Understanding Your Costs in an Evolving Payment Environment

Session 3: Cost Allocation Methodology for Value-Based Payment Systems

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What We Have Discussed So Far…

- **Session 1:** Cost Allocation: Getting the Basics Right

- **Session 2:** Preparing Internal Systems for Gathering Cost Data

Session 3: Cost Allocation Methodology for Value-Based Payment Systems

Compared to a FFS reimbursement system, several new wrinkles are introduced here:

1. **What is a Value-based Payment System?**
   - The definition may depend on your perspective ($ cost or outcomes or both?)
2. **How do we achieve those outcomes?**
   - Distinguish between acute and chronic care
   - Develop Clinical Pathways
3. **How do we account for the costs of achieving those outcomes?**
   - Time Driven Activity-Based Costing

What is a Value-Based Payment System?

Here's where it starts to get complicated…

A definition of "value" in health care must be agreed upon and often depends on where you sit in the chain of service:

"Value is defined in terms of the value equation health outcomes achieved per unit cost expended over the entire care delivery value chain (CDVC)."

Time-driven activity-based costing in health care: A systematic review of the literature George Keel, Health Policy; April 29, 2017

What is a Value-Based Payment System?

Since value depends on results, not inputs, value in health care is measured by the **outcomes** achieved, not the volume of services delivered, and shifting focus from volume to value is a central challenge.

What is Value in Health Care – Porter, NEJM; Dec 2010

Cost, the equation's denominator, refers to the total costs accrued by the FQHC to achieve the desired outcomes, not the cost of individual services.

