



## **APPLYING RETURN ON INVESTMENT (ROI) LOGIC TO NON-CLINICAL PROFESSIONS**

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**A SPECIAL  
THANKS TO  
FACHC**

# MHP Salud's Mission & Vision

**Mission:** MHP Salud promotes the Community Health Worker (CHW) profession nationally as a culturally appropriate strategy to improve health and implements CHW programs to empower underserved Latino communities.

**Vision:** Our populations and their communities will enjoy health without barriers.





# MHP Salud



MHP Salud has over 35 years of experience with the CHW profession. There are 2 'arms' of our services:

1) **CHW Programs**-MHP Salud implements CHW-led, culturally appropriate, programming on a variety of health and social topic areas—nutrition and physical activity; diabetes management; older adult health; application assistance for safety-net programs. Programs currently serve predominately Hispanic/Latino adults in our Texas and Florida communities.

2) **Training & Technical Assistance**- MHP Salud possesses experience in providing training and technical assistance nationally to FQHCs and other organizations looking to build or enhance CHW programs.





**A Community Health Worker is a trusted member of the community who empowers their peers through education and connections to health and social resources.**

***What non-clinical professions work at your organization?***



# LEARNING OBJECTIVES

## Define

Define the concept of Return on Investment (ROI) and its distinction from other types of analysis such as cost-effectiveness analysis.

## Describe

Describe the steps and conditions necessary to conduct ROI analysis

## Report

Report on evidence of positive ROI as applied to non-clinical professions

**DEFINE THE CONCEPT OF RETURN ON  
INVESTMENT (ROI) AND ITS  
DISTINCTION FROM OTHER TYPES OF  
ANALYSIS SUCH AS COST-  
EFFECTIVENESS ANALYSIS.**

**LEARNING OBJECTIVE #1**



# WHAT IS ROI?

- Simply, ROI is the total value of benefits or profit divided by total cost. That is, ROI estimates the economic benefit of non-clinical services in relation to costs.

$$\text{ROI} = \frac{\text{BENEFITS}}{\text{COST}}$$



# WHAT IS ROI? (CONT'D)

$\text{ROI} < \$1 = \text{Negative ROI.}$

$\text{ROI} = \$1 = \text{Breakeven.}$  \*Note, this can still be good!

$\text{ROI} > \$1 = \text{Positive ROI.}$

# ROI IS NOT

## **COST-EFFECTIVENESS ANALYSIS\***

- Compares the relative costs and outcomes (effects) of two or more courses of action (e.g. intervention vs. non-intervention).
  - “How do costs compare to outcomes?”

## **COST-BENEFIT ANALYSIS\***

- Compares the costs and benefits of intervention, with both being expressed monetarily.
  - “How do costs compare to benefits?”

For more information on either of these a starting point can be:  
[POLARIS Economic Evaluation](#), published by Centers for Disease Control



Society—How much is the broader community impacted by the non-clinical services?



Institution—How much is the institution providing non-clinical services impacted?



Individual—How much did the individual receiving non-clinical services benefit?

## **ROI STAKEHOLDERS**

# WHY ROI? -GENERAL

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Estimates direct financial impact

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Versatile yet simple

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Offers a basic gauge of an investment's profitability

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Relatively easy to understand



# WHY ROI FOR NON-CLINICAL PROFESSIONS?

Makes the 'business case' for use of non-clinical professions in healthcare settings.

- Especially for professions where scope of reimbursement is limited or not possible.

Provides evidence for workforce development and increased recognition of non-clinical professions.

- CHWs as example.

# KEEP IN MIND...

ROI is more than “dollars and cents”

It can also mean:

- Increased productivity /efficiency
- Improvements in quality of patient care

# **DESCRIBE THE STEPS AND CONDITIONS NECESSARY TO CONDUCT ROI ANALYSIS**

## **LEARNING OBJECTIVE #2**

# WHAT IS YOUR ORG'S EXPERIENCE WITH NON-CLINICAL PROFESSIONS AND ROI?

01

My organization is interested in conducting ROI analysis related to impact of non-clinical professions.

