SMS	Increased Vaccorded as of Addiction	Increased Happiness	
		61 51.116	Increased Knowledge of Addiction disease	Decreased Isolation	FIT will provide high quality services while being actively
			Improved Communication	Increased family cohesion and community connections	connected to communities in which they provide services
				Increased sense of purpose	

KEY PERFORMANCE INDICATORS

In the development of the valuation of the long-term outcomes, 3-4 key performance indicators appear in FIT's program data and serve as the leading indicators for the variety of intermediate and long-term outcomes for which monetization took place.

For Persons with Addiction:

- Improvements in Recovery Capital Index (RCI)
- Reduction in Risk Assessment score
- Reduction in healthcare spending
- Improvement and stabilization of employment improves both earnings for the individual as well as reduces costs to employer significantly

For Loved Ones:

- Improvements in perceived quality of life
- Reduction in mental health related expenditures
- Reduced spending on Person with Addiction

There are of course several other important KPIs that went into the development of the long-term outcome benefits, however, those identified here played outsized roles in achieving the scale of the final SROI figures. As a result, a focus on measurement of these indicators for future monetization efforts could strengthen the analysis. Further, while data collected was for all program participants, the lack of a control group reduces the strength of evidence of the program's causal effect on the change noted.

ASSUMPTIONS AND KEY FINDINGS

In order to develop the estimates of benefits created, a series of assumptions had to be developed with which to base both upfront costs, (the cost of providing the addiction coaching), as well as to estimate the scale of benefits generated.

Assumptions included:

- The PWA client is engaged for 120 days. The Impact Value Summary shows the results from a 120-day engagement, however this technical documentation also shows the results of a 60-day engagement for comparison purposes.
- The LO clients are engaged for 60 days.
- The costs of coaching each client are equal on average
- FIT Coaches work at full capacity

- Coaching is provided via in-person sessions of 1 hour per week, however given the equal cost estimates, it is noted that clients, particularly LO's will also be engaged via text and phone as well
- For Long-term Outcomes with benefits accrued over multiple years, a present value is calculated using a discount rate of 3%.

FIT also provided profiles of the typical client. The typical PWA client is:

- Equally male or female
- 45-65 years old
- Employed full time
- Primary addiction to alcohol
- Are in recovery
- Have had 2-4 treatment episodes prior to FIT

The typical LO client:

- Is female
- 45-65 years old
- Employed full time
- The parent of someone with the disease of addiction. The PWA they are supporting is typically male, living in their home, 25-44 years old, not in treatment, and their primary addiction is to alcohol.

While these characteristics do not play as prominent of a role in the analysis as compared to the aforementioned set of assumptions, certain aspects were influential in the development of cost estimates. For example, when estimating benefits to employers we are able to be more confident in the cost savings estimates due to both types of clients often being fully employed. Further, for estimates of costs of substance use, hospital costs, among others, we are able to focus our estimates more heavily on alcohol related figures given that it is most common.

Investment size estimate:

The investment size, i.e. the expenditures per client, to achieve the monetized long-term outcomes are assumed to be the same for both the PWA who is engaged for 120 days (or 60 days) and the LO who is engaged for 60 days. The total estimate is \$2,540 per client. Costs include all FIT team members' compensation, facility costs, marketing, technology costs, travel and other smaller cost categories, effectively capturing all spending occurring for the execution of the FIT coaching program.

This value is an average estimate based on the FIT facilities operating at full capacity with an average time devoted to a client by each coach of 90 days. This estimate was restricted by available cost data and given that FIT clients can be engaged for a wide variety of

time periods so per client costs can vary drastically. Also affecting cost estimates is the frequency of the FIT coaches' engagement with the clients. While we assume once per week in-person sessions, the reality can include a mix of phone calls, video calls, and text messages. With this variation in communication it is understood that LO's tend to have much more frequent communication with their coaches, thereby requiring more time than just the one session per week whereas the PWA's are less likely to engage as frequently and may miss weeks during their engagement. With this understanding, the assumption that the costs for each client are the same appears reasonable.

Long-Term Outcome Benefit Estimates:

Below are long-term outcome benefits attributed to the client's engagement with FIT, here referred to as the marginal cost (the cost/benefit of an event occurring multiplied by the likelihood of that cost/benefit occurring). The outcomes which are shaded are included in our final calculations. Both PWA scenarios include one unshaded outcome, 'reduced healthcare costs of anxiety disorder or depression'. This one is not included in the total calculation to avoid risk of double counting healthcare cost savings. This method is in alignment with Washington State Institute of Public Policy's Cost-Benefit Analysis trumping rules, used in determining whether monetized outcomes overlap. In this case, when two outcomes overlap, the larger of the two is used in the final tally. A more detailed description of each marginal cost calculation is included in the separate spreadsheets of the PWA and LO Pathways (i.e. the pathway through the logic model to achieve the monetized benefit).