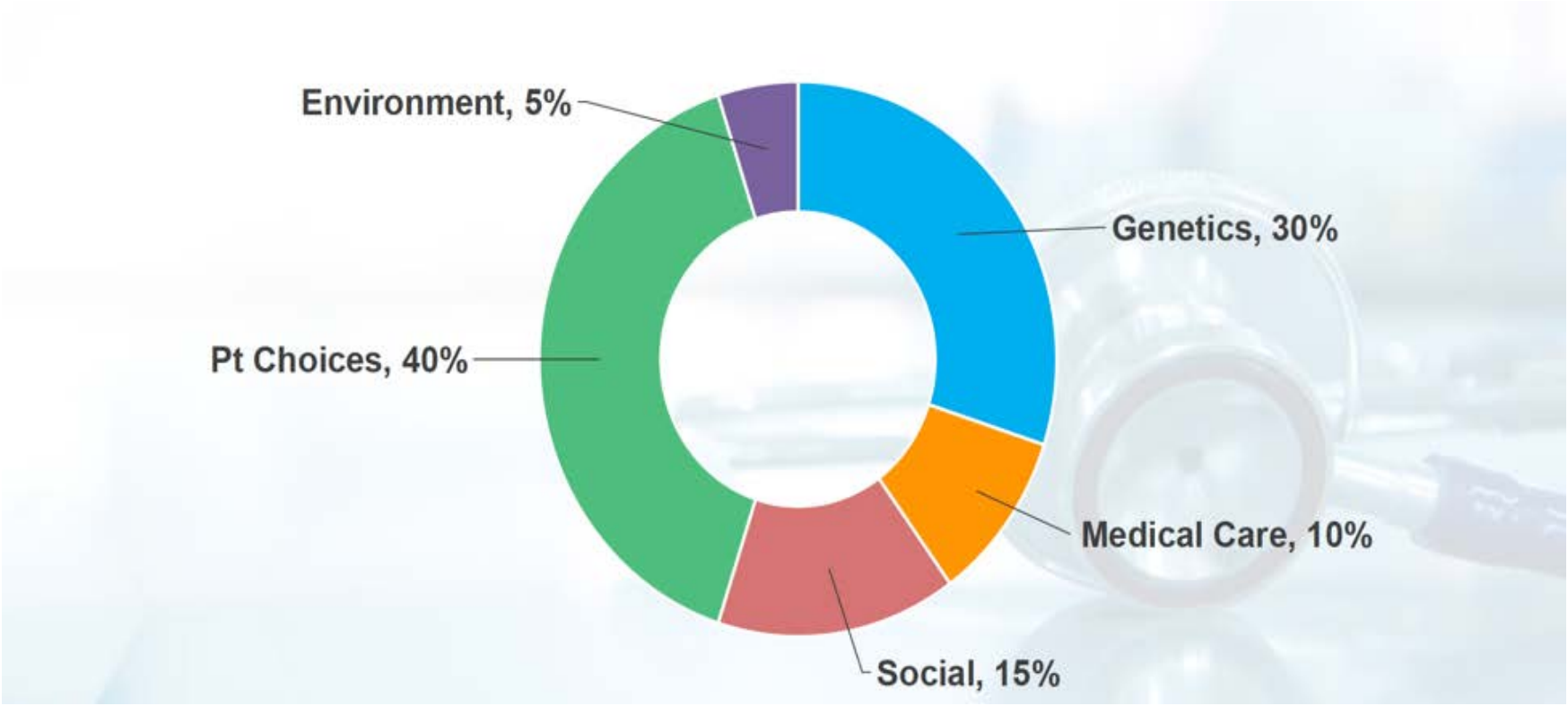
The Focus on Outcomes

The goal of measuring, reporting, and comparing healthcare outcomes is to achieve the Quadruple Aim of Healthcare:

- Improve the patient experience of care.
- Improve the health of populations.
- Reduce the per capita cost of healthcare.
- Reduce clinician and staff burnout.

The Top Seven Healthcare Outcome Measures and Three Measurement Essentials, Health Catalyst; Tinker; October, 2018

Achieving Outcomes - What Determines Health



Social Determinants of Health: Tools to Leverage Today's Data Imperative

Health Catalyst Editors January 4, 2019

Social Determinants of Health

PRAPARE (Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences) addresses 15 questions to assess 14 core SDOH domains.

CORE	
UDS SDH Domains	**Non-UDS SDH Domains**
1. Race	10. Education
2. Ethnicity	11. Employment
3. Veteran Status	12. Material Security
4. Farmworker Status	13. Social Integration
5. English Proficiency	14. Stress
6. Income	
7. Insurance	
8. Neighborhood	
9. Housing	

OPTIONAL
Non-UDS SDH Domains
1. Incarceration History
2. Transportation
3. Refugee Status
4. Country of Origin
5. Safety
6. Domestic violence

Certainly these factors can have a huge impact on patient outcomes.

Does this mean you might get paid for how well you address them in the future?

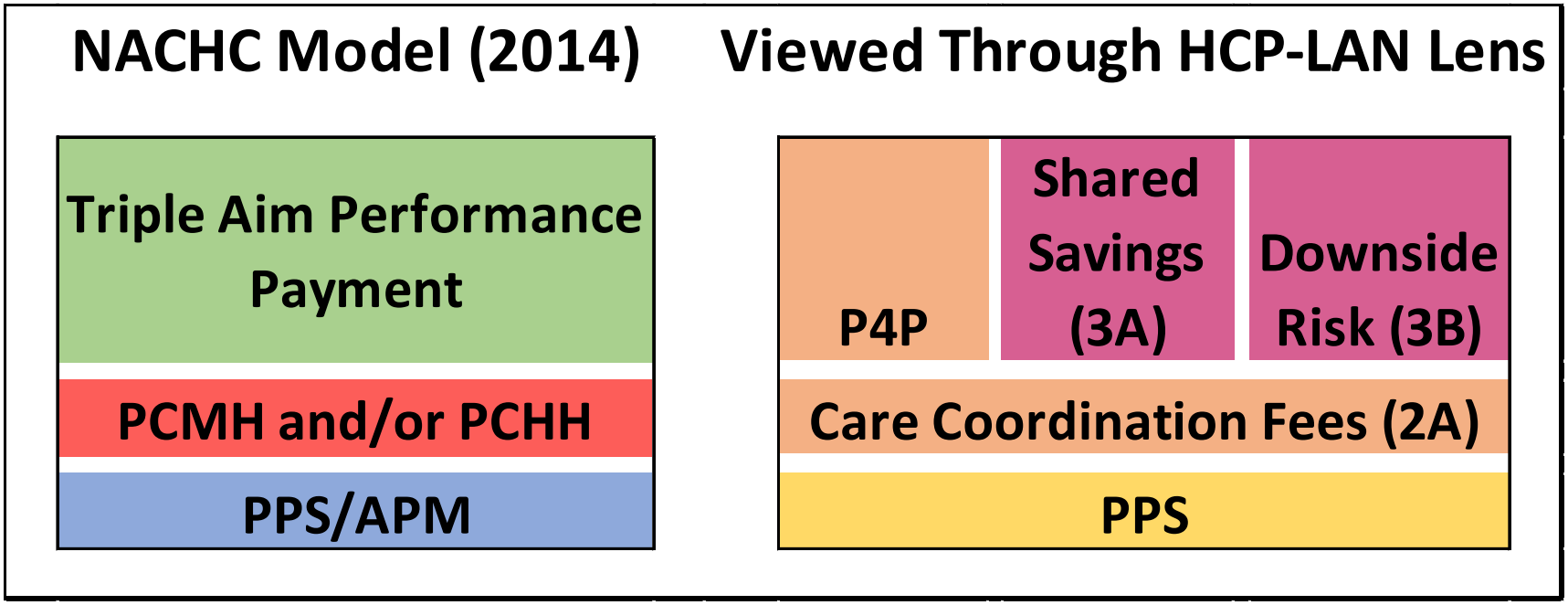
Value-Based Payment Systems for CHCs - Today