02

My organization has previously conducted ROI analysis related to impact of non-clinical professions.

03

My organization has previously conducted ROI analysis on another topic that is NOT impact non-clinical professions.

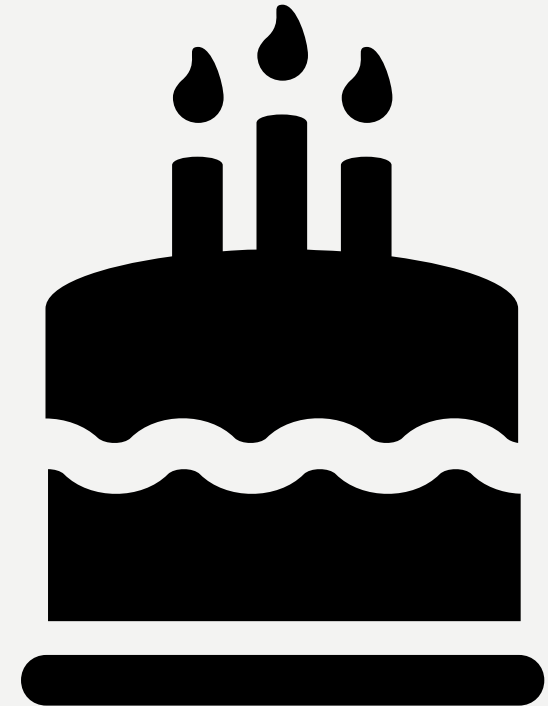
04

Other



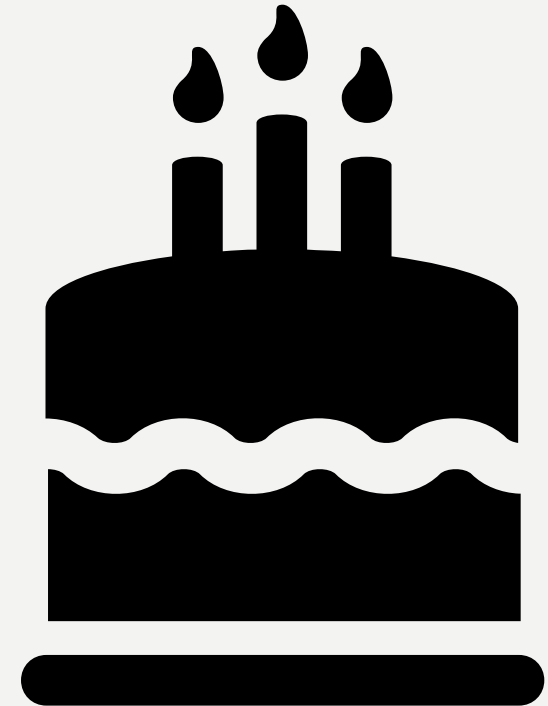
# CONTEXT AND “CAKE” ROI METAPHOR

- We will be discussing in a theoretical sense some key considerations for conducting ROI analysis.
- Today’s discussion is a model that can be thought of in a similar manner to baking a cake.
  - During baking, certain aspects are required such as mixing ingredients, baking. Other aspects are adaptable, like the cake flavor or toppings.
- Organizations can use their best judgment as to which steps/conditions are applicable to them in their pursuit of conducting ROI for non-clinical professions.



# CONTEXT AND “CAKE” ROI METAPHOR (CONT'D)

- This section assumes that organizations are currently employing non-clinical professions in some capacity.
- It also assumes the stakeholder (society, institution, individual) is pre-determined.
- And, remember even if an organization is not yet ready to embark on calculating ROI for non-clinical professions, this information sets the stage for it as a future possibility!
  - The “recipe” is here for use at any time.



