

Technical Assistance: Cost & Savings Analysis

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Today's Goal

Share different approaches to approaching financial sustainability and cost and savings analysis

Starting in
October 2021,
the current
DSRIP
program will
be zero
funded.

**Cost and Savings
Analysis**

Understanding HHSC's requirement for Cost Savings analysis is important for DSRIP reporting

**Long-term
Financial
Sustainability**

Thinking about financial sustainability post-DSRIP requires providers to complete a thorough review of costs, financing options through multiple payers, consider programmatic restructuring

Costs and Savings

Hamilton Healthcare System

Hamilton, TX

Olinda Harbaugh MPH RDN CDE

Diabetes Retinal Screening Prevention

How and why we chose the ROI Forecasting Tool

Challenges: Data Sources that align with tools

<http://www.chcsroi.org/Welcome.aspx>

To complete an ROI forecast, you will need to provide the following information:

Intervention

- Clinical focus
- Intervention strategies
- Timeframe/duration of initiative

Target Population

- Targeted population subgroups
- Disease prevalence among target groups
- Expected enrollment rate
- Risk stratification

Utilization

- Average 12 month baseline costs for intervention group members
- Trend (expected growth in claims costs)
- Anticipated utilization changes resulting from initiative

Program Costs

- Estimated costs of launching and operating the initiative

Discount Rate


- Organizational cost of capital


Core Activity and Literature Review


- Core Activity Utilization of care management and/or chronic care management services, including education in chronic disease self-management
- Chronic Care Management Services- Complications of Diabetes
- Probability of retinal complications increases with increasing duration of disease. In up to 50% of patients with type 1 diabetes and 30% of those with type 2 diabetes potentially vision-threatening retinal changes develop over time, while early retinal changes are not noticed by the patients. [World J Diabetes](#). 2015 Apr 15; 6(3): 489–499.


Important Aspects of the Tool

INTERVENTION

Name of Forecast 

Clinical Focus: Is your intervention disease-specific? Yes No 

Forecast Period: Enter the number of months during which the outcomes of the intervention will be forecasted (up to 36 months). Months 

Ramp-Up: Enter the expected number of months after the start of intervention until full enrollment is expected to be reached. Months 

Check this box if you do not wish for CHCS to view the data for this forecast. [View our privacy statement.](#)

Target Population

CHCS Center for Health Care Strategies, Inc. ROI Forecasting Calculator for Quality Initiatives

Improving the quality and cost-effectiveness of publicly financed health care

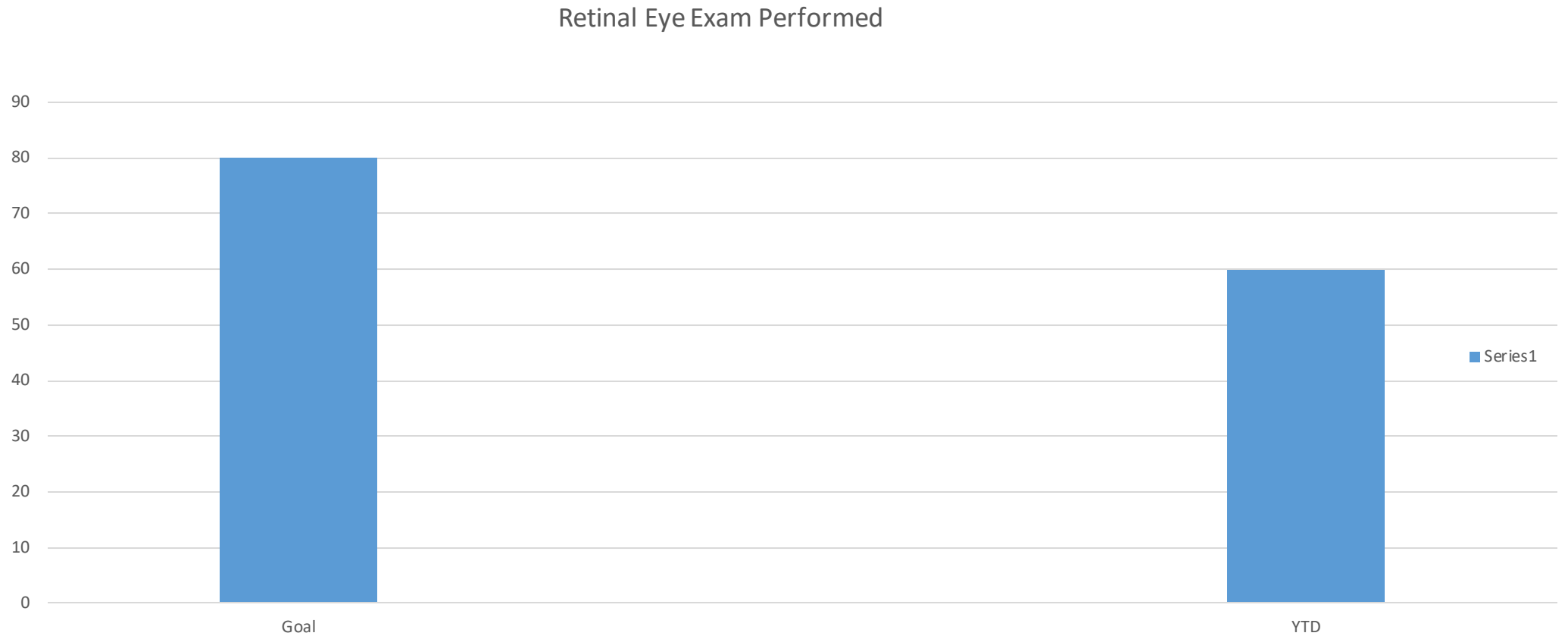
Home | Intervention | **Target Population** | Utilization | Program Costs | Analysis | ROI Solver