Payment for Performance on Triple Aim	**Layer 3** - includes shared savings with upside only or upside and downside risk (typically through Medicaid MCOs
Payment for Delivery System Transformation (PCMH)	**Layer 2** - includes partial capitation for care coordination or infrastructure development (example: investment in HIT)
Base Payment (PPS or APM)	**Layer 1** - base payment involves shifting from PPS to per member per month capitated payments for all primary care services

Health Centers and Payment Reform: A Primer, NACHC, authored by JSI

NACHC Model Aligns with Other Models

VBP for Primary Care: Multi-Layered



Health Centers and Payment Reform: A Primer, NACHC, authored by JSI

Examples of Measures Used for Payments

What is HEDIS?

Healthcare
Effectiveness
Data and
Information
Set

HEDIS is the measurement tool used by the nation's health plans to evaluate their performance in terms of clinical quality and customer service.

HEDIS is coordinated and administered by the National Committee for Quality Assurance (NCQA) and used by CMS for monitoring the performance of managed care organizations.

If CMS uses these to monitor your payer, you can be sure you will likely be measured on them as well.

Medicaid Quality Payments - Examples Abound

https://innovation.cms.gov/

Examples of Measures Used for Payments

OR Measures & 2018 Improvement Targets	
Measure	**2018 Improvement Target**
Adolescent well-care visits	49.4% of members age 12-21
Ambulatory Care: Emergency Department utilization	48.7 per 1000 member months
Childhood immunization status	75.3% of members turning 2
Cigarette smoking prevalence*	36.9% of members age 13 and older with a visit
Colorectal cancer screening	51.9% of members age 51-75
Controlling high blood pressure*	70.6% of members age 18-85 with a diagnosis of essential hypertension
Depression screening and follow up plan*^	TBD minimum population threshold of members 12 and older
Developmental screening in the first 36 months of life	74.0% of children turning 1,2,3
Diabetes: HbA1c Poor Control*	22.6% of members age 18-75 with diabetes

Types of Measures Used in Maine's PCP Profile

- Average number of EPSDT encounters (per patient per year)
- Number of EPSDT/Bright Futures forms required/number of EPSDT visits billed
- Children ages 0 to 20 with 1 or more EPSDT visits in the last year
- Well-child visits in first 15 months of life
- Well-child visits in 3rd, 4th, 5th, and 6th years of life
- Adolescent well-care visits: ages 12-21 years
- Cervical cancer screening
- Breast cancer screening
- Prenatal care in the first trimester
- Diabetes — retinal exams
- Diabetes — HbA1c tests
- Diabetes — Lipid tests
- Lead screening rates: 1st year
- Lead screening rates: 2nd year

Patient Reported Outcomes

- Research has shown that patients' and physicians' perceptions of outcomes differ, and taking into consideration what are known as Patient-Reported Outcomes—essentially patients' views of their health status—can lead to more effective interventions.
- Patient-Reported Outcome Measures, or PROMs, use validated questionnaires to elicit patients' views of their health.
- Consumer Assessment of Healthcare Providers and Systems survey questions

At some point, PROM's may be integrated into the payment system

United Hospital Fund, NY https://uhfnyc.org/initiatives/PROPC-NY/

Examples of Measures Used for Payments – You Can Start to See the Problem

There may be too many of them and (like EHR systems) they don't always measure the same things, don't work the same way and are updated and changed too frequently.