PWA 120 Day Outcome Benefits								
Long-Term Outcome Monetized	Marginal Cost							
Present Value of Increase in future earnings	\$5,925							
Cost savings from avoided Substance Use Disorder related hospital visit due to FIT coaching	\$5,639							
Cost savings from reduced criminal activity costs	\$3,443							
Improvement in Quality of Life (measured via QALY) for FIT participants	\$1,591							
Reduced healthcare costs of anxiety disorder or depression	\$176							
Average reduction in cost of substance use	\$8,488							
Average cost reduction to the PWA's employer	\$6,000							
Cost reduction from reduced homelessness	\$413							
Total	\$31,496							

PWA 60 Day Outcome Benefits	
Long-Term Outcome Monetized	Marginal Cost
Present Value of Increase in future earnings	\$2,963
Cost savings from avoided Substance Use Disorder related hospital visit due to FIT coaching	\$5,005
Cost savings from reduced criminal activity costs	\$2,099
Improvement in Quality of Life (measured via QALY) for FIT participants	\$1,237
Reduced healthcare costs of anxiety disorder or depression	\$76
Average reduction in cost substance use	\$7,105
Average cost reduction to the PWA's employer	\$3,000
Cost reduction from reduced homelessness	\$514
Total	\$21,923

LO 60 Day Outcome Benefits	
Long-Term Outcome Monetized	Marginal Cost
Gain in Quality of Life (measured via QALY) from coaching	\$1,527
Reduction in LO's spending on PWA	\$2,589
Reduction in LO's healthcare costs	\$337
Reduced costs to the employer	\$594
Reduction in mental health costs	\$1,517
Total	\$6,562

Long-Term Outcome Benefits Aggregated:

Overall, there were 649 PWA clients engaged with a coach at some point during 2017 (2017 FIT Evaluation Report). With a total estimated return on investment of \$31,496 per client, if all of FIT's PWA clients in 2017 were to undergo a 120-day engagement, that would lead to total returns of about \$20.4 million in present value. While many clients do not stay engaged for the 120-day period, this serves as a benchmark for the total possible value that could be generated for the program in 2017, given the recognition that 120 days of coaching is the 'sweet spot' where gains to the client are

maximized given the investment and that actual median number of days of engagement across PWA clients was 114.

As a point of comparison, for a PWA client engaged for 60 days, the estimated total return on investment was \$21,923. If we assume all FIT PWA clients from 2017 had an experience similar to the results of a 60-day engagement, the total present value of social gains generated would be approximately \$14.2 million. This shows that there is a diminishing return to the clients' engagement with FIT when continuing from day 60 to day 120 of coaching, however, this does not necessarily capture other psychological, emotional and physical gains made during that period which may represent certain less tangible thresholds in recovery being crossed.

In the case of Loved Ones, there were 127 clients engaged with a coach at some point during 2017 (2017 FIT Evaluation Report). With a total estimated return on investment of \$6,562 per client, if all of FIT's LO clients in 2017 were to undergo a 60-day engagement, that would lead to total returns of about \$830,000 in present value.

When combined, FIT would have generated approximately \$21 million in present value social gains to its clients and to society in 2017, assuming all clients stayed engaged for either 120 days if PWA or 60 days if LO.

Non-monetized outcomes:

The services and support provided by FIT are, by their nature, often intangible, making it often very difficult to fully value the organization's impact. The numbers we have calculated in this analysis are conservative and can be a considered a baseline onto which additional non-monetizeable outcomes can be added.

As in the case of other social service programs, non-monetizeable outcomes can be those intangibles accrued directly to the client or

those benefits which accrue to other stakeholders such as the family members of the client, the children of the client, the broader community, and so on, but there is insufficient data to support their valuation. These types of impacts are very difficult to put a value on and as a result were considered beyond the scope of this analysis. However, it is clear there is potentially very significant value stored there. For example, the well-being of a parent can have a huge impact on the well-being of their children. Children of a PWA may suffer emotionally or psychologically, and in more severe cases may experience abuse and neglect prompting removal from their home by child protective services. This is a more extreme example, but it is a situation that unfortunately has occurred before and is not included in this analysis but could clearly drastically increase the SROI figures estimated should that situation be avoided thanks to FIT coaching.

In the estimated SROI for the Loved Ones, there is a lack of data which restricts both the outcomes that can be monetized as well as the stakeholders that can be readily included. For example, the Person with Addiction (the reason the Loved One is seeking coaching support) is not included as a stakeholder although there is the possibility that as the Loved One's emotional condition and knowledge of addiction increases, this will have positive impacts on the PWA. What these impacts entail however and the monetary value of them was deemed beyond the scope of this analysis, but certainly worthy of future consideration.

Additional long-term outcomes for the Loved One that could not be monetized include:

- Increased hope and happiness
- Increase in family cohesion and less family conflict
- Decreased isolation
- Healthy boundaries established
- Stronger community connections
- Improved sense of purpose and spirituality

These indicators are tracked by FIT and their value, while being non-monetized, is recognized.

SOCIAL RETURN ON INVESTMENT

The Social Return on Investment (SROI) is an adaptation of the financial metric (ROI) to measure social gains as a result of a financial investment, doing so by placing financial value on the social gains identified. (Social + Financial + Environmental Benefits)/(Investment)=SROI. The following tables show the SROI for PWA clients under both the 120-engagement as well as the 60-day engagement scenario. Also shown in each table is a variation on the coaching capacity assumption to show how a reduction in coaching capacity effectively raises costs of carrying out the coaching program and results in a reduction in the SROI. These alternative scenarios were designed purely for FIT's internal reference so as to understand how the scenario depicted in the Impact Value Summary

(120-day engagement with coaches at full capacity) would compare to other circumstances. In either case, the SROIs are all strongly

positive, with large benefits relative to the program's cost.

