

**Healthcare Financial Management Association
Certification Program**

**Module I: The Business of Health Care
Learner's Guide**

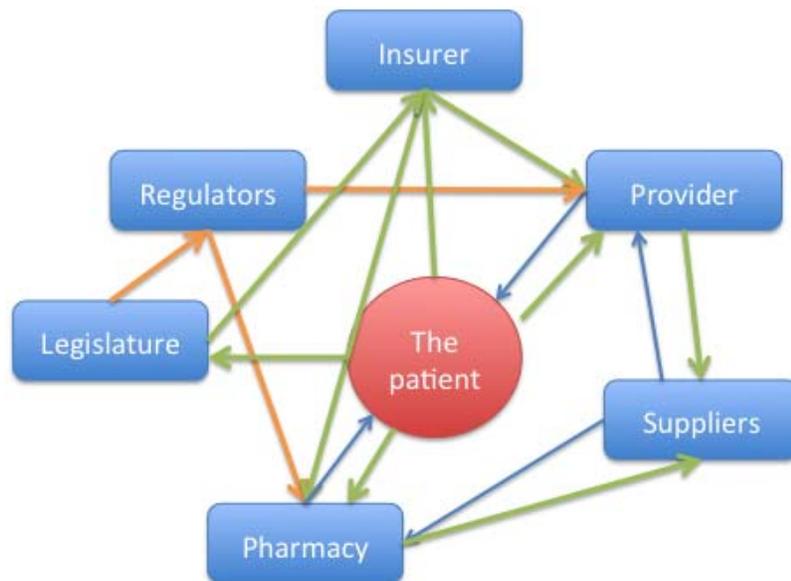
For examination period beginning June 2015

Course 1 - The Big Picture

Learning Objectives

- Describe the general characteristics of the healthcare industry in the US;
- Describe the impact of health reform on the industry;
- Describe the payment system for healthcare services;
- Define the role of financial management in health care organizations; and
- Describe some of the new challenges facing healthcare finance in the US.

1. The following diagram presents an overview of the US Healthcare System. Be prepared to identify and explain the transactions that occur for each specific entity in the diagram.



- 1) Who has direct transactions with the patient? What is the nature of the(se) transaction(s)?
- 2) Who has direct transactions with the provider? What is the nature of the(se) transaction(s)?
- 3) Who has direct transactions with the insurer? What is the nature of the(se) transaction(s)?

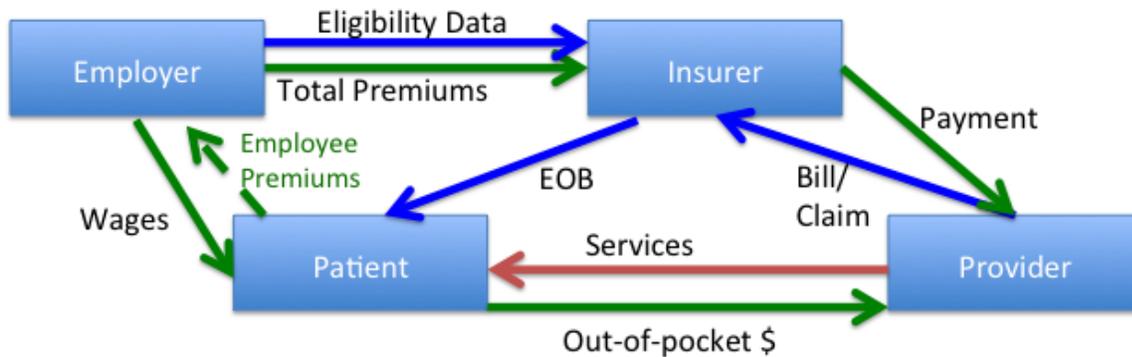
2. Fill in the blank with the correct word to complete the sentence

- 1) A party rendering medical care such as a physician or hospital is called a _____
- 2) _____ includes hospitals, skilled nursing facilities, assisted living facilities, home health agencies, and ambulatory surgery centers
- 3) Physicians serving in _____ roles usually treat common medical conditions or injuries, and often provide preventive health screenings

3. Define each of the following patient payment portions

Patient Payment Type	Definition
Out-of- pocket payment	
Deductible	
Coinsurance	

4. The following diagram illustrates the flow of money and services with employer provided insurance. Be prepared to explain the various transactions.