More on this problem in Session 4.

In the meantime let's focus on how we work with what we are given.

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/Core-Measures

Approaches to Understanding Cost Associated with New Payment Models

1. Start with historic average cost per patient as a base
2. Stratify patients by intensity of needs
3. Identify clinical care pathways for groups of patients with similar needs
4. Identify unique costs of more intensive services

Grouping Patients to Simplify Costing

For primary and preventive care, value should be measured for defined patient groups with similar needs, such as:

- Healthy children
- Healthy adults

  With relatively healthy patients the primary emphasis will be on getting individuals to take responsibility for their own health and making healthy lifestyle choices. Though the reasons for visits will vary greatly, costing the visits will be fairly straightforward. They do not likely need to see a care team, though they might benefit from encouragement to make better health choices.
- Frail Elderly
- Patients with a single chronic disease
- Patients with multiple chronic conditions

Redesigning Primary Care: A Strategic Vision To Improve Value By Organizing Around Patients' Needs
Porter, Pabo, and Lee; Health Affairs, March 2013

Chronic Disease

For the chronically ill, the emphasis will be on early detection and intervention in order to:

- slow disease progression
- avoid the development of acute complications and comorbidities, and
- minimize the long-term costs of treatment.

This may require more interactions (= more up-front cost!) and a focus on encouraging patient compliance with treatment protocols.

Chronic Disease

Each patient group has unique needs and requires inherently different primary care services. Care for the medical condition of **diabetes**, for example, must integrate:

- Interventions directly related to diabetes
- Vascular disease
- Retinal disease
- Renal disease, and
- Hypertension (among others)

Value (both outcomes and cost) should be measured for all this care, rather than for a single specialist or intervention.

Top Challenges for Chronic Disease Management

Care Redesign Survey: To Improve Chronic Disease Care, Change the Payment Model NEJM Catalyst 9/19

The ICHOM Standard Set for Adults who live with type 1 and 2 Diabetes is a recommendation of the outcomes that matter most to persons with Diabetes.

The International Consortium for Health Outcomes Measurement (ICHOM)