TARGET POPULATION

Target Population | **Target Population Output**

<p>Eligible Population: Please specify the population subset that you plan to include in your intervention. Adults ▼</p> <hr/> <p>Size of Eligible Population: Enter the total number of individuals in the population listed above. 3000</p> <hr/> <p>Disease Focus: Enter the clinical condition that is the focus of the intervention. Diabetes ▼</p> <hr/> <p>Disease Prevalence: Enter the prevalence (%) for the specified clinical condition among the Eligible Population. 50.00 %</p> <hr/> <p>Risk Stratification: Enter the percentage of the Eligible Population with the disease in each risk/severity category.</p> <p style="text-align: right;">10.00 % High Risk 40.00 % Medium Risk 50.00 % Low Risk 100% Total</p> <hr/> <p>Risk Group Inclusion: Select which risk/severity groups will be included in the intervention.</p> <p style="text-align: right;"><input checked="" type="checkbox"/> High Risk <input checked="" type="checkbox"/> Medium Risk <input type="checkbox"/> Low Risk</p> <hr/> <p>Enrollment Rate: What percentage of the identified target population do you expect to successfully enroll in the intervention? 80.00 %</p>	<p style="text-align: right;">Additional Notes ?</p> <div style="border: 1px solid gray; padding: 5px;"><p>Community Health Needs Assessment identified 50% of our population at risk for diabetes.</p><p>Approximate number of patients with a diabetes dx in our system population</p><p>Risk Stratification is matched to our population</p><p>Risk Group most likely to require an intervention would be Medium to High Risk patients.</p><p>Enrollment Rate was based on MCO target.</p></div>
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Opportunity- Incentive for Improving Screening



Baseline Costs

CHCS Center for Health Care Strategies, Inc.
Improving the quality and cost-effectiveness of publicly financed health care

ROI Forecasting Calculator
for Quality Initiatives

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BASELINE COSTS

Baseline Costs | [Cost Trends](#) | [Cost Trends Output](#) | [Utilization Change](#) | [Savings/Costs Summary](#)

Baseline Costs for Intervention Group Members: Enter the average annual baseline utilization cost per intervention group member.

Inpatient	\$	0.00
Emergency Dept	\$	0.00
Outpatient	\$	54.13
Home-Based Care	\$	0.00
Laboratory	\$	0.00
Pharmacy	\$	0.00
Other	\$	0.00
	\$	0.00
	\$	0.00
Total Costs	\$	54.13

Baseline Costs for Eligible Population Members:
Enter the annual baseline cost per person for Adults

\$ 54

Additional Notes

Exam Cost	30.00	
Tech	7.50	(5 min prep 15 min exam 10 post exam duties)
Admin	7.50	(insurance verification scheduling referral)
Emp Benefits	3.75	
Supplies	0.05	Alcohol
cleaning		
Overhead	5.33	Rent
Baseline Cost	54.13	Utilities

Cost Trends Output

CHCS

Center for Health Care Strategies, Inc.