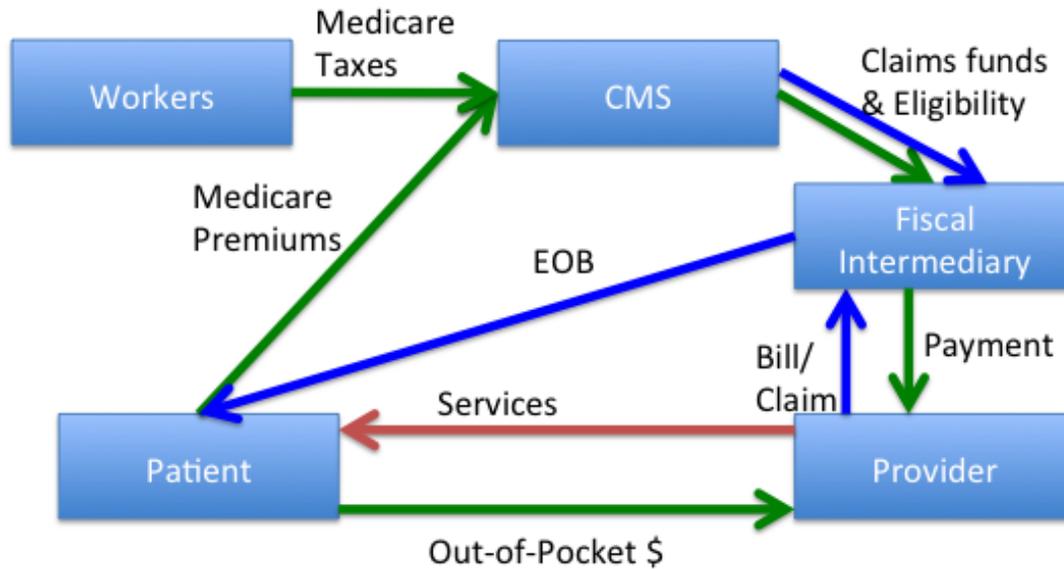


- 1) What does the employer provide to the insurer?
- 2) The green line in the diagram is the flow of money. Explain the patient's financial transactions in the diagram
- 3) The blue line represents data exchange among various entities. Explain each of the data transactions- what data is provided to what entity for what purpose?

5. Understanding Medicare – fill in the chart below

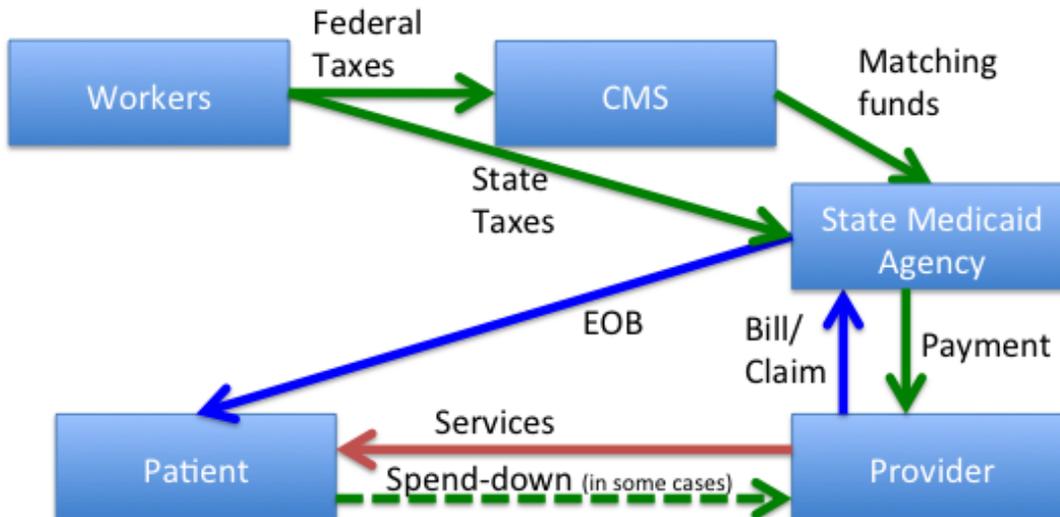
Medicare Program	Services	Eligibility
Part A		
Part B		
Part D		

6. The diagram below presents an overview of the flow of money and services for a patient with Medicare Parts A & B coverage. Be prepared to explain the transactions between the entities.