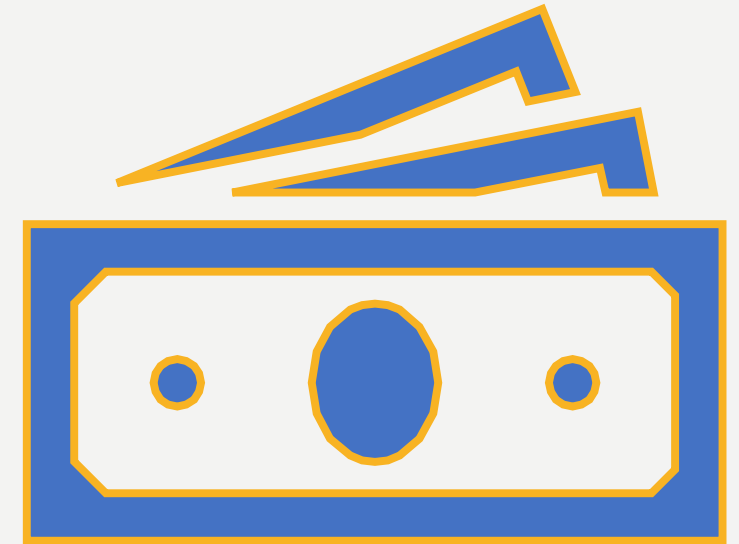
# MHP SALUD'S FREE ROI TOOLKIT

MHPSALUD.ORG/FREE  
-RESOURCE-  
PORTFOLIO/



# KEY COMPONENTS OF CALCULATING ROI FOR NON-CLINICAL PROFESSIONS

- Building the right team that can contribute to the ROI process;
  - Identifying key data and assumptions; Researching health cost data;
  - Getting to know financial information
- 
- ROI calculation





# BUILDING THE RIGHT TEAM

- This is a key consideration whether your organization is calculating ROI for non-clinical professional roles for the first time or the 100<sup>th</sup> time!
- Questions to be asked:
  - “Who understands the financials/budget of my organization?” Potentially someone from organization’s business office or in Finance.
  - “Who understands my program and program outcomes/data?” Potentially a CHW or other non-clinical profession, supervisor of CHW or other non-clinical profession.
  - “What has access to your data?” Potentially IT or Data analyst.
  - “Who makes management decisions for the organization and/or program? Potentially a Nursing Manager or Medical Director.
- For the ‘Potential’ fill in the blank for the appropriate role in your organization.

# BUILDING THE RIGHT TEAM (CONT'D)

- Can outline roles in a format such as this ...

Area of Expertise	Team member(s)	Information/data they can provide	Key questions to ask him/her/them
CHW Program			
Management			
Finances/Budget			
Data			

# IDENTIFYING KEY DATA AND ASSUMPTIONS

- **Key measures**
  - What data is being collected based on non-clinical profession activity(ies) that can be used to demonstrate impact?
- **Data**
  - How is data collected? Where is stored? Who has access ?
  - What date ranges are key measures desired/needed? Has data been collected consistently over time

# IDENTIFYING KEY DATA AND ASSUMPTIONS (CONT'D)

- **Comparison group and/or baseline data**
  - Is there a comparison group (e.g. A group that did NOT receive non-clinical professional services) OR baseline data for key measures (e.g. clinical/behavioral data BEFORE receiving non-clinical professional services)? What internal data such as patient history can be used ?
  - If primary data not an option, how can external data or research be used to artificially create a comparison group?



# IDENTIFYING KEY DATA AND **ASSUMPTIONS** (CONT'D)

- Developing key assumptions about the data you are collecting is critical for transparency. This part requires critical thinking, logic, and creativity.
- Assumptions will be made for each component of key data.

# IDENTIFYING KEY DATA AND **ASSUMPTIONS** (CONT'D)

- First, “What national/state/local data aligns with program data?”
  - For Health Centers, UDS may be a good start.

