



## SECTION IV RESOURCES

# Chronic Disease Self-Management Cost Calculator

## Overview and Instructions

### February 2009

#### About the Calculator

The National Council on Aging (NCOA) sponsored The Lewin Group, Inc. (Lewin) to develop this Calculator to help organizations better understand and manage the costs of administering their Chronic Disease Self Management Programs (CDSMP). By entering your organization's costs and CDSMP program data, you can use the Calculator to produce estimated "per participant" and "per workshop" costs, as well as evaluate the impact of individual program components on your total expenses. We encourage organizations to use this Calculator to deliver your programs in an efficient manner, and at a reasonable cost.

The Calculator will work for all community-based, CDSMP-related programs: the Positive Self-Management Program (HIV), and English and Spanish versions of Chronic Disease, Arthritis, and Diabetes Self-Management Programs. To use this Calculator, you will need to assemble all of your costs: CDSMP Personnel/Program Administration; Marketing and Recruitment; Master and Workshop Leader Training; and CDSMP Workshop. Various program costs can be saved individually on your computer and printed, so you can compare different strategies and targets.

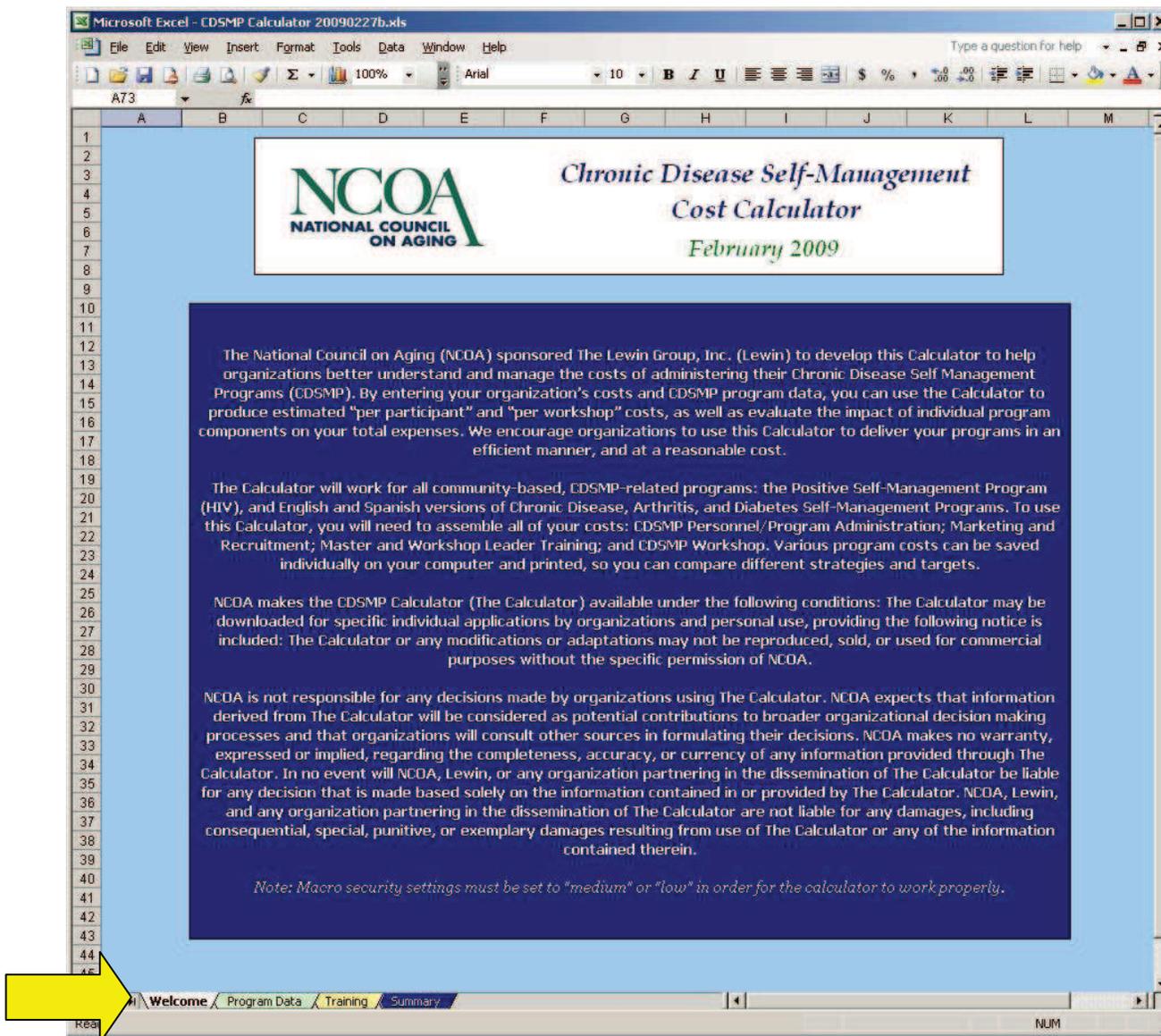
#### Getting Started with the Calculator<sup>1</sup>