SROI for Person with Addiction (120 days)								
	75% coaching capacity							
Total	\$12.40	\$9.30						
Individual (PWA)	\$6.32	\$4.74						
Government (Taxpayers)	\$1.67	\$1.25						
Employer	\$2.88	\$2.16						
Loved Ones	\$0.13	\$0.10						
Victims of Crime	\$0.68	\$0.51						
Hospital Uncompensated Care	\$0.72	\$0.48						

SROI for Person with Addiction (60 days)								
	100% coaching capacity	75% coaching capacity						
Total	\$8.63	\$6.47						
Individual (PWA)	\$4.65	\$3.49						
Government (Taxpayers)	\$1.12	\$0.84						
Employer	\$1.64	\$1.23						
Loved Ones	\$0.16	\$0.12						
Victims of Crime	\$0.41	\$0.31						
Hospital Uncompensated Care	\$0.64	\$0.48						

SROI for Loved One (60 days)								
	100% coaching capacity	75% coaching capacity						
Total	\$2.58	\$1.94						
Individual (LO)	\$1.97	\$1.47						
Government (Taxpayers)	\$0.35	\$0.26						
Employer	\$0.27	\$0.20						

Stakeholder SROIs

As can be seen, there are several stakeholders included in the analysis of the PWA's SROI while just three are included in the LO's case. This is, as noted previously, largely due to the relative lack of quantitative data associated with LO's. It also makes clear that the PWA's behavior impacts a wide range of groups, but in all cases the PWA themselves are impacted to the greatest extent. Of potential interest to FIT is that the second most impacted stakeholder is the PWA's Employer. While the non-monetized

impacts may be very significant for the PWA's loved ones, the prominence of the Employer's avoided costs makes clear their potential interest in supporting FIT's efforts. Following the Employers is the Government via its Medicaid expenditures and tax revenues. Next notably, is Hospital Uncompensated Care i.e. charity care, provided by hospitals from which they will not be reimbursed. This value spread should open up opportunities to FIT in their engagement with a variety of community players.

DISCUSSION ON METHODOLOGY AND DATA QUALITY

One of the more difficult aspects of this analysis was determining FIT's effect size on its clients and how that effect size could be tied to long-term outcome costs that tend to be based on traditional in-patient treatment services rather than once a week coaching sessions. As a result, the calculation for long-term outcomes used two effect sizes, one for FIT's effect on the client and the second, coming from external literature, as a general effect size for the likelihood of substance abuse to lead to a given long-term outcome. The following

table shows the effect sizes determined for FIT for PWA clients, noted as 'Effect Size 1', and the rationale for that effect size. Some were determined via estimation from multiple metrics while others are the direct metric measured by FIT.

FIT Effect Sizes (Effect Size 1): Person with Addiction								
Outcome	60 Day	120 Day	FIT Metric					
Present Value of Increase in future earnings	0.25	0.5	Estimated based 60% improved their employment stability, 70% improved their employment, and 40% improved their financial health due to FIT and the effect relative to a traditional treatment program.					
Cost savings from avoided SUD related hospital visit due to FIT coaching	0.577	0.65	% of PWD clients who reduced healthcare use from addiction related issues					
Cost savings from reduced criminal activity costs	0.225	0.369	Change in reported legal issues due to addiction					
Improvement in Quality of Life	0.07	0.09	Improvement in RCI with FIT					
Reduced healthcare costs of anxiety disorder or depression	0.25	0.27	Reduction of FIT participants experiencing stress					
Average reduction in cost of substance use	0.67	0.8	% of FIT clients who reduced drug or alcohol use during FIT					
Average cost reduction to the PWA's employer	0.3	0.6	Percent of clients that are employed and improve their RCI. Estimated 60% improved their employment stability (for 120 day).					
Cost reduction from reduced homelessness	0.27	0.21	My current housing or living situation is sufficient for myself and/or my family. Response = Agree					

For more details on each outcome monetized including the effect sizes used as well as the outcome cost values used, please reference the spreadsheets in Attachment 2.

In addition to determining the appropriate effect sizes of the program was also the estimated duration of impact which will be attributed to FIT. This was in large part developed based on assumptions also described in Attachment 2 as well as discussion with FIT. For example, some long-term outcomes are based on the likelihood of a single event occurring such as requiring a hospital visit, however others such as an increase in earnings continue beyond a single event. In these cases, based on the specific outcome of concern, the duration was chosen as either 1 year or 3 years, being that after this point we either could not reasonably attribute the benefits to FIT or the outcome itself made it unlikely to require to continue counting the benefits gained. In either case, determining this time period is not clear-cut given that data used does not extend over multiple years and the data quality restricts our case for attribution. This is discussed in the next section. Given that certain long-term outcomes are valued over a 3-year period, a discount rate of 3% is utilized. This is the rate used by WSIPP in estimating the costs and benefits of social programs and as a result is believed to be appropriate here as well.

Data Quality Considerations

In regards to data quality there are a few key points worth noting. Where possible, and in particular regarding Effect Size 2 (the external effect sizes) and cost of long-term outcomes, the highest available level of evidence was utilized.

The analysis of both clients however required a reliance on studies with levels of evidence of causality of 4, 5, or 6. This implies there is a limitation in terms of the use of randomized controlled trials (RCTs) and meta-analysis of RCTs. This is in part due to the more limited study accompanying addiction management coaching as compared to traditional in-patient treatment programs. This however applies to FIT as well given that there is currently no comparison or control group (randomized or otherwise) used in the program data, resulting in all program collected data falling into the level of evidence of 6. Going forward, if a comparison group were able to be developed and tracked in tandem with the participants receiving the coaching there would be greater understanding of the impact of the program in relation to the myriad of external factors that may influence the individual's behavior.

TAKEAWAYS AND STRATEGIC RECOMMENDATIONS

Both programs had strong positive SROI values with significant benefits noted for both program participants. Non-monetized outcomes of both PWA and LO clients are potentially major sources of additional value beyond that accounted for in this analysis. Given this value generated and the limitations to this analysis as previously described, a few recommendations have been noted.