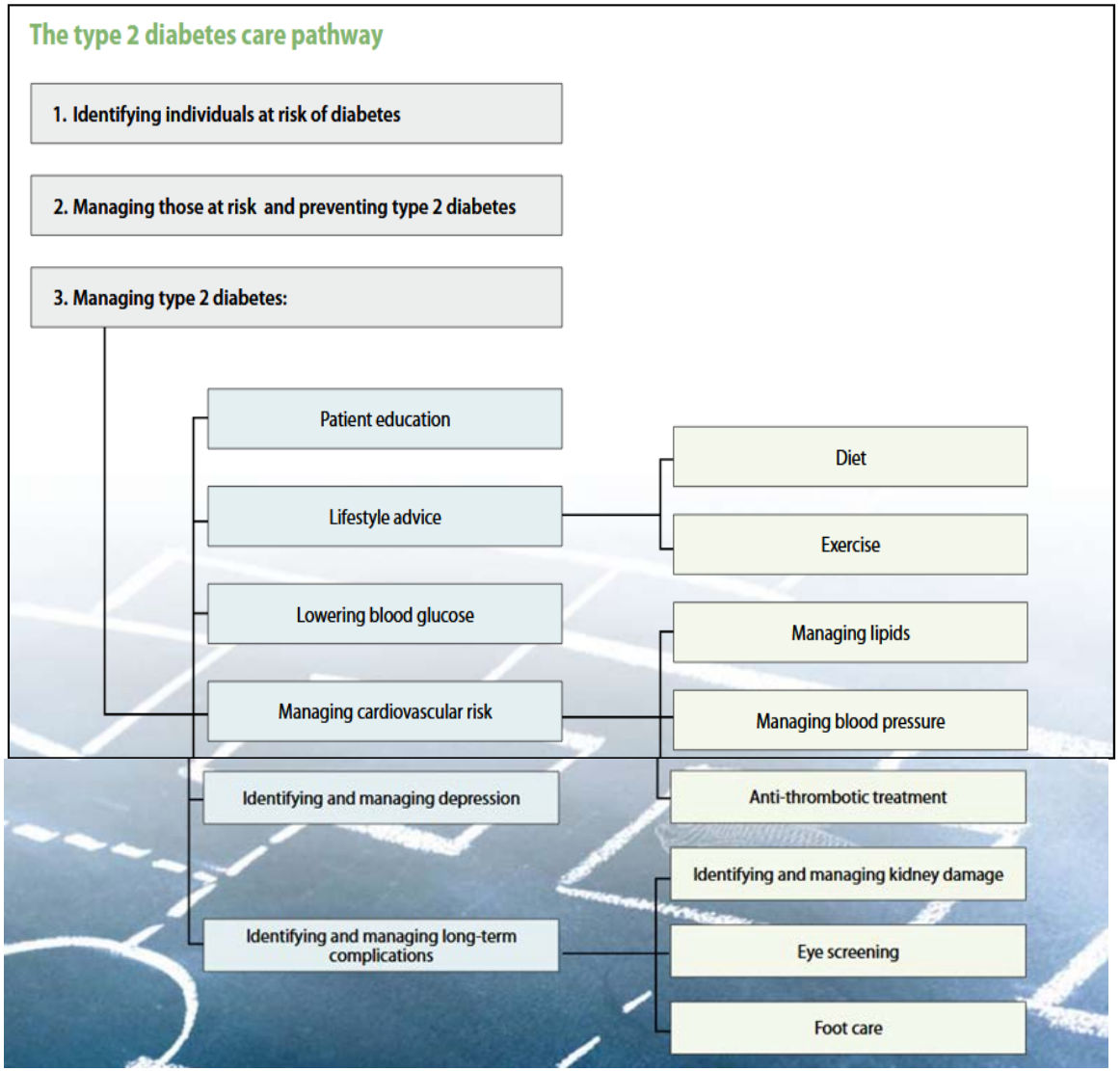
Introducing Clinical Pathways

A care pathway is, at its simplest, a set of management guidelines, usually in the form of a flow chart, applied to a group of patients with the same condition.

It is a tool used to improve the quality of healthcare by recommending a recognised best practice approach at a certain stage of a disease or condition.

At its most complex, a care pathway can act as a fully integrated information system, guiding and monitoring a patient's journey of care between health professionals and across sectors.

https://bpac.org.nz/BPJ/2012/October/carepathways.aspx



Process Mapping

Accurate costing begins with process mapping which is understanding all of the care processes involved in serving a patient subgroup over time.

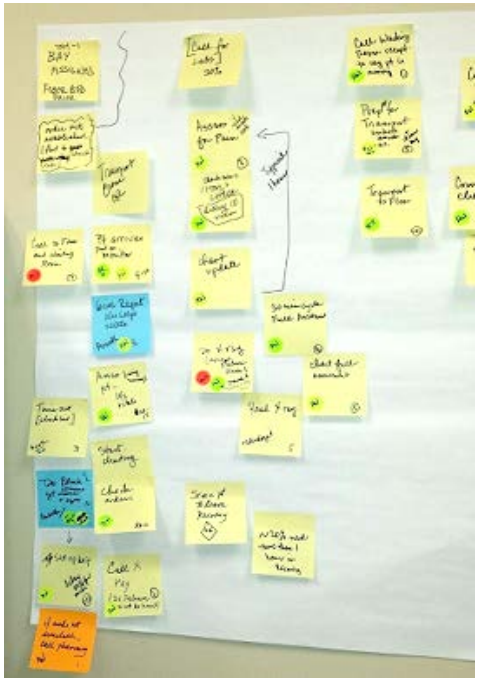
It may include much of what you now do as Enabling Services, plus lab, pharmacy consultations.

Then the resources involved in each process—for example, personnel, equipment, space, drugs, and supplies—can be identified and their costs ascertained and aggregated.