1. **Check your security settings in Excel.** The Calculator is powered by macros, which means you may need to modify your security settings in Excel to allow the macros to operate. From the toolbar in Excel, go to Tools > Macro > Security. On the Security Level tab, select a security level of **Medium** or **Low** (see below).



<sup>1</sup> The calculator was developed in Microsoft Excel and operates with a Visual Basic interface. Because the calculator is in Excel, it may not function for a user who does not operate in a Microsoft environment.

2. **Save the Calculator to Your Desktop or to a File Folder.** Before you start working in the calculator, please save the calculator to your desktop or a file folder.
3. **Go to the Welcome Tab.** When you open the Excel file, it should automatically take you to the **Welcome** tab.



## Cost Calculator

To get started with the calculator, you will need all of your costs for the past year. This includes the costs of all personnel connected with CDSMP (both workshop leaders and administration of the program), indirect costs, training for workshop leaders, master trainings, the workshops themselves, and related program promotion.

Cells highlighted in yellow can be changed by the user. Cells with small red triangles in the upper right corner contain more guidance and definitions of key terms. Scroll over or click on the cell and look for the yellow “pop-up” box.

The Calculator is pre-loaded with example cost and program data. To clear the Calculator inputs and set all values to zero (0), click the “Clear Input Data” button located at the top of the Calculator. To reload the example data, click “Load Example Data.”

The screenshot shows the Microsoft Excel interface for the 'CDSMP Program Cost Calculator 20090227b.xls'. The spreadsheet is organized into several sections:

- Section 1:** Title and buttons for 'Clear Input Data' and 'Load example data'.
- Section 2:** Introductory text explaining the calculator's purpose.
- Section 3:** 'CDSMP Personnel / Program Administration' header.
- Section 4:** Instructions for entering data.
- Section 5:** 'Paid Staff' table with columns: No. of FTE, Salary, Fringe Benefit %.
- Section 12:** 'Volunteers' table with columns: No. of FTE, Stipend / Fee.
- Section 17:** 'Contractors' table with columns: No. of FTE, Hourly Rate.
- Section 21:** 'CDSMP Workshop Leaders' table with columns: Paid Staff, Volunteers.
- Section 22-26:** Summary rows for total compensation and other costs.
- Section 28:** 'Annualized cost of CDSMP license' row.

A pop-up box titled 'How do you compensate contractors?' is visible, with radio button options:  Hourly Rate,  Fee, and  N/A.