Recommendations

- Continue to grow the program!
- Follow participants after their engagement with FIT. Right now, this analysis is prospective estimating future benefits and duration of impact which may not be accurate but are based on expert opinion and rational estimation. However, it is understood that this longitudinal study has already begun and will be beneficial to include in future analyses of this kind.
- Use of United Nations Sustainable Development Goals to help show FIT's alignment with global goals and the targets many large foundations, corporations and multilateral organizations are interested in.
- The SROI figures can be used to display the value generated of FIT's work. Given the conservative nature of the estimation it is safe to assume the figures developed are baseline values which can be added to.

Of note, the SROI figures are not the be all, end all indicator of program success. They are a tool among the toolkit with which to communicate value generated as well as to inform managerial decisions, data collection processes, and future data analysis.

FUTURE RESEARCH AND PROPOSED NEXT STEPS

There are multiple future research needs that have been identified both within FIT as well as for the broader scientific study of addiction coaching. These include:

- Cost estimates were often derived from either formal treatment costs or from the costs of an addiction to a specific substance such as alcohol, opioids, etc. As a result, most studies were not necessarily measuring impacts and costs from programs similar to FIT. There were a couple specific programs that mirrored the process of coaching that were assessed by WSIPP such as motivational interviewing however in this case there was a large discrepancy in the duration of the treatment, making extrapolation to FIT's operating context difficult. With more studies conducted with AMC as the treatment, there will be the possibility of much greater refinement of the estimates included in this analysis.
- An increase in external cohort, quasi-experimental and/or randomized controlled trial studies that will boost the level of evidence of causality to support the understanding of the benefits of FIT's style of coaching.
- An assessment of any potential negative impacts. While these can be difficult to attribute to coaching, it is important to recognize if and where they exist and the potential offset to benefits generated.
- Expand the scope to include additional stakeholders, particularly for LO's. This however will require additional studies to be conducted and more intensive data collection that would allow for quantitative analysis and monetization.

ATTACHMENT A - IMPACT VALUE SUMMARIES

[Separate documents]

ATTACHMENT B – CALCULATIONS AND SUPPLEMENTARY ANALYSIS

[Separate document for outcome pathways and SROI spreadsheet calculations]

Sensitivity Analysis

The following tables show how the SROI could change with changes in the estimated upfront program costs and long-term outcome benefits per participant.

SROI for Person with Addiction 120 Day Outcome: \$12.40

SROI		Percent change in Long-Term Outcome Benefits										
Sensitivity		-50%	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%	50%
	-50%	\$12.40	\$14.88	\$17.36	\$19.84	\$22.32	\$24.80	\$27.28	\$29.76	\$32.24	\$34.72	\$37.20
	-40%	\$10.33	\$12.40	\$14.47	\$16.53	\$18.60	\$20.67	\$22.73	\$24.80	\$26.87	\$28.93	\$31.00
	-30%	\$8.86	\$10.63	\$12.40	\$14.17	\$15.94	\$17.71	\$19.48	\$21.26	\$23.03	\$24.80	\$26.57
	-20%	\$7.75	\$9.30	\$10.85	\$12.40	\$13.95	\$15.50	\$17.05	\$18.60	\$20.15	\$21.70	\$23.25
Percent	-10%	\$6.89	\$8.27	\$9.64	\$11.02	\$12.40	\$13.78	\$15.15	\$16.53	\$17.91	\$19.29	\$20.67
change in program	0%	\$6.20	\$7.44	\$8.68	\$9.92	\$11.16	\$12.40	\$13.64	\$14.88	\$16.12	\$17.36	\$18.60
cost	10%	\$5.64	\$6.76	\$7.89	\$9.02	\$10.15	\$11.27	\$12.40	\$13.53	\$14.65	\$15.78	\$16.91
	20%	\$5.17	\$6.20	\$7.23	\$8.27	\$9.30	\$10.33	\$11.37	\$12.40	\$13.43	\$14.47	\$15.50
	30%	\$4.77	\$5.72	\$6.68	\$7.63	\$8.58	\$9.54	\$10.49	\$11.45	\$12.40	\$13.35	\$14.31
	40%	\$4.43	\$5.31	\$6.20	\$7.09	\$7.97	\$8.86	\$9.74	\$10.63	\$11.51	\$12.40	\$13.29
	50%	\$4.13	\$4.96	\$5.79	\$6.61	\$7.44	\$8.27	\$9.09	\$9.92	\$10.75	\$11.57	\$12.40

SROI for Person with Addiction 60 Day Outcome: \$8.63

SROI		Percent change in Long-Term Outcome Benefits										
Sensitivi	ty	-50%	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%	50%
	-50%	\$8.63	\$10.36	\$12.08	\$13.81	\$15.54	\$17.26	\$18.99	\$20.72	\$22.44	\$24.17	\$25.89
Percent	-40%	\$7.19	\$8.63	\$10.07	\$11.51	\$12.95	\$14.39	\$15.82	\$17.26	\$18.70	\$20.14	\$21.58
change in	-30%	\$6.17	\$7.40	\$8.63	\$9.86	\$11.10	\$12.33	\$13.56	\$14.80	\$16.03	\$17.26	\$18.50
program	-20%	\$5.39	\$6.47	\$7.55	\$8.63	\$9.71	\$10.79	\$11.87	\$12.95	\$14.03	\$15.10	\$16.18
cost	-10%	\$4.80	\$5.75	\$6.71	\$7.67	\$8.63	\$9.59	\$10.55	\$11.51	\$12.47	\$13.43	\$14.39
	0%	\$4.32	\$5.18	\$6.04	\$6.91	\$7.77	\$8.63	\$9.49	\$10.36	\$11.22	\$12.08	\$12.95