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COST TRENDS OUTPUT

[Baseline Costs](#) |
 [Cost Trends](#) |
 Cost Trends Output |
 [Utilization Change](#) |
 [Savings/Costs Summary](#)

The table below shows the utilization cost trends for your population, based on the baseline costs and trend information submitted.

Utilization Cost Trend for Target Population (annual per person)				
	Year 1	Year 2	Year 3	PMPM
Inpatient	\$0	\$0	\$0	\$0
Emergency Dept	\$0	\$0	\$0	\$0
Outpatient	\$56	\$57	\$59	\$6
Home-Based Care	\$0	\$0	\$0	\$0
Laboratory	\$0	\$0	\$0	\$0
Pharmacy	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0
Total Costs	\$56	\$57	\$59	\$6

Utilization Cost Trend for Eligible Population (annual per person)				
	Year 1	Year 2	Year 3	PMPM
Total Costs	\$56	\$57	\$59	\$6

Program Costs

PROGRAM COSTS

Program Costs | [Program Costs Output](#)

Most interventions require financial investment. This investment may come in the form of additional staffing, training and education, general office operations, equipment, construction, or other direct or indirect expenses. These costs must be accounted for in calculating return on investment.

Intervention Costs

	Pre-Launch	Year 1	Year 2	Year 3	Total
Personnel	10,000.00	11,000.00	12,000.00	13,000.00	\$46,000.00
Training and Education	100.00	100.00	100.00	100.00	\$400.00
Office Operations	250.00	400	600.00	800.00	\$2,050.00
Technology and Equipment	22,749.00	0.00	0.00	0.00	\$22,749.00
Construction/Renovation	0.00	0.00	0.00	0.00	\$0.00
	0.00	0.00	0.00	0.00	\$0.00
Indirect Costs	0.00	0.00	0.00	0.00	\$0.00
Total Program Costs	\$33,099.00	\$11,500.00	\$12,700.00	\$13,900.00	\$71,199.00

ROI

Forecast Name: Retinal Scan

Utilization Change Assumptions Used: No article selected, manual inputs used.

Target Population	
Eligible Population	Adults
Total Membership in Eligible Population	3,000
Clinical Focus	Diabetes
Target Strata	High Risk, Medium Risk
Outreach Goal	80.00%
Ramp-up Period	3 months
Total Target Population Members	750
Total Intervention Group Members	600

ROI			
	Year 1	Year 2	Year 3
Cumulative ROI	-0.02x	-0.03x	-0.04x
Cumulative ROI Captured Internally	0.00x	0.00x	0.00x
Cumulative ROI if Savings are 3.00% Lower	-0.02x	-0.03x	-0.04x
Cumulative ROI if Savings are 3.00% Higher	-0.02x	-0.04x	-0.04x
Net Present Value	(\$42,975)	(\$54,597)	(\$66,947)

How will we approach VBP?