# IDENTIFYING KEY DATA AND ASSUMPTIONS (CONT'D)

- Second, “What assumptions will be made based on patient population served?”
  - For example, it is assumed that participants of a CHW-led diabetes program maintain their behavior change after the CHW program ends.
  - Another example, it is assumed that patients lost to follow-up did not lower their A1c.
- Third, “What data can not be quantified?”

# IDENTIFYING KEY DATA AND ASSUMPTIONS (CONT'D)

- Putting it all together
- Use key data + assumptions to develop value estimates.
- Source can be internal OR external. Ideally, the more data that can be internal , the stronger the ROI estimated will be.
- Example table below:

Program outcome	Key Data/Measures	Assumptions	Value Estimates	Source

# RESEARCHING HEALTH COST DATA

- This is an extension of previous step.
  - Using key data + assumptions, embark on research of health care cost data.
- This will facilitate a comparison between the benefits estimated in previous step.

# RESEARCHING HEALTH COST DATA (CONT'D)

- Similarly, continue to look at national/state/local data wherever appropriate.
- Whereas the previous step focused on value estimates, this step considers the **\*costs\***.
  - Examples: Economic impact of diabetes, costs of being uninsured, healthcare spending by medical condition
- Example table below for detailing costs:

Health care cost	Source	Notes

# GETTING TO KNOW FINANCIAL INFORMATION

- Consider all costs that are encompassed within the non-clinical profession's program or service.
  - Too narrow, will severely bloat the ROI causing an overestimation.
    - Ex. Looking at non-clinical profession salary only
  - Too wide, will underestimate the ROI.
    - Ex. Looking at the organization's total budget with no specificity to non-clinical profession program or service.
  - “Just right”
    - Ex. A comprehensive overview of costs, including direct/indirect costs of non-clinical profession program or service. Also, accounts for inflation when appropriate.



# FINALLY, ROI CALCULATION!

- All steps have been completed accurately and with clear documentation, transparency.
- Calculate benefits based upon non-clinical profession program outcomes.
  - For example, if 100 uninsured individuals served, but only 40 received insurance, do not calculate benefits for receiving insurance for the 60 individuals who did not receive insurance.
- Consider calculating a 1 year, 3 year, and possibly 5-year return. *Why? ROI can take time*

$$\text{ROI} = \frac{\text{BENEFITS}}{\text{COST}}$$

# **REPORT ON EVIDENCE OF POSITIVE ROI AS APPLIED TO NON-CLINICAL PROFESSIONS**

## **LEARNING OBJECTIVE #3**

# CONTEXT AND LIMITATIONS

- The following exemplars are for the CHW profession.
- The settings are an academic institution (UPenn), Community-based organization (MHP Salud), and Foundation.

# CHWS AND ROI: MULTI-CHRONIC DISEASE MANAGEMENT<sup>[1]</sup>

**\$2 return for every \$1 invested** (institutional)

- 6-month program with UPenn's IMPaCT model
- 302 Medicaid insured adults.
- Institutional benefits included reduction in hospitalizations, improvements in mental health, BMI, and smoking.
- Resulted in UPenn Health System in permanent adoption of this intervention as part of population based health management strategy for at-risk patients.



[1] Kangovi, S., Mitra, N., Grande, D., Huo, H., Smith, R.A., & Long, J.A. (2017). Community Health Worker Support for Disadvantaged Patients With Multiple Chronic Diseases: A Randomized Clinical Trial. *American Journal of Public Health*, 107(10), 1660–1667. <https://doi.org/10.2105/AJPH.2017.303985>

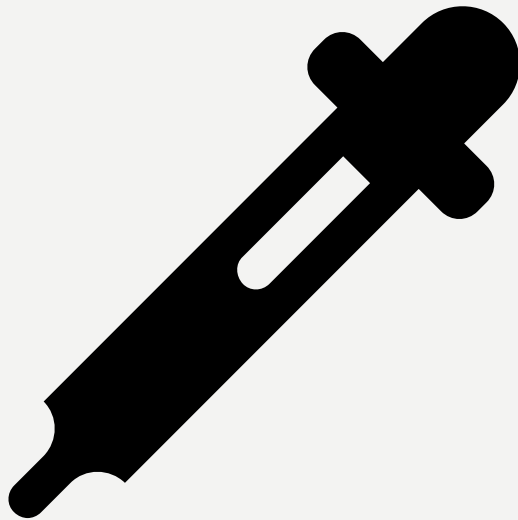
# CHWS AND ASTHMA MANAGEMENT [2]