10%	\$3.92	\$4.71	\$5.49	\$6.28	\$7.06	\$7.85	\$8.63	\$9.42	\$10.20	\$10.99	
20%	\$3.60	\$4.32	\$5.03	\$5.75	\$6.47	\$7.19	\$7.91	\$8.63	\$9.35	\$10.07	
30%	\$3.32	\$3.98	\$4.65	\$5.31	\$5.98	\$6.64	\$7.30	\$7.97	\$8.63	\$9.30	
40%	\$3.08	\$3.70	\$4.32	\$4.93	\$5.55	\$6.17	\$6.78	\$7.40	\$8.01	\$8.63	
50%	\$2.88	\$3.45	\$4.03	\$4.60	\$5.18	\$5.75	\$6.33	\$6.91	\$7.48	\$8.06	

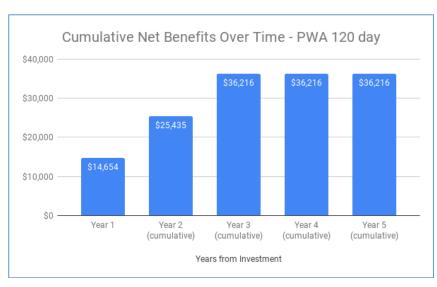
SROI for Loved One's 60 Day Outcome: \$2.58

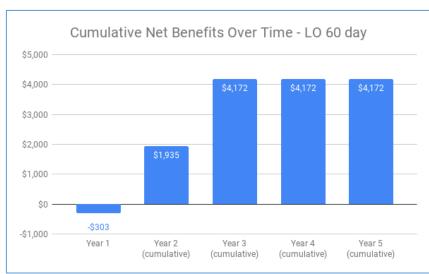
SROI					Percent cha	ange in Lon	g-Term Ou	utcome Bei	nefits			
Sensitivi	ty	-50%	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%	50%
	-50%	\$2.58	\$3.10	\$3.62	\$4.13	\$4.65	\$5.17	\$5.68	\$6.20	\$6.72	\$7.24	\$7.75
	-40%	\$2.15	\$2.58	\$3.01	\$3.45	\$3.88	\$4.31	\$4.74	\$5.17	\$5.60	\$6.03	\$6.46
	-30%	\$1.85	\$2.21	\$2.58	\$2.95	\$3.32	\$3.69	\$4.06	\$4.43	\$4.80	\$5.17	\$5.54
	-20%	\$1.62	\$1.94	\$2.26	\$2.58	\$2.91	\$3.23	\$3.55	\$3.88	\$4.20	\$4.52	\$4.85
Percent	-10%	\$1.44	\$1.72	\$2.01	\$2.30	\$2.58	\$2.87	\$3.16	\$3.45	\$3.73	\$4.02	\$4.31
change in program	0%	\$1.29	\$1.55	\$1.81	\$2.07	\$2.33	\$2.58	\$2.84	\$3.10	\$3.36	\$3.62	\$3.88
cost	10%	\$1.17	\$1.41	\$1.64	\$1.88	\$2.11	\$2.35	\$2.58	\$2.82	\$3.05	\$3.29	\$3.52
	20%	\$1.08	\$1.29	\$1.51	\$1.72	\$1.94	\$2.15	\$2.37	\$2.58	\$2.80	\$3.01	\$3.23
	30%	\$0.99	\$1.19	\$1.39	\$1.59	\$1.79	\$1.99	\$2.19	\$2.39	\$2.58	\$2.78	\$2.98
	40%	\$0.92	\$1.11	\$1.29	\$1.48	\$1.66	\$1.85	\$2.03	\$2.21	\$2.40	\$2.58	\$2.77
	50%	\$0.86	\$1.03	\$1.21	\$1.38	\$1.55	\$1.72	\$1.89	\$2.07	\$2.24	\$2.41	\$2.58

Break-Even Analysis

The Break-Even Analysis shows when costs equal benefits, if ever. In the case of the PWA with a 120-day engagement, the benefits payoff within the first year and continue to grow through year 3, the last year benefits attributed to FIT are accrued. In the case of the

LO with a 60-day engagement, the story differs slightly. In year 1 the cost of the FIT coaching exceeds the benefits generated. However, benefits continue to accumulate in years 2 and 3, moving the program into positive figures. Benefits are un-discounted in this breakeven analysis. Where benefits from a given outcome accrued once, they are here spread across the 3-year time span equally to account for equal likelihood of year of occurrence of the avoided event.





Sample of Gap Analysis

The following chart is an initial representation of the long-term outcomes monetized for each client, PWA and LO, and compared against the Recovery Capital Index components with those boxes shaded indicating a strong correlation and as a result, showing the component of the RCI that have been put into dollar terms. Those boxes that are not shaded are, upon initial review, not strongly correlated to the RCI component. A publishable version of this table would require a detailed literature review with references to support each shading or non-shading. As a result, this is designed to serve as an internal reference table, and for understanding the SROI values in comparison to the RCI components tracked. For this table, more white space generally means fewer dollars have been captured in the SROI calculation.

