

APPENDIX A: A MODEL FOR APPLYING REFORM TO YOUR OWN ORGANIZATION

Care redesign is a complicated task that requires a great deal of exploratory evaluation to identify priorities, feasibility, and sustainability. When administrators, clinicians, and other stakeholders are deciding whether or not to pursue care redesign they need have a robust understanding of how it will change the financial inflows and outflows of business activities. For example, extending clinic hours might cost a practice additional employee salary costs, but will decrease hospitalization costs because patients could walk into the clinic instead of the ER. A more fundamental question is how the totality of upfront redesign costs can be financed—a per member per month contribution, a bundle payment, etc. Figure 1 below is a starting point for clinical leaders working through the complex process of sustainable care redesign. It is a model that organizations can use when having conversations with payers about the costs and possible savings associated with the care redesign initiatives.

The left side of this simple and sample cost-benefit model accounts for the major upfront costs associated with the three year care redesign program and the its annual running costs—staff required to coordinate between the redesign program and normal business operations, for example. The right side of the model captures the ER and hospitalization costs the program seeks to reduce over the 3 years. These costs are then used to calculate total savings the redesign program. Those savings can then be used to fund the care redesign and incentives stakeholder buy-in.

Total startup cost for a care redesign might range from hundreds of thousands to the millions. Analyzing the relevant costing associated with care redesign, whether it be developing a clinical pathway or accounting for the retraining of clinical and administrative staff, is a critical step to ensure sustainability and feasibility.

Before this model can realistically be built, however, an organization must gather some basic data to assist in making the business case to a payer of why they should invest in your program. The questions in Figure 2 will help a practice obtain an understanding of baseline costs and a rigorous estimate of additional costs and savings will help frame and guide negotiations with payers.

FIGURE 1 Sample Cost-Benefit Model

Upfront Care Redesign Costs		Average Cost of ER Visits	
Program and clinical staff	\$600,000	Cost of ER Visit	\$1,200
Clinical pathways development	\$2,000,000	Annual rate of ER visits per 10,000	4000
Technology	\$175,000	Total Annual ER Costs	\$4,800,000
Extended hours clinic	\$100,000		
Total Upfront Costs	\$2,875,000	Average Cost of Hospitalization	
		Per diem cost of hospitalization	\$2,000
Annual Redesign Running Costs	\$1,142,857	Average length of hospital stay	4.8
		Cost of hospitalization	\$9,600
TOTAL PROGRAM COST OVER 3 YEARS	\$6,303,571	Annual rate of hospitalization per 10000	1130
		Total Annual Hospitalization Cost	\$10,848,000
		Total Cost Over 3 Years	\$46,944,000
		Savings Over 3 Years From:	
		20% reduction in ER visits (noncompound)	\$2,880,000
		30% reduction in hospitalization (noncompound)	\$9,763,200
		TOTAL PROGRAM SAVINGS OVER 3 YEARS	\$12,643,200

NOTES: Note: The upfront care redesign cost estimates come from the COME HOME grant cost categories, and are adjusted based on the number of clinics grant monies were distributed to, among other factors. The annual redesign running costs are an approximation based on NMCC's COME HOME total amount and scaled to a practice size of 10,000. The benefits—cost of ED visit, hospitalization costs, days spent in hospital, and total ED visits and hospitalizations—are national averages from the CDC and Kaiser Family Foundation.

FIGURE 2 Sample Business Case Questions for Organizations

Care Redesign	Questions	Data Source
Market Analysis		
Patient Demographics and Services	<p>Can the care redesign (clinical pathways, etc.) be applied across my entire patient population regardless of disease type or will the redesign need to be stratified by risk or other measure?</p> <p>What is the average cost per patient over a 30, 90, 180 day window?</p> <p>Which patients are most at risk to be hospitalized/visit the ER?</p> <p>At what rate is the population I serve hospitalized/visiting the ER?</p> <p>How much does an average hospitalization/ER visit cost? How much of that care could have been provided in a different setting?</p> <p>What is the average length of stay?</p>	Strategic planning Charge data Risk stratification using claims data and patient records Claims data Charge data Claims data, patient records
Payer Market and Costs	<p>What are your patient payer demographics (i.e. Medicare, Medicaid, IHS, private payer)?</p> <p>What current costs are not adequately covered by payers?</p> <p>How much do costs vary between payers and is care redesign sensitive of that variance?</p> <p>What is the relationship with the local hospital? How can services be coordinated to reduce service duplicated and ensure proper coordination?</p>	Claims data Budget analysis Claims data Strategic planning
Care Redesign Framework Questions		
Site of Care Reforms	Will newer technologies (electronic health records, smart devices, automated telephone systems, etc.) be required to service patients? How much will this cost?	Estimate from EHR provider
Reforms	<p>Will newer technologies (electronic health records, smart devices, automated telephone systems, etc.) be required to service patients? How much will this cost?</p> <p>Will any services be consolidated into one location?</p> <p>Will the physical building need to be upgraded? How much does that cost?</p> <p>How much of the redesign startup costs will not be reimbursed?</p> <p>Will the redesign change medical supply costs?</p> <p>Will the redesign change my hours of operation and therefore change the cost of rent and utilities?</p>	Estimate from EHR provider Claims data Contractor estimate Strategic planning Claims data Building estimate
Team Approaches to Care	<p>Will care redesign shift employee responsibilities? Will you need to retrain or hire new administrative, program, or clinical staff?</p> <p>How do the number of staff hours and rates change based on providing extended hours?</p> <p>How will a phone triage system impact the volume of care delivered or diverted?</p> <p>How much additional patient education will be provided? What are the costs for materials, staff time, etc?</p>	Employee capacity and salary data Salary data Claims forecasting Materials costs and salary data
Improved Decision Support	<p>How much does it cost to develop a clinical pathway program (reimbursement for physicians, database support, technology costs)?</p> <p>How often does the pathway need to get updated?</p> <p>How will your revenue/operating costs change given new clinical pathways that change the volume of services (PET, CT, mammography, etc.) provided?</p> <p>How do pathways impact the pharmacy costs and how does that impact the margin earned on drug costs?</p>	Salary data, technology costs Strategic planning Claims data Drug cost data
Collecting and Using Data	<p>How much does the EMR cost to implement?</p> <p>How much are monthly or yearly update/maintain fees for the EMR?</p> <p>How much does it cost to train your staff on the EMR?</p> <p>Do I need to hire support to analyze claims and other data?</p> <p>How will you evaluate your clinical and financial models? Do you need to outsource this?</p>	Estimate from EMR company Estimate from EMR company Salary data Salary estimate Strategic planning