### CDSMP Personnel and Program Administration

- Number of Full-Time Equivalent (FTE): The number of full-time equivalent (FTE) employees you have working per staff position. This may be a whole number or a fraction. For example, if your FTE is equal to 40 hours a week and you have two people who each work 30 hours a week as Program Directors, you should answer that you have 1.5 FTE Program Directors. One individual's time may be attributed to different categories as appropriate. For example, if you have a staff member who works 20 hours a week as a Volunteer Coordinator and also spends 20 hours a week as a Wellness Manager, you should attribute 0.5 FTE to Volunteer Coordinator and 0.5 FTE to Wellness Manager.
- Salary: Regular wages received by an employee from an employer on a regular basis.
- Fringe Benefit Percentage: Non-salary employee compensation expressed as a percentage of salary. Fringe Benefits may include vacation, holidays, sick leave, workers compensation, social security and retirement benefits.
- CDSMP Personnel and Program Administration: The number of FTE (paid staff, volunteers, and contractors) that perform CDSMP management, administration or program coordination. This includes such tasks as:
  - ❖ *determining locations, dates and times of classes;*
  - ❖ *updating websites, fliers and brochures;*
  - ❖ *workshop leader recruitment;*
  - ❖ *establishing relationships with partner organizations;*
  - ❖ *fundraising;*
  - ❖ *on-going marketing and program promotion;*
  - ❖ *recruiting participants and supporting retention;*
  - ❖ *assisting in setting up workshops;*
  - ❖ *providing support to leaders;*
  - ❖ *tracking participation; and*
  - ❖ *monitoring quality and fidelity and documenting outcomes.*

Since job titles and descriptions vary by organization, there is space for you to enter up to six (6) paid staff positions, four (4) volunteer positions, and two (2) contractor positions. Please indicate whether contractors are paid an hourly rate or a flat fee.

- CDSMP Workshop Leader: Health professionals or lay persons (peers) with one or more chronic conditions who facilitate the six-week CDSMP workshop class using a detailed scripted manual.
- Annualized Cost of CDSMP License: The annualized cost to obtain the Stanford University CDSMP licensure. The cost of a license is determined by how many programs your organization plans to offer each year.
  - ❖ *\$500 license for up to 10 workshops per year*
  - ❖ *\$800 license for up to 20 workshops per year*
  - ❖ *\$1000 license for up to 30 workshops per year*
  - ❖ *Fees vary for more than 30 workshops*

- Other Costs: Any other cash or in-kind expenses related to CDSMP personnel and program administration that are not otherwise captured.

### *Indirect Costs*

- Total Indirect Costs: Overhead costs incurred in the overall functioning of the organization that are not readily identified as direct project expenditures. This may include rent, utilities, general administration expenses, etc.
- Indirect Cost Rate: The percentage of indirect costs borne by the CDSMP Program. The default value is 30%.

### *Marketing and Program Promotion*

- The costs associated with recruitment and marketing to participants, lay leaders, partners, and funders. This includes postage, advertisements, and mailing list purchases. If possible, estimate the dollar amount associated with any in-kind contributions.

### *Workshop Leader Training*

- # of Workshop Leader Trainings conducted: The number of workshop leader trainings your organization conducted in the past year.
- # of Follow-up Sessions conducted: The total estimated cost of all follow-up trainings and/or networking sessions (e.g., annual in-service, continuing education) conducted in the past year. In your calculations, include both meeting costs (e.g., room rental, supplies, snacks, name tags) and travel expenses (e.g., mileage, parking, lodging). If possible, please estimate the total dollar amount associated with any in-kind contributions.
- Master Trainer: A health professional who is qualified to teach Workshop Leaders how to guide patients through the CDSMP Program. These people may work for your agency or they may be affiliated with another agency in your area. Master Trainers are required to conduct at least one (1) leaders training or self-management workshop per year to remain certified.

### *CDSMP Workshops*

- Number of CDSMP workshops conducted: The number of Chronic Disease Self-Management Workshops your organization conducted in the past year.
- Number of CDSMP workshops cancelled: The number of Chronic Disease Self-Management Workshops your organization scheduled and subsequently cancelled in the past year. This data element is included only for your reference and is not factored into any of the calculations.

- Total Registrants: The total number of persons who registered for CDSMP workshops in the past year. This data element is included only for your reference and is not factored into any of the calculations.
- Total Participants: The total number of persons who participated in at least one (1) CDSMP workshop class in the past year.
- Total Completers: The total number of persons who completed at least four (4) CDSMP workshop classes in the past year.