Redesigning primary care: a strategic vision to improve value by organizing around patients' needs. Health Affairs Mar 2013
Porter ME[1], Pabo EA, Lee TH.

Steps for Creating Value Through Process Mapping and Observation

1. Identify a care segment that has opportunities for improvement.
2. Develop a first draft of a care segment process map by interviewing experts – that is, the people involved in the process.
3. Start with Post-It notes, then convert to electronic.
4. Observe the care segment twice to validate the process map.
5. Close the loop with the experts after the observation.



5 Steps for Creating Value Through Process Mapping and Observation
Institute for Healthcare Improvement | October 1, 2015

Principles of Measuring Cost of Care

1. Cost is the **actual expense of patient care**, not the **charges** billed or collected;
2. Optimally, cost should be measured around the **patient**, (but initially start with a group of patients);
3. Cost should be aggregated over the **full cycle of care for the patient's medical condition leading to desired outcomes**, not for departments, services, or line items
4. Cost depends on the **actual use of resources** involved in a patient's care process (personnel, facilities, supplies):
   - The **time** devoted to each patient (or group of patients) by these resources
   - The **capacity cost** of each resource
   - The **support costs** required for each patient-facing resource

Measure Outcomes & Cost for Every Patient Institute For Strategy & Competitiveness, Harvard University

Seven Steps to Estimate Total Costs

- **Step 1. Select the medical condition.** Typically, chronic conditions that are best addressed in a coordinated way and should be broadly defined to include common complications and comorbidities. However, other groups could include well child and frail elderly.
- **Step 2. Define the care delivery value chain (Clinical Pathway).** This step involves charting the activities that occur and their locations over the entire cycle of care, and helps identify required measures and ways to inform and engage patients and achieve outcomes.
- **Step 3. Develop process maps for each activity in patient care delivery,** including all relevant resources required for each process step.

Seven Steps to Estimate Total Costs

(Optional - For High Achievers)

- **Step 4. Obtain time estimates for each process**
  - ➢ Standard times estimated by experts could be used for common, short, and inexpensive activities.
  - ➢ Actual times should be measured for complex, lengthy, and expensive activities, where observations would be the preferred approach.
  - ✓ Health centers can use historical productivity data to approximate time estimates
    - E.g. Provider productivity: 2.7 patients per hour = 22 minutes

Seven Steps to Estimate Total Costs

- **Step 5. Estimate the cost of supplying patient care resources**

Flashback!

(To Session 1 in this webinar series)

Components of Cost Per Visit or Patient

All expenses at the organization can be classified into one of the following categories:

- Provider cost
- Direct Support cost
- Direct Enabling cost
- Ancillary and Other cost

Seven Steps to Estimate Total Costs

- **Step 6. Estimate the capacity of each resource and calculate the capacity cost rate**

Obtain the practical capacity for all primary resources—the annual or monthly time available for patient-related work. Calculate the Capacity Cost Rate (CCR) as the cost of a resource divided by its practical capacity over a given time period. The most common procedure is to group resources into resource pools and developed CCRs for each pool.

Seven Steps to Estimate Total Costs

- **Step 7. Calculate the total cost of patient care**

Sum the cost of each activity to obtain the cost of a process (or alternatively, multiply the CCR of each resource by its duration of use in each activity). The cost of each process is summed to generate the cost of a complete cycle of care for patients with the medical condition.

Example – Costing Care of Chronic Diabetics

Assume a future where your FQHC works under a (mostly) Full Risk Value-Based Reimbursement Plan

You are assigned a group of chronic Type 2 diabetic patients and given a set of measurable clinical targets. Under this plan, you are paid a base PM/PM rate, plus an "add on" for care coordination and the "At Risk Threshold" is set at 50%, meaning:

- If fewer than 50% of this group meets the specific health parameters, you owe the plan $250/patient under 50%
- At 50% - nothing owed but no incentive/reward payment
- Over 50% and your center earns $500 per patient over the 50% threshold