- 1) Describe the role of the fiscal intermediary in terms of the transactions represented in the diagram.
- 2) Explain how workforce Medicare taxes are transferred to a provider?
- 3) Explain how a “claim” works as presented in the diagram
- 4) Describe the role of CMS s in terms of the transactions presented in the diagram

7. The diagram below presents the flow of money and services for a patient with Medicaid coverage. Be prepared to explain all of the transactions represented in the diagram.



- 1) Describe how federal tax dollars are transferred to a provider?
- 2) Explain the role of the state Medicaid agency in terms of the transactions presented in the diagram.

3) Describe how state tax dollars are transferred to a provider?

8. Understanding major reform initiatives – complete the chart below:

Reform Initiatives	Definition	Significance of this Initiative?
The Employer Mandate		
Insurance Exchange		
Accountable Care Organization (ACO)		
Bundled payments		

Notes:

Course 2 - Financial Accounting Principles

Learning Objectives

- Describe the basic elements of accounting;
- Differentiate between the key financial statements and what they describe;
- Conduct a basic analysis of an organization's financial condition using financial statements;
- Relate basic measures of operational performance to an organization's financial statements; and
- Know what other accounting reports are usable in the analysis of financial statements.

Accounting Basics

Double Entry:

Term	Definition
Asset	
Liability	
Net Income or Equity	

The "Matching Principle":

"Accrual":

Accrual basis of accounting:

"GAAP":

Cash=Basis of Accounting:

Key Financial statements

Income statement:

Sample Income Statements for physicians, hospitals and health insurers

<u>Item</u>	<u>Physician Clinic</u>	<u>Hospital</u>	<u>Health Plan</u>
Revenues	Gross revenues	Gross Revenues	
			Premium Revenues
	- deductions and allowances	- deductions and allowances	
	- bad debt	- bad debt	
	- charity care	- charity care	
	Net patient revenue	Net patient revenue	
	Other operating revenue	Other operating revenue	Other operating revenue
Total Revenue	Total Revenue	Total Revenue	
Expenses			Medical Claims Expenses - fee-for-service claims - capitation - carve-outs and subcontracts - reinsurance
			Underwriting Profit
			Administrative expenses
	Salaries & Benefits	Salaries & Benefits	
	Supplies	Supplies	Salaries & Benefits
	Purchased services	Purchased services	Purchased services
	Insurance	Insurance	Insurance
	Rental Expenses	Rental Expenses	Rental Expenses
Depreciation & Amortization	Depreciation &	Depreciation &	

		Amortization	Amortization
	Other Operating Expenses	Other Operating Expenses	Other Operating Expenses
	Total Expenses	Total Expenses	Total Expenses
	Operating Income	Operating Income	Operating Income
	Other non-operating income/expenses	Other non-operating income/expenses	Other non-operating income/expenses
	Net Income	Net Income	Net Income

Bad Debt:

Charity care:

The Balance Sheet

<u>Item</u>	<u>Physician Clinic</u>	<u>Hospital</u>	<u>Health Plan</u>
<u>Assets</u>			
Current Assets	Cash and short-term investments	Cash and short-term investments	Cash and short-term investments
	Net patient accounts receivable	Net patient accounts receivable	Premiums receivable
	Inventory	Inventory	
	Prepaid expenses	Prepaid expenses	Prepaid expenses
	Other current assets	Other current assets	Other current assets
	Total current assets	Total current assets	Total current assets
Long-term Assets	Property, plant & equipment	Property, plant & equipment	Property, plant & equipment
	- accumulated depreciation	- accumulated depreciation	- accumulated depreciation
	Long-term investments	Long-term investments	Long-term investments
	Other long-term assets	Other long-term assets	Other long-term assets
	Total long-term assets	Total long-term assets	Total long-term assets
	Total assets	Total assets	Total assets
<u>Liabilities and Net Assets</u>			
Current Liabilities			Medical claims payable
	Accounts payable	Accounts payable	Accounts payable
	Accrued payroll & benefits	Accrued payroll & benefits	Accrued payroll & benefits
	Current portion of long-term debt	Current portion of long-term debt	Current portion of long-term debt
	Total current liabilities	Total current liabilities	Total current liabilities
Long-term Liabilities	Mortgage or capital leases, less current portion	Mortgage or capital leases, less current portion	Mortgage or capital leases, less current portion