- Connecticut Health Foundation analyzed models of CHW-led services that have potential to demonstrate positive ROI if implemented in practice.
  - Used existing models (in differing geographic regions) to project outcomes
- One example—asthma control for children in New Haven, CT at a private-group practice
  - 4-month program including home visits, a home assessment, and supplies for asthma control.
  - **Projected ROI: \$1.86 for every \$1 invested over 3 years (institutional)**
  - Other projected improvements: 43% demonstrate well-controlled asthma at 12 months; 32% fewer hospitalizations, decreased absenteeism (children & parents).



[2] London, K., Love, K., & Tikkanen, R. (2017). Policy Brief, Community Health Workers: A Positive Return on Investment for Connecticut. *Connecticut Health Foundation*. Retrieved 03/19/21 from <https://www.cthealth.org/wp-content/uploads/2017/04/CHW-Brief-April-2017.pdf>

# CHWS AND ROI: DIABETES MANAGEMENT



**\$1.34 return for every \$1 invested (individual)\***

- 12-month case management program with MHP Salud\*\* in Rio Grande Valley region of TX.
- 699 uncontrolled diabetic participants (HgbA1c >9) served by CHW and diabetes self-management education.
- Improvements in glycemic control (-17.5% reduction in poor control, +6.9% increase in moderate control, +10.5% increase in good control)
- Individual benefits included recovered wages (i.e. decreased absenteeism) and decreased out-of-pocket medical costs.

\*Averages -3 year estimate (\$1.00) and 5-year estimate (\$1.67)

\*\*MHP Salud sub-contractors under University of Texas Health Science Center at Houston. Reporting on MHP Salud results only

# CHWS AND ROI: SUPPORT FOR SURVIVORS OF INTIMATE PARTNER VIOLENCE & SEXUAL ASSAULT

- Overall, \$0.91 return for every \$1 invested (individual).

*Note, ROI not positive.*

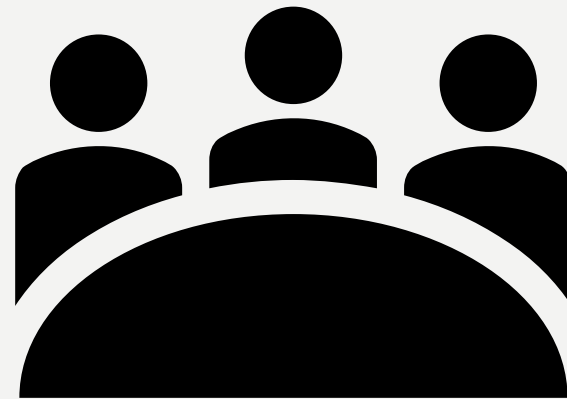
- 2-year support group and referral program for survivors of Intimate Partner Violence and sexual assault with MHP Salud in Cameron County, TX.
- 80 female participants served.
- 8-week support group demonstrated significant changes in stress and depressive symptoms.
- Benefits included decreased medical costs and improved productivity.





# DISSEMINATION AS A KEY PART OF ROI

- It is crucial to share ROI results as widely as possible—internally and externally.
- This will arguably benefit your individual organization, other like-minded organizations, and non-clinical professions.



# FOR MORE INFORMATION

- MHP Salud's [Return on Investment Resource\(s\)](#).
  - Brief reports
  - ROI educational tool
- MHP Salud [Virtual Technical Assistance hours](#)
- MHP Salud's [COVID-19 Resources](#).



# THANK YOU!

QUESTIONS, COMMENTS