Example – Costing Care of Chronic Diabetics

Diabetes Clinic Staffing							
Position	Hrs. Per Week	Rate Per Hour	Annual Total	FTE	FFS & Scenario 1	Scenario 2	Scenario 3
Clinical Providers							
Physician A	30	$ 85	$ 132,600	0.50			
Physician B	30	$ 85	$ 132,600	0.50			
Nurse Practitioner A	40	$ 45	$ 93,600	1.00			
					$ 179,400	$ 179,400	$ 179,400
Clinical Non-Provider							
RN	40	$ 40	$ 83,200	1.00			
LPN	30	$ 30	$ 46,800	0.75			
					$ 74,286	$ 74,286	$ 74,286
Support							
Case Manager	40.0	$ 25	$ 52,000	1.00		$ 52,000	$ 52,000
Senior MA	40.0	$ 20	$ 41,600	1.00	$ 41,600	$ 41,600	$ 41,600
Nutritionist	40.0	$ 25	$ 52,000	1.00			$ 52,000
Clinical Pharmacist	40.0	$ 85	$ 176,800	1.00			$ 176,800
Total					$ 295,286	$ 347,286	$ 576,086
Fringe Benefits @ 18%					$ 53,151	$ 62,511	$ 103,695
Total Personnel Costs					$ 348,437	$ 409,797	$ 679,781
Total Personnel Cost / Visit					37.23	43.78	72.63
Total Personnel Cost / Patient					$ 107.21	$ 126.09	$ 209.16

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Example – Costing Care of Chronic Diabetics

Diabetic Visit Revenue

Position	Hrs Per Week	Weeks	Annual	PPH	Visits	Rev. per Visit/Pat.	PSR
Clinical							
Provider - Physician A	20	46	920	2.25	2,070		
Provider - Physician B	20	46	920	2.25	2,070		
Provider - NP A	40	46	1,840	2.00	3,680		
Totals - FFS				2.13	4,430	$ 130.00	$ 575,952
Totals - PM/PM				2.13		$15.00	$ 585,000
Totals - PM/PM w/CC				2.13		$16.00	$ 624,000
Totals - VBP				3.00		$16.00	$ 624,000

Example – Costing Care of Chronic Diabetics

Diabetes Program Projections

	FFS	Scenario 1	Scenario 2	Scenario 3
Patients/Visits				
Total Visits	9,360	9,360	9,360	19,500
Total Patients	3,250	3,250	3,250	3,250
Visits/Patient	2.88	2.88	2.88	6.00
Revenue and Expenses				
Operating Revenue				
Patient Service Revenue	$ 574,600	$ 585,000	$ 624,000	$ 624,000
Grant and Contract Revenue	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Other Revenue	-	-	-	-
Pharmacy Revenue	-	-	-	-
Total Operating Revenue	$ 584,600	$ 595,000	$ 634,000	$ 634,000
Revenue Per Visit	$ 62	$ 64	$ 68	$ 33
Revenue Per Patient	$ 180	$ 183	$ 195	$ 195

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Example – Costing Care of Chronic Diabetics

Operating Expenses	FFS	Scenario 1	Scenario 2	Scenario 3
Personnel Costs	$ 348,437	$ 348,437	$ 409,797	$ 679,781
Supplies	30,000	30,000	30,000	40,000
Sub-Contracts - Patient Service	25,000	25,000	35,000	40,000
Other Purchased Services	10,000	10,000	20,000	30,000
Overhead Allocation	115,000	115,000	115,000	150,000
Other	50,000	50,000	50,000	50,000
Total Operating Expenses	$ 578,437	$ 578,437	$ 659,797	$ 989,781
Subtotal Before VBP	$ 6,163	$ 16,563	$ (25,797)	$ (355,781)
Patient Outcome Achievement Percentage	25%	25%	50%	85%
Value-Based Payment		$ (30,469)	$ -	$ 414,375
Net Surplus/Loss	$ 6,163	$ (13,906)	$ (25,797)	$ 58,594

Session 4: Utilizing Cost Data to Drive Programmatic Change

As the final webinar of this four-part series, we will review the key takeaways from the first three presentations and apply these concepts to several scenarios in which health centers are seeking to understand their costs in an evolving reimbursement environment. This will include a behavioral health example and an HIV specialty clinic.

We will focus on how to model costs related to these scenarios and emphasize the use of this information for decision-making and guiding programmatic change.

Thank you

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NATIONAL ASSOCIATION OF Community Health Centers

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