<u>Item</u>	<u>Physician Clinic</u>	<u>Hospital</u>	<u>Health Plan</u>
		Bonds	Bonds
	Total long-term liabilities	Total long-term liabilities	Total long-term liabilities
	Total liabilities	Total liabilities	Total liabilities
Net Assets	Net Assets	Net Assets	Net Assets
	Total liabilities and net assets	Total liabilities and net assets	Total liabilities and net assets

Working capital:

Statement of Cash Flows:

An example template for the statement of cash flows for a physician clinic (using the accrual basis of accounting), a hospital, and a health plan are shown in the table below:

<u>Item</u>	<u>Physician Clinic</u>	<u>Hospital</u>	<u>Health Plan</u>
Cash flows from operating activities	Increase/(decrease) in net assets (Net income)	Increase/(decrease) in net assets (Net income)	Increase/(decrease) in net assets (Net income)
	+ depreciation expense	+ depreciation expense	+ depreciation expense
	Increase/(decrease) in accounts receivable	Increase/(decrease) in accounts receivable	Increase/(decrease) in accounts receivable
			Increase/(decrease) in claims payable
	Increase/(decrease) in accounts payable	Increase/(decrease) in accounts payable	Increase/(decrease) in accounts payable
	Increase/(decrease) in current portion of long-term liabilities	Increase/(decrease) in current portion of long-term liabilities	Increase/(decrease) in current portion of long-term liabilities
	Net cash provided by (used for) operating activities	Net cash provided by (used for) operating activities	Net cash provided by (used for) operating activities
Cash flows from	Increase/(decrease) in investments	Increase/(decrease) in investments	Increase/(decrease) in investments

Item	Physician Clinic	Hospital	Health Plan
investing activities	Net capital expenditures	Net capital expenditures	Net capital expenditures
	Net cash provided by (used for) investing activities	Net cash provided by (used for) investing activities	Net cash provided by (used for) investing activities
Cash flows from financing activities	Proceeds from increase in long-term debt	Proceeds from increase in long-term debt	Proceeds from increase in long-term debt
	Payments on long-term debt	Payments on long-term debt	Payments on long-term debt
	Net cash provided by (used for) financing activities	Net cash provided by (used for) financing activities	Net cash provided by (used for) financing activities
	Net increase (decrease) in cash and cash equivalents	Net cash provided by (used for) financing activities	Net cash provided by (used for) financing activities
	+ Cash and cash equivalents, beginning of the period	+ Cash and cash equivalents, beginning of the period	+ Cash and cash equivalents, beginning of the period
	Cash and cash equivalents, ending of the period	Cash and cash equivalents, ending of the period	Cash and cash equivalents, ending of the period
	<i>(this should be the same as the cash + cash equivalents balance on the balance sheet at the period ending date)</i>		

Relationships between the balance sheet and income statement:

Income statement revenue:

Balance sheet receivable:

Analyzing Financial Statements

Operational metric:

Ratio Analysis:

Ratio Type	Definition
Liquidity	
Capital Structure	
Profitability	

Financial Accounting Concepts

1. Provide the appropriate term for each definition. In accounting:
 - 1) What you have or are owed – known as an “_____”
 - 2) What you owe – known as a “_____” and _____
 - 3) What you get to keep (or retain) – known as _____
 - 4) The financial statement that summarizes **revenues, expenses, and income** for an organization over a specified period of time – month, quarter, or year is the _____
 - 5) The description of the organization’s assets, liabilities, and net assets at a specified point in time – usually the end of the accounting period (month, quarter, or year is called the _____)
 - 6) The **Statement of Cash Flows** is a financial statement used to determine the sources and uses of _____