						SR	Ol Moneti	zed Out	tcomes					
D	0!4-1					PWD						LO		
Index Com	Recovery Capital Index Components		Healthcare Costs	Criminal Activity	QALY	Mental Health Costs	Cost of the substance use	Employer Benefits	Homeless- ness	QALY	Expenditures on PWD	Health care	Employment/ Employer	Mental Health
	General Health													
	Mental and emotional Well-being													
Personal	Nutrition													
Recovery Capital -	Employme- nt													
Physical Well- being, Mental	Education													
Well-being, Spiritual Well- being, Self-	Financial well-being													
determination	Housing and living situation													
	Transporta- tion													
	Clothing													
	Family support													
Social	Significant other													
Recovery Capital - Family	Social support													
Relationships, Social	Social Mobility													
Relationships, Relationship to Recovery Support	Healthy lifestyle													
	Access to healthcare													
	Safety													
Cultural	Beliefs													
Recovery	Values													
Capital – Social Values,	Spirituality													
Social Beliefs, Relationship to	Sense of purpose													

Culturally Relevant Recovery	Cultural Relevancy							
Supports	Sense of Community							

Impact Management Project (IMP): Dimensions of Impact

IMP has brought together over 2,000 practitioners to establish a global consensus on how to measure and manage impact. The following tables define the dimensions of impact as established by IMP as well as a sample table of how these dimensions can be applied to an outcome metric for FIT. This is meant to display what is becoming the growing standard for how impact is understood.

	The 5 Dimensions of	of Impact
Dimension	Description	Category of Impact Performance
What	What outcome(s) does a business' practices and products affect, positively or negatively? Is it an important outcome to the person or planet?	Outcome(s); Importance of outcome(s)
Who	Who experiences the effect, and how underserved are they in relation to the outcome?	Demographic; Environmental; Geographic
How much	How much of the effect occurs? Is the effect a deep driver of the outcome? Does it occur for many people and/or last for a long time?	Number of people affected in time period; depth of effect in time period; time period effect lasts for
Contribution	How does the effect compare and contribute to what the market would likely do anyway?	Benchmarked performance across who, what, how much
Risk	What is the risk to people and planet that the impact does not occur as expected?	Risk factors

Sample of Impact Management Project's Metric Mapping Tool

١	sampic or	unple of impact Management Project's Metric Mapping 1001									
			Effect 1: Quality of Life								
				Raw Data							
					Data	Analysis	Assessment				
			Indicator	Value	Source						
ſ			Post coaching								
	What	Outcome	RCI Score	Client specific	FIT Data		Positive				
	vviiat		Baseline RCI								
		Threshold for Positive Outcome	Score	Client specific	FIT Data						

	Importance of Outcome to Stakeholder				RCI is validated instrument proven to measure key changes for the client.	Life changing
	SDG		SDG 3.5	UN		
	Stakeholders	j	PWA	FIT Data		
	Geography	States	CO, SD, ND, MN	FIT Data		
Who	Demographic of stakeholder in relation to outcome prior to effect				Low RCIs	Underserved
	Depth (low degree vs. high degree)				Change in RCI often fostered or even entirely contingent on FIT	High degree
How much	Scale (small scale vs. large scale)		800+ per year	FIT Data		
	Duration (Short term vs. long-term)		Estimated 3+ years	Ongoing FIT study		
Contribut-	Depth (degree of change that would be experienced anyways)				FIT is filling a void for PWA's that traditional treatment does not often reach	Unlikely extent of change would occur without FIT
ion	Duration (time period that change that would be experienced anyways)				Traditional treatment only gets at certain components of RCI which may not last	Duration would be much shorter without FIT
	What level of evidence risk are you taking?				Evidence informed by pre/post survey and expert opinion	Moderate Risk
	What level of external risk are you taking?				External factors show increasing need for FIT's work	Low Risk
	What level of stakeholder participation risk are you taking?				PWA's are going through many difficult situations that may impact their participation	Moderate risk
Risk	What level of drop-off risk are you taking?				This aspect is still being studied, but many aspects of recovery capital generate a positive feedback cycle promoting long-term gain	Moderate Risk
	What level of efficiency risk are you taking?				FIT is in a growth stage while also operating at high capacity	Low Risk
	What level of execution risk are you taking?				Coaching methods are established from best practices	Low Risk
	What level of alignment risk are you taking?				Many clients may discontinue their engagement early	Moderate Risk
	What level of unexpected impact risk are you taking?				Unlikely negative impacts occur	Low Risk

ATTACHMENT C – LEVELS OF EVIDENCE + BIBLIOGRAPHY

	Levels of Evidence of Causality (1 is highest, 7 is lowest)
1	Evidence from a systematic review or meta-analysis of all relevant RCTs (randomized controlled trial) or evidence-based clinical practice guidelines based on systematic reviews of RCTs or three or more RCTs of good quality that have similar results.
2	Evidence obtained from at least one well-designed RCT (e.g. large multi-site RCT).
3	Evidence obtained from well-designed controlled trials without randomization (i.e. quasi-experimental).
4	Evidence from well-designed case-control or cohort studies.
5	Evidence from systematic reviews of descriptive and qualitative studies (meta-synthesis).
6	Evidence from a single descriptive or qualitative study.
7	Evidence from the opinion of authorities and/or reports of expert committees.

