



# Return on Community Investment (ROCI): A Model and its Application to a Healthcare Access Program

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# Session Objectives

- Introduce Ascension Health (AH) and the Access Leadership Department
- Introduce St. John Health (SJH) and its Community Health Investment Corporation (CHIC) Access Program
- Introduce and demonstrate Return on Community Investment modeling (ROCI)
- Discuss applications of ROCI Modeling

# Ascension Health

## **Our Mission . . .**

Directs us to serve all persons, particularly those poor and vulnerable, toward improving the health of individuals and communities.

## **Our Vision . . .**

Propels us to contribute to the building of a strong, vibrant Catholic health ministry in the U.S.

## **Our Values . . .**

We are called to: Service of the Poor, Reverence, Integrity, Wisdom, Creativity and Dedication.



# Ascension Health

Ascension Health is the largest Catholic and largest nonprofit healthcare provider in the United States operating in 20 states and the District of Columbia. St. John Health is one of Ascension Health's flagship organizations.

Ascension Health utilizes a distributed leadership model, allowing flexibility in decision making based on specific community needs. Programs to care for the uninsured and underinsured are developed with unique community needs in mind.

# Access Leadership Department

The Ascension Health System Office supports the work of our member health systems. The Access Leadership Department assists in the implementation and maintenance of programs to serve the uninsured and underinsured. The department includes specific expertise in program development, clinical outcomes and return on investment analysis.

# St. John Health (SJH)

Located in southeastern Michigan, the Catholic Health Ministry of SJH consists of 8 hospitals, 125 facilities, over 17,000 associates and includes home care, long term care, assisted living, cancer centers, heart centers, behavioral health and community health subsidiaries.

Community health is organized into a separate 501c3, called Community Health Investment Corporation, and operates major community health outreach, preventive health and wellness and primary care safety-net programs in schools and other community based locations.

# CHIC Background

The Community Health Investment Corporation (CHIC), St. John Health in Detroit enrolls eligible, uninsured patients into primary care medical homes and is interested in understanding the financial benefits of the initiative.

To support program continuation, CHIC wanted to calculate and analyze the community-wide financial benefits of primary care medical home enrollment on its eligible patient population.

A return on community investment (ROCI) analysis was developed and completed with a focus on:

- *Determination of specific, quantifiable benefits*
- *Identification of stakeholders*
- *Comparison of operating expenses to financial benefits*

# What is ROCI Modeling?

Combines program/department measures with research that allows customers, partners and stakeholders to understand the financial benefits of healthcare access programs.

Supports the business case for program continuation and effectiveness by demonstrating the financial value or return of dollars invested by health system and others in the program.

Ensures that we ask the right questions at the right time to judge whether an enterprise is worth the effort\*.

\*Return on Community Investment – A practical primer to open doors. Communities Joined in Action, 2004 Community Health Leadership Network, Inc.

# Why is ROCI Modeling important?

Typically, programs/departments are able to tell patient stories and clinical outcome stories rather effectively. ROCI allows a program to tell a financial story.

ROCI analysis supports the sustainability efforts of your healthcare access program.

Provides another tool to benchmark and evaluate the success and effectiveness of the program.

Answers the question – Why invest dollars into outreach/enrollment programs? – for stakeholders and potential funders