2. Match the terms with its correct definition

Term	Number	Definitions
operational metric		1) The sum of the patient days of all inpatients discharged over a given period divided by the number of discharges in the same period.
The average length of stay		2) Measures the ability of an entity to pay its current obligations as they come due;
Ratio analysis		3) Measures the extent to which the entity is generating a surplus.
Liquidity		4) Simple ratios that describe the volume of services provided to patients or members or the resources used to provide services.
Profitability		5) Used in businesses to assist managers in understanding the relationships between elements in the financial statements
Capital Structure		6) measures how the assets for an entity are financed, as well as its ability to pay its long-term debts; and

Notes:

Course 3 - Cost Accounting Principles

Learning Objectives

- Define the term “cost” in health care from the multiple different perspectives represented in the industry;
- Describe the varying types of costs in a health care business and the different ways that costs can change with the volume of services provided;
- Differentiate between the varying methods of cost finding and cost allocation used in health care;
- Describe how costs are used to set prices in health care businesses; and
- Complete a simple “break even” analysis.

Cost Accounting Principles

1. Define:

Define	
Direct cost	
Indirect Cost	
Variable Cost	

2. Match

Direct Cost		As their name implies, these are shifting directly with the volume of services provided
Indirect cost		This remain constant within a range of operational volumes, regardless of the volume of services provided
Fixed Cost		The amount of or overhead cost to be allocated
Variable Cost		The basis upon which a cost pool is allocated among different revenue producing functions.
Cost allocation		This are made up of those costs necessary to operate the business but are not incurred in the provision of services to patients, customers, or clients.
Cost pool		Those costs that are incurred to provide the services of a health care entity

3. Fill in the blank:

- 1) The process of _____ analysis can be broken into two steps – gathering total data and activity statistics and then allocating the costs of activities to a service
- 2) _____ approach, where all direct and overhead costs and a desired level of profit
- 3) Determining on how much cost can be included in the price charged to a particular customer based on a value judgment of how much customer volume will be gained for that lower price is called _____
- 4) _____ is the sum of variable and fixed costs in a health care organization.
- 5) Community rating is _____; whereas group rating is _____

4. Acrostics – using the clue, unscramble the letters to find the correct answer:

Clue	Letters	Answer	
Analyzing volume needed to cover costs	aaksbyreynas		
A cost incurred in providing a service	tdisorcct		
Lower prices in exchange for increased volume	gciostcfthnsi		

Notes:

Course 4: Strategic Financial Issues

Learning Objectives

- Describe how strategic planning influences budgeting,
- Differentiate between various budgeting approaches,
- Define the different types of budgets used in a healthcare business, and
- Complete a simple budget variance analysis

1. Fill in the missing word:

- 1) Planning and budgeting are closely related. Planning is - _____ while budgeting is _____
- 2) A mission statement is intended to _____ while the vision statement is intended to _____
- 3) A broad plan to guide the organization toward fulfillment of its mission is called a _____

2. Matching:

Operating budget		Once an understanding of service volumes is established, managers then apply expected collection rates or premium rates to estimated volume
Statistical budget		This results from developing estimates of expenses by knowing operational relationships
Revenue budget		Support areas that usually do not generate revenues tend to incur indirect costs
Expense budget		This provides a benchmark for the normal, day-to-day activities of the business
Cost center		Provides a necessary foundation for other elements in the budget process by defining the volume and nature of units of service expected to be provided

3. Define

Term	Definition
Capital budget	
Margin Capital	
Strategic Capital	
Net Present Value Period	

4. Fill in the number to have the financial sheets balance

Sample physician office and hospital operating budget

	Physician Office	<u>Hospital</u>
Statistical Budget	<i>Office visits</i>	<i>Patient Discharges</i>
Insurer #1	10,000	25,000
Insurer #2	5,000	25,000
Total	?	?
Revenue Budget (per unit)		
Insurer #1	\$100.00	\$7,000.00
Insurer #2	125.00	5,000.00
Expense Budget		
<i>Variable costs</i>		
Direct labor/unit	\$70.00	\$3,500.00
Supplies/unit	10.00	1,000.00
<i>Fixed costs</i>		
Fixed labor	\$250,000	25,000,000
Overhead	145,000	45,000,000
Income Statement Forecast		
<i>Revenues</i>		
Insurer #1	?	\$175,000,000
Insurer #2	625,000	?
Total revenue	\$1,625,000	\$300,000,000
<i>Expenses</i>		