### *Master Trainer Training*

All Master Trainers must be certified by Stanford University. To become certified, a person must complete a 4 or 4.5 day Master Training conducted by two certified T-trainers. These can take place at Stanford University or can be arranged through Stanford to take place off-site anywhere in the world.

### **Cost Calculator Output**

The calculator yields a picture of your organization's current cost structure. Based on an organization's costs and program data, the calculator assesses efficiency by estimating "per participant" costs, "per workshop" costs, and the impact of individual program components on total expenses.

The screenshot shows the 'CDSMP Program Cost Calculator' spreadsheet. The main title is 'CDSMP Program Cost Calculator' with buttons for 'Clear Data' and 'Load example data'. The spreadsheet is organized into sections: 'Current Cost Structure', 'FIXED COSTS', and 'VARIABLE COSTS'. The 'FIXED COSTS' section includes Administration, CDSMP licensure, and Marketing. The 'VARIABLE COSTS' section includes Workshop Leader Trainings, Master Trainer Trainings, and CDSMP Workshops. Summary rows show Total Fixed Costs at \$58,650, Total Variable Costs at \$44,611, and Total Costs at \$103,261. Below this, it calculates Total Cost per Participant (\$430), Total Cost per Completer (\$459), and Total Cost per Workshop (\$412). A final row shows that 2% of costs are In-Kind.

	Fixed Costs	Variable Cost per Unit	Units	Variable Costs
<b>FIXED COSTS</b>				
Administration, Program Coordination, and Management	\$ 54,500			
CDSMP licensure	\$ 500			
Indirect costs	\$ 3,000			
Marketing and Recruitment	\$ 650			
<b>VARIABLE COSTS</b>				
<b>Workshop Leader Trainings</b>				
• Master Trainer fee	\$ 1,538	6		\$ 9,225
• Leader Trainer fee	\$ 860	5		\$ 4,302
• Workshop Leader Training	\$ 717	3		\$ 2,150
• Workshop Leader Training Trainee Costs Reimbursed	\$ 8	43		\$ 360
• Workshop Leader Training Follow-up	\$ 400	1		\$ 400
<b>Master Trainer Trainings</b>				
• Stanford	\$ 8,400	0.5		\$ 4,200
• Off-Site	\$ 39,500	0.5		\$ 19,750
◦ Master Trainee Costs Reimbursed	\$ 33	3		\$ 100
CDSMP Workshops	\$ 412	10		\$ 4,124
<b>Total Fixed Costs</b>	<b>\$ 58,650</b>			
<b>Total Variable Costs</b>				<b>\$ 44,611</b>
<b>Total Costs</b>				<b>\$ 103,261</b>
<b>Total Cost per Participant</b>	<b>\$ 430</b>	<i>Total cost / number of participants</i>		
<b>Total Cost per Completer</b>	<b>\$ 459</b>	<i>Total cost / number of completers</i>		
<b>Total Cost per Workshop</b>	<b>\$ 412</b>	<i>Total CDSMP workshop cost / number of CDSMP workshops</i>		
<b>Percentage of Costs that are In-Kind</b>	<b>2%</b>			

The calculator yields a picture of your organization's current cost structure. Based on an organization's costs and program data, the calculator assesses efficiency by estimating "per participant" costs, "per workshop" costs, and the impact of individual program components on total expenses.

The following costs are included in the current cost structure:

#### *Fixed Costs*

- Administration, Program Coordination, and Management: Salary and fringe benefits for paid staff, stipend/fee for volunteers, and compensation for contractors.
- CDSMP licensure: Annualized cost of CDSMP license.
- Indirect costs: Indirect costs attributable to the CDSMP program.

- Marketing and Recruitment: Cash and in-kind expenses for marketing to participants, lay leaders, and partners/funders.