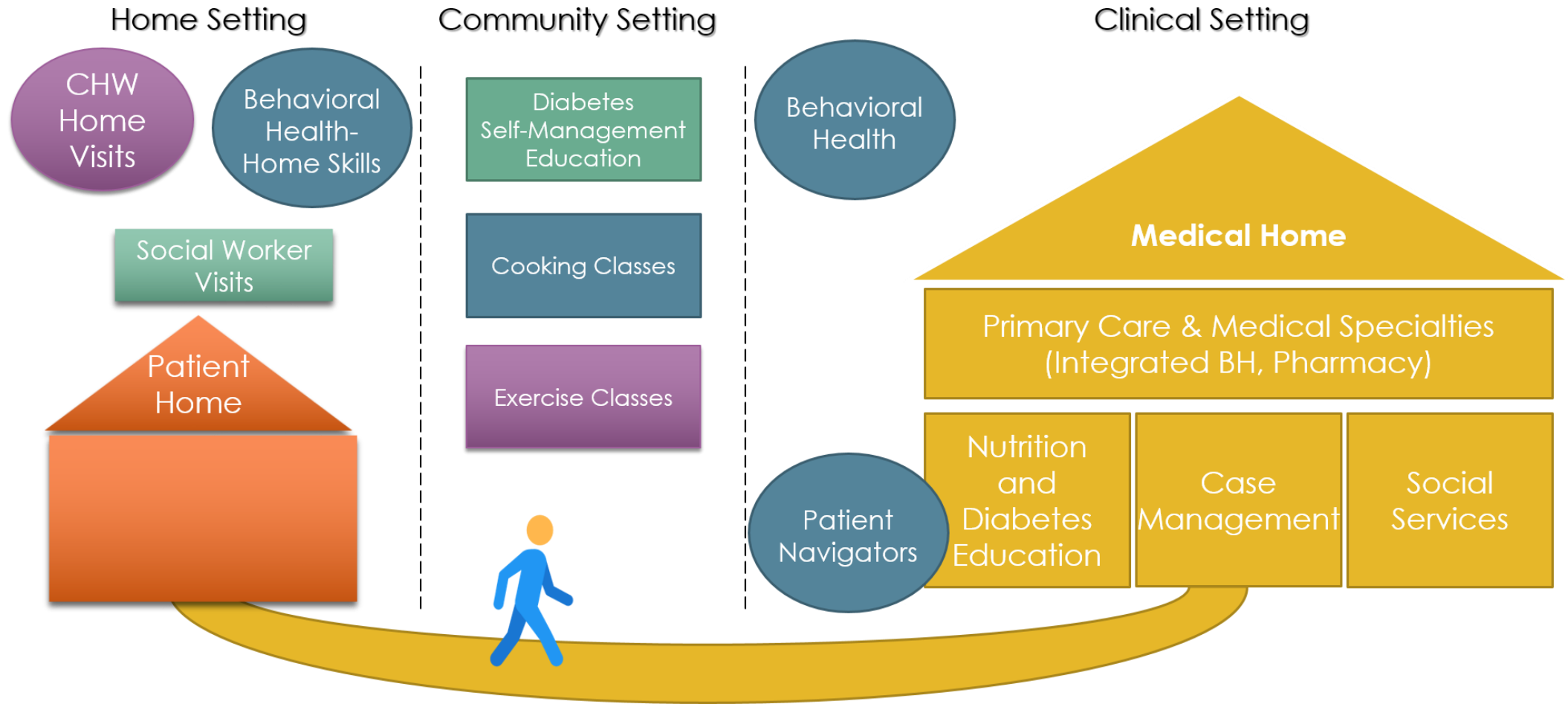
- Payout for retinal interventions from MCO is not available
- 20% of allowable charge for Medicare of \$4000 is \$800
- Assumption is that we are saving the MCO \$800 per treatment intervention.
- Using the numbers from the tool 300 High Risk persons are at risk for an intervention.
- 30% or 100 would have an intervention costing the MCO \$80,000.
- Payment for screening averages \$55.00 which is less than cost
 - Incentive to improve screening numbers
 - Share the cost savings based on preventing costly interventions.