Variable costs	\$1,200,000	\$225,000,000
Fixed costs	375,000	70,000,000
Total expense	?	?
<i>Forecasted margin</i>	<i>\$30,000</i>	<i>\$5,000,000</i>

Sample Health plan Operating Budget

<i>Statistical Budget</i>	<i>Member Months</i>
Medicare Advantage	120,000
Commercial Line #1	120,000
Commercial Line #2	60,000
Total	?
<i>Revenue Budget (per unit)</i>	
Medicare Advantage	\$450.00
Commercial Line #1	200.00
Commercial Line #2	250.00
Investment income	\$1,250,000
<i>Expense Budget</i>	
<i>Variable costs (per unit)</i>	
Medicare Advantage claims	\$373.50
Commercial Line #1 Claims	160.00
Commercial Line #2 Claims	212.50
Behavioral health carve-out (all members)	10.00
<i>Fixed Costs</i>	
Fixed labor	\$7,000,000

Overhead	4,500,000
<i>Income Statement Forecast</i>	
<i>Revenues</i>	
Medicare Advantage	?
Insurer #1	?
Insurer #2	?
Total premium revenue	?
Investment income	1,250,000
Total revenue	?
<i>Expenses</i>	
Medical claims costs	\$79,770,000
Fixed costs	11,500,000
Total expense	?
<i>Forecasted margin</i>	?

Sample hospital cash budget

<i>Sources of cash:</i>	
Drawdown of cash	?
Income from operations	+3,000,000
Depreciation & amortization	+4,000,000
Non-operating income	+1,000,000
Gift from hospital foundation	+3,000,000
Sale of old equipment	+400,000
<i>Total sources of cash</i>	<i>13,900,000</i>

<i>Less: Uses of cash</i>	
Construction of new Emergency Room	-13,000,000
New diagnostic equipment	-2,000,000
Current payments on debt	-1,500,000
<i>Total uses of cash</i>	?
<i>Cash needed</i>	?

Sample budget variance analysis physician clinic

	Simple Budget	Actual Result	Variance Amount
<i>Statistical Budget</i>			
	<i>Office visits</i>		
Insurer #1	10,000	9,500	?
Insurer #2	5,000	6,000	?
Total	15,000	15,500	?
<i>Revenue Budget (per unit)</i>			
Insurer #1	\$100.00	?	\$5
Insurer #2	125.00	\$123.00	(2)
<i>Expense Budget</i>			
Direct labor/unit	\$70.00	\$71.00	?
Supplies/unit	10.00	10.50	?
Fixed labor	\$250,000	270,000	?
Overhead	145,000	150,000	?
<i>Income Statement Forecast</i>			
<i>Revenues</i>			

Insurer #1	\$1,000,000	\$997,500	?
Insurer #2	625,000	738,000	?
Total revenue	\$1,625,000	\$1,683,000	\$110,500
<i>Expenses</i>			
Variable costs	\$1,200,000	\$1,263,250	(\$63,250)
Fixed costs	395,000	420,000	(25,000)
Total expense	\$1,595,000	\$1,683,250	(\$88,250)
<i>Forecasted margin</i>	<i>\$30,000</i>	<i>\$52,250</i>	<i>\$22,250</i>

Flexible Budget Variance Analysis for Physician Clinic

	Flexible Budget	Actual Result	Variance Amount
<i>Statistical Budget</i>	<i>Office visits</i>		
Insurer #1	9,500	9,500	
Insurer #2	6,000	6,000	
Total	15,500	15,500	
<i>Revenue Budget (per unit)</i>			
Insurer #1	?	105.00	\$5.00
Insurer #2	125.00	?	(2.00)
<i>Expense Budget</i>			
Direct labor/unit	\$70.00	?	(\$1.00)
Supplies/unit	10.00	?	(0.50)
Fixed labor	\$250,000	?	(20,000)
Overhead	145,000	?	(5,000)