	PWA Bibliography								
Level of Evidence	Study	Relevant Finding							
	Washington State Institute for Public Policy (WSIPP). (December 2017). <i>Cognitive-behavioral coping-skills therapy for alcohol or drug use disorders</i> . Substance Use Disorders: Treatment for Adults. Olympia, WA.	Reference for Long-term Outcome cost							
Level 1 Evidence: Meta-analysis of RCTs	Washington State Institute for Public Policy (WSIPP). (December 2017). Benefit-cost technical documentation. Olympia, WA.	Long-term Outcome Effect Size + Outcomes Cost							
	Washington State Institute for Public Policy (WSIPP). (December 2017). Motivational Interviewing to Enhance Treatment Engagement. Substance Use Disorder: Treatment for Adults. Olympia, WA.	Reference for Long-term Outcome cost							
Level 2 Evidence: Randomized Controlled Trials									
Level 3 Evidence: Quasi-experimental Analysis									

Level 4 Evidence:	Bouchery, E; Harwood, H; Sacks, J; Simon, C; Brewer, R. (2011). <i>The Economic Costs of Excessive Alcohol Consumption in the U.S., 2006.</i> The American Journal of Preventative Medicine. 2011;41(5):516 –524	Long-Term Outcome Cost
Case-control/ Cohort Studies	Florence, C; Luo, F; Xu, L. (2016). <i>The Economic Burden of Prescription Opioid Overdose, Abuse and Dependence in the United States, 2013</i> . Medical Care. 2016 October; 54(10): 901–906. doi:10.1097/MLR.00000000000000525.	Long-Term Outcome cost
	Birnbaum, H; White, A; Schiller, M; Waldman, T; Cleveland, J; Roland, C. (2011). Societal Costs of Prescription Opioid Overdose, Abuse and Dependence in the United States. Pain Medicine 2011; 12: 657–667 Wiley Periodicals, Inc.	Reference for Long-Term Outcome Cost
	Ettner, S; Huang, D; Evans, E; Rose Ash, D; Hardy, M; Jourabchi, M; Hser, Y. (2006). <i>Benefit-Cost in the California Treatment Outcome Project: Does Substance Abuse Treatment "Pay for Itself"?</i> Health Services Research. 41.1. DOI: 10.1111/j.1475-6773.2005.00466.x	Long-Term Outcome Cost
	Mark, T; Woody, G; Juday, T; Kleber, H. (2001). <i>The economic costs of heroin addiction in the United States</i> . Drug and Alcohol Dependence 61 (2001) 195–206.	Reference for Long-Term Outcome Cost
Level 5 Evidence:	Minnesota Hospital Association (MHA). (2018). <i>Hospital Price Check</i> . Data and Reporting: Minnesota Hospital Association.	Long-Term Outcome Cost
Systematic Review of Descriptive Studies	Office of National Drug Control Policy. (2012). Cost Benefits of Investing Early in Substance Abuse Treatment. Executive Office of the President of the United States.	Long-Term Outcome Cost
Descriptive Studies	Pacula, R; Hoorens, S; Kilmer, B; Reuter, P; Burgdorf, J; Hunt, P. (2009). <i>Issues in estimating the cost of drug abuse in consuming nation</i> . Report 3. Rand Corporation-Europe and the European Commission.	Long-Term Outcome Effect Size
	Rehm, J; Gnam, W; Popova, S; Baliunas, D; Brochu, S; Fischer, B; Patra, J; Sarnocinska-Hart, A; Taylor, B. (2007). <i>The Costs of Alcohol, Illegal Drugs, and Tobacco in Canada, 2002</i> . Journal of Studies on Alcohol and Drugs: November 2007.	Long-Term Outcome Cost
	Spellman, B; Khadurri, J; Sokol, B; Leopold, J. (2010). <i>Costs Associated with First-time Homelessness for Families and Individuals</i> . U.S. Department of Housing and Urban Development (HUD). Prepared by Abt Associates.	Long-Term Outcome Cost
	Tecco, J; Jacques, D; Annemans, L. (2013). <i>The Cost of Alcohol in the Workplace in Belgium.</i> Psychiatria Danubina, 2013: Vol. 25, Suppl. 2, pp 118-123. Medicinska Naklada – Zagreb, Croatia.	Long-Term Outcome Cost
Level 6 Evidence:	Blavin, F; Garrett, B; Blumberg, L; Buettgens, M; Gadsden, S; Rifkin, S. (2014). <i>Monitoring the Impact of the Affordable Care Act on Employers</i> . Urban Institute.	Outcome Attribution Ratio
Single Descriptive/ Qualitative Study	DeVaney, S. and Anong, S. (2007). The Likelihood of Having Employer Sponsored Health Insurance. Compensation and Working Conditions: U.S. Bureau of Labor Statistics.	Outcome Attribution Ratio

		Intermediate Outcome
	Face it Together. (2018). Addiction Management Coaching Evaluation Report - 2017.	Effect Size
	Face it Together. (2018). One pager Outcomes.	Intermediate Outcome Effect Size
	Face it Together. (2017). Evaluation Brief: Risk Reduction.	Intermediate Outcome Effect Size
	Face it Together. (2017). Evaluation Brief: Recovery Capital Index	Intermediate Outcome Effect Size
	Face it Together. (2018). Evaluation Brief: Enjoying Life and Getting Well.	Intermediate Outcome Effect Size
	Face it Together. (2018). 2017 Annual Report.	Intermediate Outcome Effect Size
	Face it Together. (2018). Evaluation Brief: Positive Change after Coaching.	Intermediate Outcome Effect Size
	Face it Together. (2018). Evaluation Brief: Recovery Capital Index and Use.	Intermediate Outcome Effect Size
	Marciniak, M; Lage, M; Dunayevich, E; Russell, J; Bowman, L; Landbloom, R; Levine, L. (2005). <i>The cost of treating anxiety: the medical and demographic correlates that impact total medical costs.</i> Depression and Anxiety. 2005;21(4):178-84.	Long-Term Outcome Effect Size and Cost
	National Coalition for the Homeless. (2009). Substance Abuse and Homlessness. NCH; Washington DC.	Long-Term Outcome Cost
	Pyne, J; French, M; McCollister, K; Tripathi, S; Rapp, R; Booth, B. (2008). <i>Preference-weighted health-related quality of life measures and substance use disorder severity</i> . Addiction. 2008 August; 103(8): 1320–1332. doi:10.1111/j.1360-0443.2008.02153.x.	Long-Term Outcome Effect Size
	Real Costs of Substance Use in Your Workplace. (2017). A Substance Use Cost Calculator for Employers - Methodology. National Safety Council.	Long-Term Outcome Effect Size, Cost and Outcome Attribution
Level 7 Evidence: Expert Opinion		