Sustainability for a collaborative chronic care management program

Belinda Reininger, DrPH, Regional Dean

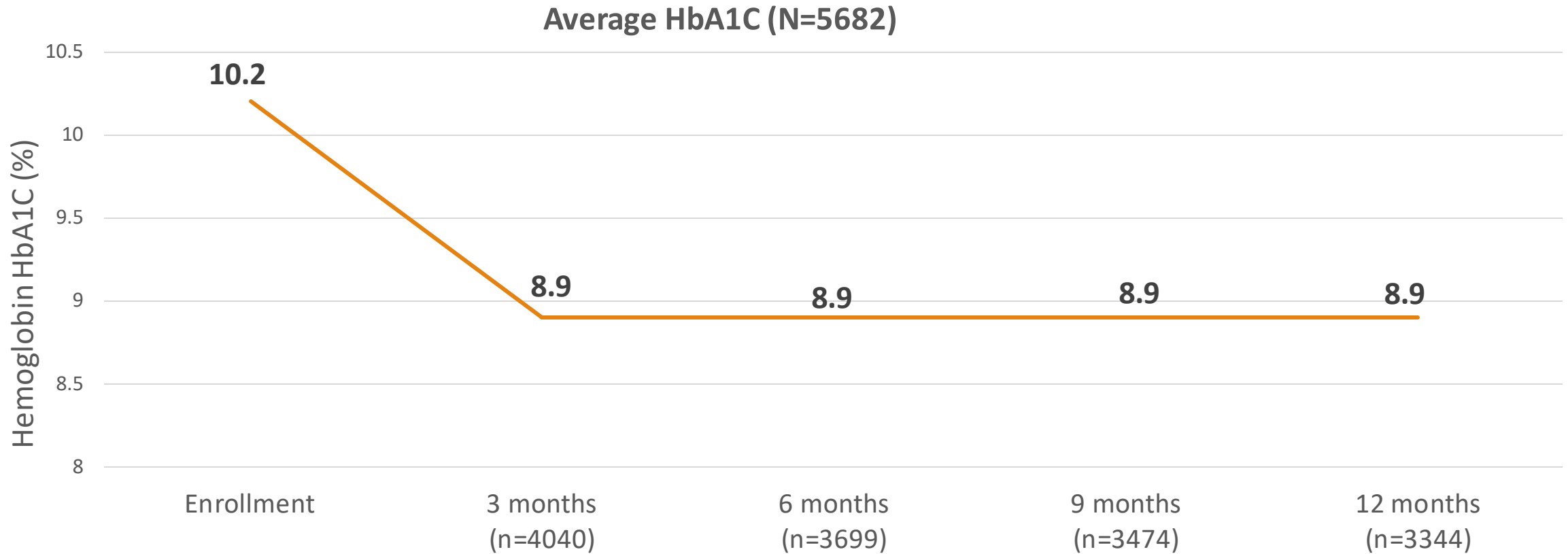


Salud y Vida – Care beyond the clinic

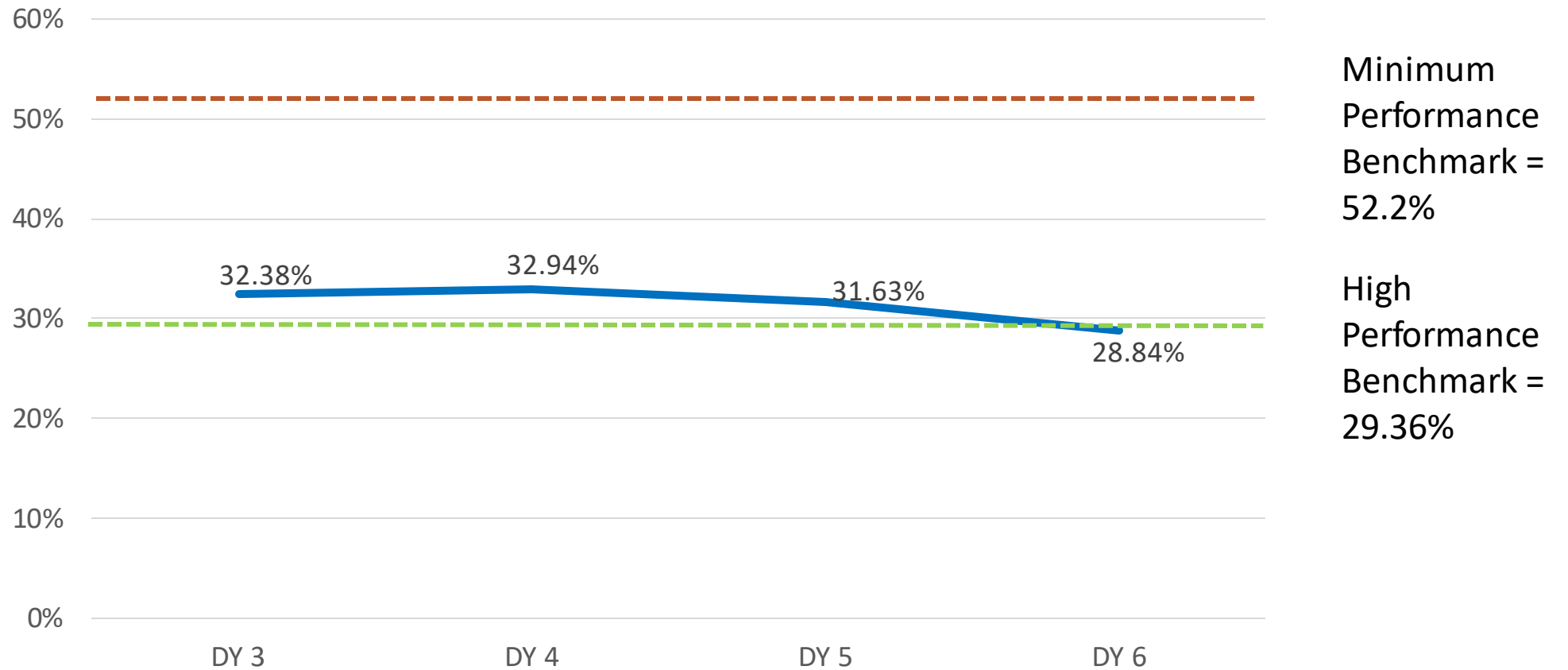


How do we fund
a collaborative care model
transcending all patient
settings?

Mean HbA1c of Salud y Vida Participants 2013-2018



Overall Rate of HbA1c Poor Control in 4 Clinic Partners Implementing Salud y Vida



NCQA NQF 0059 guidelines were used to assess HbA1c Poor Control

Who will fund
a collaborative care model
transcending all patient
settings?

Participant Baseline Demographics

Table 1. Demographic and Baseline Characteristics of Salud y Vida Participants, 2013-2018 (N=5,678)

	N	%		N	%
Gender			Educational attainment		
Female	3893	68.5	8th Grade or less	2363	48.1
Male	1788	31.5	Some High School	916	18.6
Language			High School Graduate/GED	855	17.4
English	1775	31.3	Some college	634	12.9
Spanish	3889	68.7	College degree (BA/BS)	126	2.6
Health Insurance			Graduate Degree	23	0.5
Yes	1228	22.6	Employment status		
No	44211	77.4	Employed	1456	28.5
Income level			Disabled	307	6
\$0	694	28	Student	242	4.7
From \$1 - \$500	430	17.4	Employed	23	0.5
From \$501 - \$1,000	717	28.9	Unemployed	2475	48.5
From \$1,001 - \$2,000	432	17.4	Other	603	11.8
\$2,001 or more	206	8.3			

*Information not reported or missing was excluded from this demographic table

High rates of
uninsured individuals
= No payers



How do we sustain a program serving the sickest patients and who are uninsured?