<i>Income Statement Forecast</i>			
<i>Revenues</i>			
Insurer #1	\$950,000	\$997,500	\$47,500
Insurer #2	750,000	738,000	(12,000)
Total revenue	?	?	?
<i>Expenses</i>			
Variable costs	\$1,240,000	\$1,263,250	(\$23,250)
Fixed costs	395,000	420,000	(25,000)
Total expense	?	?	?
<i>Forecasted margin</i>	<i>\$65,000</i>	<i>\$52,250</i>	<i>(\$12,750)</i>

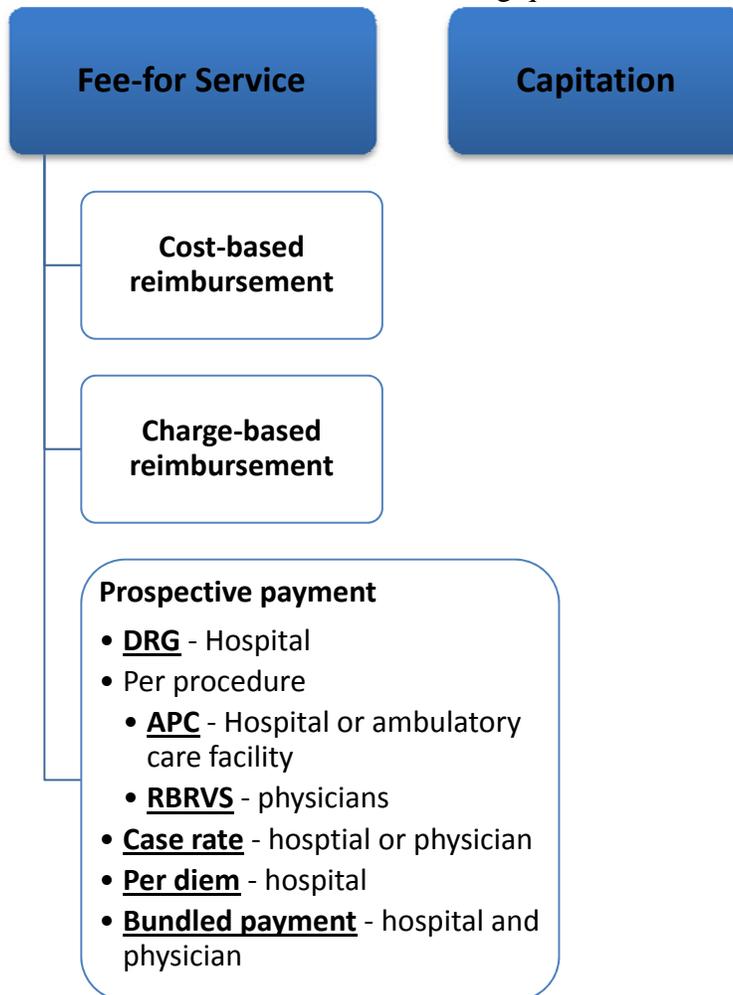
Notes:

Course 5 - Managing Financial Resources

Learning Objectives

- Describe how healthcare providers are reimbursed for services;
- Recognize the types of reimbursement methods used in the healthcare industry;
- Describe the processes by which a hospital or physician clinic bill insurers;
- Calculate metrics used to manage the revenue cycle;
- Name resource management issues in a health care business; and
- Recognize the methods that healthcare businesses finance receivables and acquire capital equipment.

1. Use the chart below to answer the following questions.



- 1) What does the chart present?

- 2) Distinguish between “cost-based” and “charge-based” reimbursement.
- 3) Define “capitation”. What is the financial objective of capitation?
- 4) What are “DRG”, “APC” and “RVRBS”? How are they used?

2. Define the following:

Term	Definition
Case rate	
Per diem	
Bundled payment	

3. Be prepared to use the following chart to explain the current payment system. Note especially the risk-management /risk transfer instruments that providers, physicians and payers employ and be able to explain each one.

