



ROI Calculator for Partnerships to Address Social Needs:

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Table Name	Explanation	Notes/Significance
Calculated Total Service Unit Volume Per Month	Total Service Volume per Month = (Number of People in Intervention Population) * (Quantity - Number of Units of Social Services Provided)	This calculation is needed to assess the overall costs of each service.
Calculated Baseline PMPM Cost	Healthcare Event PMPM Cost = (Number of Healthcare Events per 1,000 people) * (Healthcare Unit Cost) / 1,000 / 12 For Hospital Admissions and Readmission and for Skilled Nursing Facility (SNF) Admissions: Unit Cost = (Cost per Day) * (Length of Stay)	Baseline cost means the expense for selected healthcare events that would be anticipated if social services were not offered. The higher the baseline cost, the greater the potential opportunity for social services to generate a positive ROI. Dividing by 1,000 and dividing by 12 converts this from a per thousand per year metric to a per member per month (PMPM) metric.
	Total Baseline PMPM Cost = Sum of the Utilization Types Listed Above	
Calculated Cost Per Month	Monthly Variable Cost = (Total Social Service Volume per Month) * (CBO Variable Cost per Unit of Service)	
	Monthly Total Cost = (Monthly Variable Cost) + (Monthly CBO Variable Cost * Administrative Cost Percentage) + (CBO Fixed Costs / 12 * Administrative Cost Percentage) + ((CBO Fixed Costs / 12) + (Healthcare Organization Fixed Costs / 12))	Dividing the fixed costs by 12 converts those costs into a monthly amount.



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Calculated Cost Avoidance	<p>Cost Avoidance PMPM = (Percent Reduction in Utilization for that Service) * (Healthcare Event PMPM Cost)</p> <p>Cost Avoidance PMPM for Hospitals and SNFs when Length of Stay and Admission Rate are Impacted = (Baseline Admission or Readmission Rate * Percent Reduction in Admission or Readmission Rate * Baseline Average Length of Stay * Cost per Day / 1000 / 12) + (Baseline Admission or Readmission Rate * (1-Percent Reduction in Admission or Readmission Rate) * Baseline Average Length of Stay * Percent Reduction in Length of Stay * Cost per Day)</p>	<p>This is the savings in healthcare costs resulting from offering the social service. It can also be thought of as the difference in the cost of healthcare services before and after the provision of social services.</p> <p>For outpatient visits, there may be an increase or a decrease in cost depending on whether there is an increase or decrease in outpatient utilization.</p>
	<p>Percent Reduction in Costs = (Cost Avoidance PMPM) / (Baseline Healthcare Service Costs) * 100</p>	<p>This is a measure of the effectiveness of the social service intervention in reducing healthcare costs.</p>
Summary of Revenue Changes	<p>PMPM Revenue = (Monthly PMPM Revenue) + (Lump Sum Revenue / 12)</p>	
	<p>Monthly Total = (PMPM Revenue Change) * (Number of Recipients)</p>	
Summary of Financial Returns	<p>Reductions in Cost to Healthcare Organization (Savings)</p>	
	<p>Change in Revenues to Healthcare Organization PMPM = Calculated Cost Avoidance (Calculation Methodology Above)</p>	
	<p>Gross Financial Benefits PMPM (Savings + Revenue) = (Monthly Total PMPM Revenue) + (Reductions in Cost to Healthcare Organizations)</p>	



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	Cost to CBO of Providing Social Services PMPM (with Administrative Overhead/Without Administrative Overhead) = (Monthly Variable Cost) + (CBO Fixed Costs / 12) + (Administrative Cost Percentage * ((Fixed Costs / 12 / Number of Recipients) + (Variable Costs Per Member Per Month))	
	Costs to the Healthcare Organization PMPM = (Monthly Healthcare Fixed Costs) / Number of Recipients	
	Net Benefit of Integrating Social Services PMPM (Gross Benefits - Cost to CBO with Administrative Overhead) = Gross Financial Benefit - (Cost to CBO of Providing Social services + Cost to Healthcare Organizations PMPM)	The Total Cost of the Intervention PMPM can also be derived by dividing the Monthly Total Cost of Social Services (Equation #4) by the number of people in the intervention population.
	ROI = Net Benefit of Integrating Social Services PMPM / (Cost to CBO of Providing Social Services PMPM + Costs to the Healthcare Organization PMPM)	ROI differs from a benefit to cost ratio, which is the Gross Financial Benefit divided by the Cost of the Intervention.
Healthcare ROI	Gross Benefit - Healthcare Organization = Gross Financial Benefits PMPM	
	Gross Benefit - CBO = Cost to CBO of Providing Social Services PMPM	
	Net Benefit - Healthcare Organization = Net Benefit of Integrating Social Services PMPM	



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	$\text{Net Benefit - CBO} = (\text{Administrative Cost Percentage} * ((\text{Fixed Costs} / 12 / \text{Number of Recipients}) + (\text{Variable Costs Per Member Per Month})))$	
Payment Models	$\text{Full Cost Recovery} = \text{Cost to CBO of Providing Social Services PMPM} * \text{Total Service Volume Per Month}$	
	$\text{Fee for Service} = \text{Cost to CBO of Providing Social Services PMPM with Administrative Cost Included} / \text{Number of Units of Social Service Provided}$	<p>For meals, the unit is a meal.</p> <p>For transitional housing and medical respite/ recuperative care, the unit is the number of days the participant stays overnight.</p> <p>For supportive housing, legal assistance, and care management, the unit is typically 1 bundled service per month (unless the user specifies a number of contacts per month).</p>
	$\text{Capitation} = \text{Cost to CBO of Providing Social Services PMPM}$	
	$\text{Case Rate} = \text{Cost to CBO of Providing Social Services PMPM} * \text{Average Number of Months that the Person Receives the Social Services}$	
Sharing of Financial Rewards	$\text{Shared Savings as a Percentage of Net Benefit: Healthcare Organization} = \text{Net Financial Benefit PMPM} * (1 - \text{CBO Shared Savings Percentage})$	



Table Name	Explanation	Notes/Significance
	Shared Savings as a Percentage of Net Benefit: Community Based Organization = Net Financial Benefit PMPM * CBO Shared Savings Percentage	
	Shared Savings as a Percentage of Gross Benefit: Healthcare Organization = Gross Financial Benefit PMPM * (1 - CBO Shared Savings Percentage)	
	Shared Savings as a Percentage of Gross Benefit: Community Based Organization = Gross Financial Benefit PMPM * (CBO Shared Savings Percentage)	