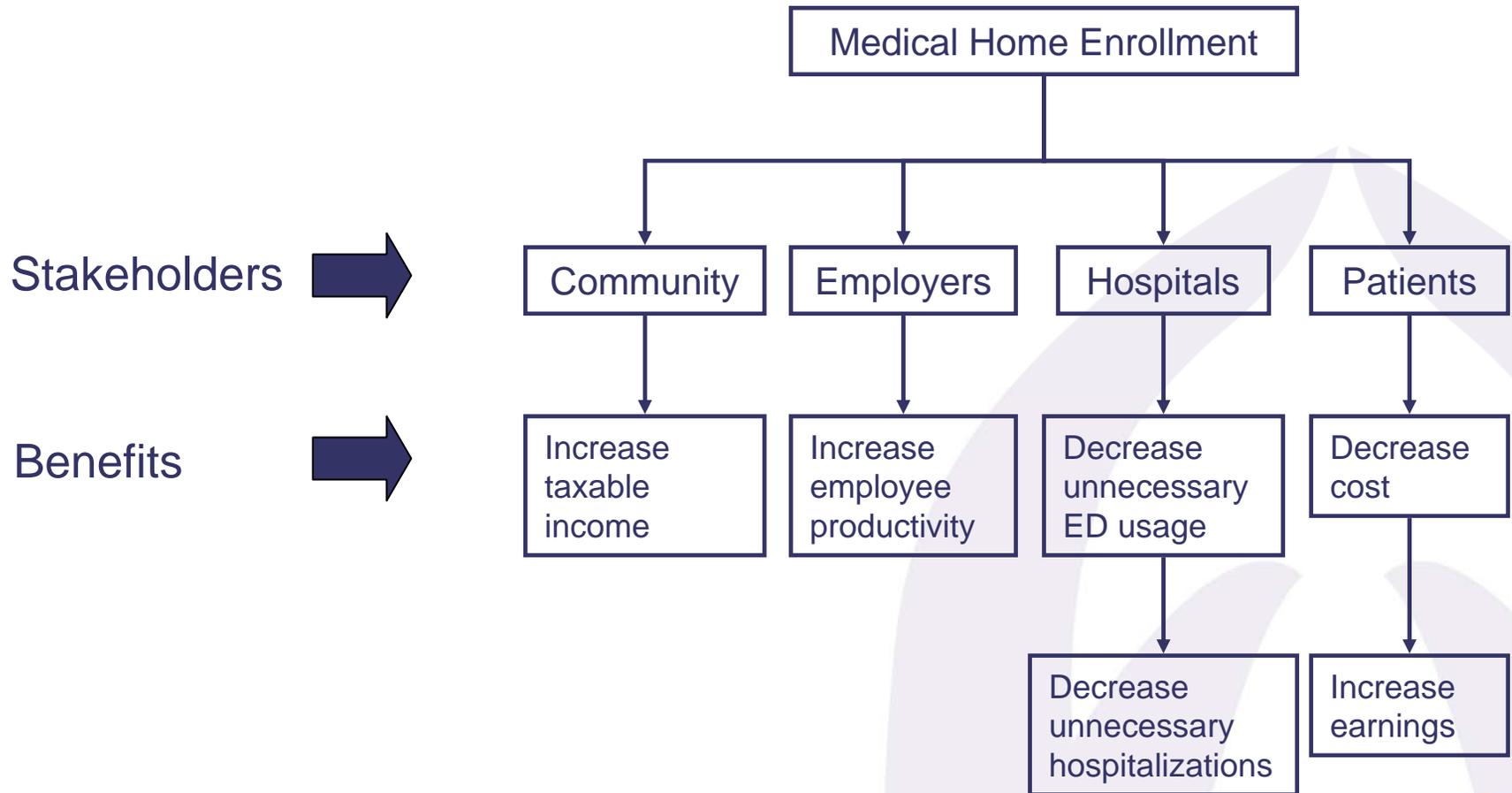
# ROCI Model methodology

Combines outcome measures directly from a program/department with thoroughly reviewed community specific and national research.

Developed from a community-wide perspective – stakeholders include entities/organizations outside the walls of the hospital.

Testing of the ROCI model format and content occurred with healthcare access partners, health system senior leaders and external healthcare access programs.

# ROCI Enrollment Model



# Sources that support ROCI model calculations

Stakeholder Benefit	Calculation Support Data
Increase taxable Income	<b>Tax Foundation – Michigan state and local tax burden</b>
Increase employee productivity	<b>US Department of Labor – average weekly earnings state of Michigan,</b> US Department of Health and Human Services, Industrial and Labor Relations Review, Econometrica
Decrease unnecessary ED visits	<b>St. John Health – cost of an ED visit,</b> Centers for Disease Control and Prevention (CDC), Medical Care
Decrease unnecessary hospitalizations	<b>St. John Health – cost of a hospitalization,</b> Centers for Medicare and Medicaid Services (CMS), Health Affairs
Decrease patient costs	<b>St. John Health – cost of an ED visit, National Association of Community Health Centers – cost of Michigan CHC visit,</b> CDC, New England Journal of Medicine (NEJM), Families USA
Increase patient earnings	<b>US Department of Labor – average weekly earnings state of Michigan,</b> Kaiser Family Foundation, Department of Health and Human Services