### *Variable Costs*

- Workshop Leader Trainings: Cash and in-kind expenses for room rental; charts and stands for charts; office supplies; books, tapes, videos, or CDs; food and beverage; and other costs.
- Master Trainer fee: Master Trainer costs associated with Workshop Leader Training for paid staff and contractors, including total financial compensation (salary / fee), the value of non-cash gifts, transportation, parking, lodging, and other costs.
- Leader Trainer fee: Total financial compensation, the value of non-cash gifts, transportation, and other costs for paid staff and volunteer CDSMP Workshop Leaders.
- Workshop Leader Training: Cash and in-kind expenses for room rental; charts and stands for charts; office supplies; books, tapes, videos, or CDs; food and beverage; and other costs.
- Workshop Leader Training Trainee Costs Reimbursed: Transportation, parking, lodging, and compensation for attending training.
- Workshop Leader Training Follow-up: Cash and in-kind expenses for both meeting costs (e.g., room rental, supplies, snacks, name tags) and travel expenses (e.g., mileage, parking, lodging).
- Master Trainer Trainings – Stanford: Cash and in-kind expenses for tuition paid for health professionals, tuition paid for lay persons, transportation, parking, lodging, food and beverage, and compensation for attending training.
- Master Trainer Trainings – Off-Site: Cash and in-kind expenses for training, and additional fees paid to trainers, such as transportation, lodging, food and beverage, and other costs.
- Master Trainee Costs Reimbursed: Transportation, parking, lodging, and compensation for attending training.
- CDSMP Workshops: Cash and in-kind expenses for room rental; charts and stands for charts; office supplies; books, tapes, videos, or CDs; and other costs.

## Training Calculator

One of the key challenges in CDSMP implementation is making workshop leader trainings as efficient and cost effective as possible. Another challenge is to determine the most cost effective way to train an adequate number of master trainers. If you train too many workshop leaders or master trainers and there are not enough classes for them to teach, or if they can't maintain their certification requirements, there is little or no return on your investment. If you train too few workshop leaders or master trainers, there may not be enough to meet the demand. Another important issue is how many individuals should attend a training workshop in order to achieve a reasonable per-person cost. This calculator is designed to help organizations answer these questions, by examining the number of participants they plan to reach, and calculating the number of trainers needed and accompanying costs.

The Training Calculator will:

- Evaluate the financial impact of workshop sizes, training class sizes, and training utilization
- Calculate the number of workshop leaders your organization needs to reach a desired number of participants while minimizing training costs
- Calculate the number of participants, workshops, workshop leaders, and workshop leader trainings needed to achieve a specific cost per participant

**CDSMP Training Calculator**

One of the key challenges in CDSMP implementation is making workshop leader trainings as efficient and cost effective as possible. Another challenge is to determine the most cost effective way to train an adequate number of master trainers. If you train too many workshop leaders or master trainers and there are not enough classes for them to teach, or if they can't maintain their certification requirements, there is little or no return on your investment. If you train too few workshop leaders or master trainers, there may not be enough to meet the demand. Another important issue is how many individuals should attend a training workshop in order to achieve a reasonable per-person cost. This calculator is designed to help organizations answer these questions, by examining the number of participants they plan to reach, and calculating the number of trainers needed and accompanying costs.

By entering information about your organization's workshop size, training class size, and training costs, the Calculator will:

- Evaluate the financial impact of workshop sizes, training class sizes, and training utilization
- Calculate the number of workshop leaders your organization needs to reach a desired number of participants while minimizing training costs
- Calculate the number of participants, workshops, workshop leaders, and workshop leader trainings needed to achieve a specific cost per participant
- Compare the costs of training workshop leaders with contracted master trainers or with master trainers who are paid staff
- Compare the costs of training master trainers by sending trainees to Stanford University or by bringing Stanford University trainers to your area

**Current Training Utilization**

Number of Workshop Leader Trainings	3	
Number of Workshop Leaders Trained	43	
Number of Workshop Leaders that operated under your license	30	70%
Facilitated no workshops	8	27%
Facilitated 1 workshop	5	17%
Facilitated 2 workshops	7	23%
Facilitated 3+ workshops	10	33%