	LO Bibliography	
Level of Evidence	Study	Relevant Finding
Level 1 Evidence: Meta-analysis of RCTs	Washington State Institute for Public Policy (December 2017). Benefit-cost technical documentation. Olympia, WA.	Long-term Outcome Effect Size + Outcomes Cost
Level 2 Evidence: Randomized Controlled Trials		
Level 3 Evidence: Quasi-experimental Analysis		
Level 4 Evidence: Case-control/ Cohort Studies	Orford, J; Velleman, R; Natera, G; Templeton, L; Copello, A. (2013). Addiction in the family is a major but neglected contributor to the global burden of adult ill-health. Social Science and Medicine: Volume 78, February 2013, Pages 70-77	Long-Term Outcome Cost
Level 5 Evidence: Systematic Review of Descriptive Studies		
	Blavin, F; Garrett, B; Blumberg, L; Buettgens, M; Gadsden, S; Rifkin, S. (2014). <i>Monitoring the Impact of the Affordable Care Act on Employers</i> . Urban Institute.	Outcome Attribution Ratio
	Copello, A; Velleman, R; Templeton, L. (2005). <i>Family interventions in the treatment of alcohol and drug problems</i> . Drug and Alcohol Review, (July 2005), 24, 369 – 385	Reference for Long- Term Outcome
Level 6 Evidence: Single Descriptive/	Daley, D; Smith, E; Balogh, D; Toscolani, J. (2018). Forgotten but not Gone: The Impact of the Opioid Epidemic and Other Substance Use Disorders on Families and Children. COMMONWEALTH, Volume 20, Issue 1. http://dx.doi.org/10.15367/com.v20i2-3.189.	Reference for Long- Term Outcome
Qualitative Study	Face it Together. (2018). Addiction Management Coaching Evaluation Report - 2017.	Intermediate Outcome Effect Size
	Face it Together. (2018). Evaluation Brief: Impact of Coaching on Loved Ones' Employment.	Intermediate Outcome Effect Size
	Face it Together. (2017). Evaluation Brief: Impact on Loved Ones.	Intermediate Outcome Effect Size

	Joachim Salize, H; Jacke, C; Kief, S; Franz, M; Mann, K. (2012). <i>Treating alcoholism reduces financial burden on care-givers and increases quality-adjusted life years</i> . Addiction. https://doi.org/10.1111/j.1360-0443.2012.04002.x	Long-term Outcome Cost and Effect Size
	Kaufman, E; Yoshioka, M. (2005). <i>Treatment Improvement Protocol 39: Substance Abuse Treatment and Family Therapy</i> . U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES: Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. Rockville, MD.	Reference for Long- Term Outcome
	Marciniak, M; Lage, M; Dunayevich, E; Russell, J; Bowman, L; Landbloom, R; Levine, L. (2005). <i>The cost of treating anxiety: the medical and demographic correlates that impact total medical costs.</i> Depression and Anxiety. 2005;21(4):178-84.	Long-Term Outcome Effect Size
	McIntyre, Jeffrey I. (2004) "Family Treatment of Substance Abuse." Clinical Work with Substance-Abusing Clients, 2nd ed., Guilford Press, 2004, pp. 237–267.	Reference for Long- Term Outcome
	Nelson, J. A., Henriksen, R. C., & Keathley, R. S. (2014). <i>Mothers of Sons with Substance Use Disorders: A Grounded Theory Approach Revealing Maternal Expectations and Three Stages of Change.</i> The Qualitative Report, 19(44), 1-16. Retrieved from http://nsuworks.nova.edu/tqr/vol19/iss44/1	Reference for Long- term Outcome
	Uhl, K. (2018). Distinguishing Between Empathy and Enabling: Dance/Movement Therapy for Family Members of People with Addiction. Dance/Movement Therapy Theses. 41. https://digitalcommons.slc.edu/dmt_etd/41	Long-Term Outcome Effect Size
	Ventura, A; Bagley, S. (2017). <i>To Improve Substance Use Disorder Prevention, Treatment and Recovery: Engage the Family</i> . Journal of Addiction Medicine 2017;11: 339–341.	Reference for Long- term Outcome
	Wittenberg, E; Bray, J; Aden, B; Gebremariam, A; Nosyk, B; Schackman, B. (2016). <i>Measuring benefits of opioid misuse treatment for economic evaluation: health related quality of life of opioid dependent individuals and their spouses as assessed by a sample of the US population</i> . Addiction. 2016 April; 111(4): 675–684. doi:10.1111/add.13219.	Long-term Outcome Cost and Effect Size
Level 7 Evidence: Expert Opinion		

ATTACHMENT D: UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs)

[See separate document]