# Model Inputs

FY2008 operating costs of enrolling eligible, uninsured patients into primary care medical homes – **\$188,273**

- *Enrollment workers, office space, equipment and supplies, technology*

FY2008 number of eligible, uninsured patients who are enrolled into primary care medical homes – **4,783**

- *Eligible patients are low income (<200% FPL), 19-64 years old, ineligible for any other public programs such as Medicaid and are most often referred from a St. John Health hospital ED*

## RETURN ON COMMUNITY INVESTMENT (ROCI) INPUT CELLS

Please address the following 4 questions pertaining to your Healthcare Access Program by placing your answers in **column H**. After each answer is entered, please press the **Enter** key - the cell should then turn green. In order for the Return on Community Investment (ROCI) calculator to function properly, questions 1 and 2 **must** be answered. If the answers to questions 3 and 4 are unavailable, leave them unanswered. After answering all of the questions that pertain to your access program, please press the **Enter** key. This will complete the Return on Community Investment (ROCI) calculation.

1) What were the total operating expenses for your program during 2007?	\$188,273
2) How many patients did you enroll in your program during 2007?	4,783
3) What was the reduction in emergency department expenses as a result of your program in 2007?	\$0
4) What was the reduction in inpatient hospitalization expenses as a result of your program in 2007?	\$0

## PROGRAM RETURN ON COMMUNITY INVESTMENT (ROCI) SUMMARY OUTPUT

Medical Home Enrollment Program Benefit	\$1,743,137
Program expenses	\$188,273
<b>Return on Community Investment</b>	<b>926%</b>

## RETURN ON COMMUNITY INVESTMENT (ROCI) BENEFIT BREAKDOWN

Medical Home Enrollment	
Community	\$113,839
Employers	\$210,137
Hospitals	\$204,459
Patients	\$1,214,702
<b>Total Benefit</b>	<b>\$1,743,137</b>

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## Medical Home Enrollment Benefits



Service	Customer	Benefit	Yearly Financial Impact
Medical Home Enrollment	Community	increase taxable income	\$113,839
	Employers	increase employee productivity	\$210,137
	Hospitals	decrease unnecessary ED usage	\$93,921
		decrease unnecessary hospitalizations	\$110,538
	Patients	decrease cost	\$3,648
		increase earnings	\$1,211,054
			<b>\$1,743,137</b>

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# Model Outputs

Benefits to the St. John Health service area:

Benefit to the local community - **\$113,839**

Benefit to the employers of the enrolled patients - **\$210,137**

Benefit to the hospitals - **\$204,459**

Benefit to the enrolled patients - **\$1,214,702**

Total financial benefit based on ROCI model - **\$1,743,137**

# What does it mean?

Comparison of the total financial benefit of the CHIC primary care medical home enrollment program to the operational costs of maintaining the program =  
$$\$1,743,137 / \$188,273 = 926\%$$

**\$1.00 spent to enroll patients into medical homes = \$9.26  
in community benefit or Return on Community  
Investment**

# Things to remember

Model assumptions should be tested by those you trust.

Research needs to be updated regularly.

A good data collection system is mandatory.

This is one tool to measure program effectiveness. It may be the only tool available to measure the financial impact in dollars.

The demonstration did not include an estimate of number of persons or time spent assessing persons found to be ineligible for enrollment.

# Conclusions

It is important to evaluate program effectiveness from several view points including clinical, process, and financial.

Preventive and population based programs have demonstrated significant variability in ability to evaluate program outcomes and effectiveness financially.

The ROCI methodology and tool holds promise of an approach to evaluating program effectiveness from several view points for a number of different programs and should be further developed and explored.



For questions and additional research materials  
please contact

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