**Chart Area**

Facilitated no workshops: 27%  
 Facilitated 1 workshop: 17%  
 Facilitated 2 workshops: 23%  
 Facilitated 3+ workshops: 33%

**Training Cost Manager**

**Assumptions for Program Efficiency:**

Workshop Leader Training Class Size	20
# of Workshops Facilitated by each Workshop Leader Trained	2
Follow-Up Sessions per Training	0.5
CDSMP Workshop Class Size	18
CDSMP Workshop Completion Rate	90%

**Your Program**

	15
	7.5
	0.3
	24
	94%

Please select which data element you would like to vary:

Number of Workshop Leaders Trained

Number of CDSMP Workshop Participants

Cost per Participant

### Training Cost Manager

After observing your current cost structure on the previous tab, the training cost manager allows you to quickly determine what effect a change in the number of Workshop Leaders trained, the number of CDSMP workshops, or the cost per participant would have. The calculator presents a scenario for maximum program efficiency, and compares it to your program's operations over the past year.

Cells highlighted in yellow can be changed by the user. Cells highlighted in blue are "read-only" and cannot be changed.

- Assumptions for Program Efficiency: The assumptions about the Workshop Leader Training class size, the number of Workshops facilitated by each Workshop Leader trained, the number of follow-up sessions per Training, CDSMP Workshop class size, and CDSMP Workshop completion rate are based on the recommendations that Stanford gives. These assumptions may be changed to fit your program's needs.

When varying the desired cost per participant, the minimum value you can enter will depend on what assumptions you've made and what your fixed and variable costs are. If you enter a value that is too low, the Calculator will display an error message indicating that you need to enter a greater value.

Desired Cost Per Participant

*Error: Please enter a cost per participant greater than \$50*

## Summary Report

The **Summary** tab contains a comparative side-by-side summary of your organization's current cost structure (both fixed and variable costs) and the training calculator scenario. Excluded costs and assumptions made throughout the calculator are also included at the bottom of the report.

Depending on the information the user enters on the Cost Calculator, the following costs may be excluded from the current cost scenario:

- ❖ Administration, Program Coordination, & Management
- ❖ Workshop leader training trainee costs
- ❖ CDSMP licensure
- ❖ Workshop leader training follow-up cost
- ❖ Indirect costs
- ❖ Stanford Master Training costs
- ❖ Marketing and Recruitment
- ❖ Off-site Master Training costs
- ❖ Master Trainer fee
- ❖ Master Trainee costs
- ❖ Leader Trainer fee
- ❖ CDSMP workshop cost
- ❖ Workshop leader training costs

Please note that when comparing your current cost scenario to the training cost scenario, Stanford Master Training costs and off-site Master Training costs are **always** excluded from the training cost scenario.

We are currently exploring the capability of allowing the user to save and load various training scenarios or cost structures. In the meantime, the summary reports for various program scenarios can be saved individually on your computer and printed, so you can compare different strategies and targets.