Sustainability Initiatives

1. DSRIP Cost Benefit Analysis:

Using the Center for Health Care Strategies ROI Forecasting Calculator (still underway)

2. Assess cost effectiveness using economic models:

Lifetime Cost Savings:

QALY 0.2 Yrs: \$10,000

Cost Aversion: \$1,429

\$14,429

Program Costs:

Per member per year: \$1,287.29

The Salud y Vida program is considered Cost Effective

3. Sustainability evaluation by consulting agency to explore reimbursement opportunities:

Recommendations included scenarios by uninsured, Medicaid, Medicare, and insured covering options such as state and federal funding lines, grant funding through state, federal and local foundations, reimbursement for Diabetes Self-Management program

4. Alternative payment models:

Lack of interest due to small number of MCO patients served
MCOs are testing their own chronic care management models

Barriers with Current Financing Structure



BILLING IS BASED ON SINGLE PROVIDER MODEL NOT COLLABORATIVE, MULTI-ORGANIZATION MODEL



PROGRAM SERVICES COMPLEMENT THE CLINICAL SERVICES BUT DO NOT CONFORM TO THE BILLING STANDARDS



THERE IS NO REIMBURSEMENT FOR ADDRESSING SOCIAL DETERMINANTS OF HEALTH IN COMMUNITY SETTINGS

Long term
impact on low
income
uninsured
individuals

We know that there are disparities in health outcomes for the uninsured when compared to insured patients. The lack of accountability for improving outcomes in the uninsured (value based models are not incentivizing for uninsured pts) may result in increasing these disparities once DSRIP goes away.