Current Cost Structure					Training Cost Scenario				
	Fixed Costs	Variable Cost per Unit	Units	Variable Costs		Fixed Costs	Variable Cost per Unit	Units	Variable Costs
<b>FIXED COSTS</b>					<b>FIXED COSTS</b>				
Administration, Program Coordination, & Management	\$ 54,300				Administration, Program Coordination, & Management	\$ 54,300			
CDSMP Licensure	\$ 500				CDSMP Licensure	\$ 1,000			
Indirect costs	\$ 3,000				Indirect costs	\$ 3,000			
Marketing and Recruitment	\$ 650				Marketing and Recruitment	\$ 650			
<b>VARIABLE COSTS</b>					<b>VARIABLE COSTS</b>				
<b>Workshop Leader Trainings</b>					<b>Workshop Leader Trainings</b>				
Master Trainer fee	\$ 1,520	6	6	9,725	Master Trainer fee	\$ 1,520	20	6	30,750
Leader Trainer fee	\$ 660	5	5	4,302	Leader Trainer fee	\$ 660	191	5	164,355
Workshop Leader Training	\$ 717	3	3	2,150	Workshop Leader Training	\$ 717	10	3	7,167
Workshop Leader Training Trainee Costs Reimbursed	\$ 0	43	368		Workshop Leader Training Trainee Costs Reimbursed	\$ 0	191	3	1,589
Workshop Leader Training Follow-up	\$ 400	1	600		Workshop Leader Training Follow-up	\$ 400	5	600	2,000
<b>Master Trainer Trainings</b>					<b>Master Trainer Trainings</b>				
Stanford	\$ 8,400	0.6	6	4,200	Stanford				
Off-site	\$ 39,500	0.5	19,750		Off-site				
Master Trainee Costs Reimbursed	\$ 33	3	100		Master Trainee Costs Reimbursed				
CDSMP Workshops	\$ 412	10	6,124		CDSMP Workshops	\$ 412	191	10	70,760
<b>Total Fixed Costs</b>	<b>\$ 58,450</b>				<b>Total Fixed Costs</b>	<b>\$ 58,950</b>			
<b>Total Variable Costs</b>				<b>\$ 44,611</b>	<b>Total Variable Costs</b>				<b>\$ 284,621</b>
<b>Total Costs</b>	<b>\$ 103,061</b>				<b>Total Costs</b>	<b>\$ 343,571</b>			
Total Cost per Participant	\$ 429				Total Cost per Participant	\$ 100			
Total Cost per Completee	\$ 458				Total Cost per Completee	\$ 111			
Total Cost per Workshop	\$ 412				Total Cost per Workshop	\$ -			
Percentage of costs that are in final	2%								
<i>The following costs are excluded:</i>					<i>The following costs are excluded:</i>				
Stanford Master Training costs, off-site Master Training costs, Master Trainee costs					Stanford Master Training costs, off-site Master Training costs, Master Trainee costs				
<b>This Scenario assumes:</b>					<b>This Scenario assumes:</b>				
20 people per workshop leader training class, each workshop leader trained will facilitate 2 CDSMP workshops, there will be 0.3 follow-up sessions per workshop leader training, a CDSMP workshop class size of 10, and that 90% of participants will complete the CDSMP workshop.					20 people per workshop leader training class, each workshop leader trained will facilitate 2 CDSMP workshops, there will be 0.3 follow-up sessions per workshop leader training, a CDSMP workshop class size of 10, and that 90% of participants will complete the CDSMP workshop.				

## Questions/Feedback

The calculator and manual will be housed on the online Healthy Aging Community library for your use, at <http://www.healthyagingcommunity.org>.<sup>2</sup> Any future updates or edits will be made to this version. We encourage you to periodically check the library for any updates. To access these materials, simply click on the Groups tab in the top navigation bar, EBP/SS/Challenge Grantees, and the Library tab along the left navigation bar. The documents will be in the main folder.

If you need assistance or have any questions, comments, or suggestions about the calculator, please visit the EBP/SS/Challenge Grantees forum, also in the Online Healthy Aging Community. From the homepage, click on the Forums tab in the top navigation bar, EBP grantees, and the thread called “CDSMP Calculator Forum.” You will be able to post questions and responses there, as well as search the thread for specific terms.

We welcome your feedback about the calculator, and feel that this online forum is the best way to promote shared learning. Thank you in advance for your participation!

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<sup>2</sup> Note: if you do not have access to the Healthy Aging Online Community, please visit the following survey link and fill out the required information. The CHA will contact you with further instructions.

[https://www.surveymonkey.com/s.aspx?sm=vYNmb7f1jR41Y\\_2flm2LSqDA\\_3d\\_3d](https://www.surveymonkey.com/s.aspx?sm=vYNmb7f1jR41Y_2flm2LSqDA_3d_3d)