	Provider incentive to increase volume of services			Provider incentive to decrease volume of services			
	Provider incentive to maximize costs			Provider incentive to minimize costs			
	Cost Based	Charge Based	DR G	Per- Procedure	Per Diem	Bundled Payment	Capitation
Providers	<i>Lowest financial risk</i>			<i>Lowest financial risk</i>			
Payers	<i>Highest financial risk</i>			<i>Lowest financial risk</i>			
Consumers	<i>Risk of overtreatment</i>			<i>Risk of under treatment</i>			
Employers	<i>Risk of high costs from inefficiency</i>			<i>Risk of high costs from under treatment</i>			

The Revenue Cycle



4. Explain what the diagram above illustrates.

5. Define and explain the importance of each of the following activities

Stage	Activities	Definition	Significance
Pre-visit	Patient scheduling		
	Eligibility verification		
	Registration		
	Point of Service collection		

Stage	Activities	Definition	Significance
Patient visit	Treatment		
	Utilization review		
	Charge capture		
	Discharge		
	Medical record completion		

Stage	Activities	Definition	Significance
Post-visit	1. Medical record analysis and coding		
	2. Billing		
	3. Payment processing by health plan (claims adjudication) <ul style="list-style-type: none"> a. Claim logging b. Eligibility c. Adjudication d. Remittance 		

	4. Denial management		
	5. Payment posting and follow up		
	6. Account closure		

6. Matching

Term	Number	Definition
Working capital		a large amount of payables on hand in terms of claims awaiting adjudication
Inventory		The ability of an organization to draw funds as needed to meet immediate cash needs
Accounts payable		The difference between current assets (cash, receivables, and inventory) and current liabilities (salaries payable and accounts payable)
Line of credit		loan that is offered not only to a bank but to private individuals, all collectively acting as a lender to the business
Operating or capital lease		Supplies on-hand
Bond issues		A long-term rental of facilities or equipment

Notes:

Course 6 - Looking to the Future

Learning Objectives

- Describe some of the new healthcare reimbursement models;
- Define the use of business intelligence in the context of health care;
- Describe how finance professionals, physicians and payers will need to work together;
- Define the trend of population health in future healthcare delivery models; and
- Apply the lessons learned in this course to your future work in the healthcare industry

1. The Patient Protection and Affordable Care Act (PPACA) include provisions for a new approach to reimbursing hospitals and physicians for their services. Determine which of the following statements are true regarding new approaches. If a statement is false, state why it is false

New Payment Approach	True	False	Reason item is false
Current payment methods do not encourage providers to work together to keep patients healthy,			
An ACO is a network of physicians, hospitals, and patients organized together to share the financial responsibility for the care provided			
An ACO provides incentives for cooperation among providers to share data and avoid unnecessary tests or procedures			
ACO must meet quality of care targets			

2. Cross all descriptions and requirements that do not apply

An ACO	Requires group of primary care physicians that serve in a lead role in managing the care of a patient.
	Creates incentives for clinical cooperation
	Pays providers on a negotiated case-rate basis
	May have to pay a penalty if cost and quality performance does not meet established targets
	The ACO model of payment is currently in use by the Medicare program

	Te health plan has full charge over the medical care decisions made by ACO providers
	Can have valuable cooperation with payers through referral of patients and assistance with the collection and analysis of cost and quality data

3. Complete the sentence by entering the mission term
- 1) When a health plan pays a single prospective rate to all providers involved in a patient's care it is making a _____
 - 2) The processing of data available in the organization being analyzed and converted into information usable by decision-makers is known as _____
 - 3) "*Quality in relation to the total payment for care*" is the definition of _____
 - 4) _____ entails a group of providers and a health plan collaborating to improve performance on measures of overall health (such as hypertension or diabetes or cancer screenings) for a specific group of patients

Evolving Models of Reimbursement

Explain the following diagram:



Challenges Faced by an ACO model:

“The Point of Medical Homes, ACOs and Bundled Payments”

- 1)
- 2)
- 3)

The Need for Business Intelligence in Health Care:

Distinguish the difference between “Business analytics” and “Business intelligence”

If you were to present the following slide to a colleague, what would you say?

Business Intelligence Implementation

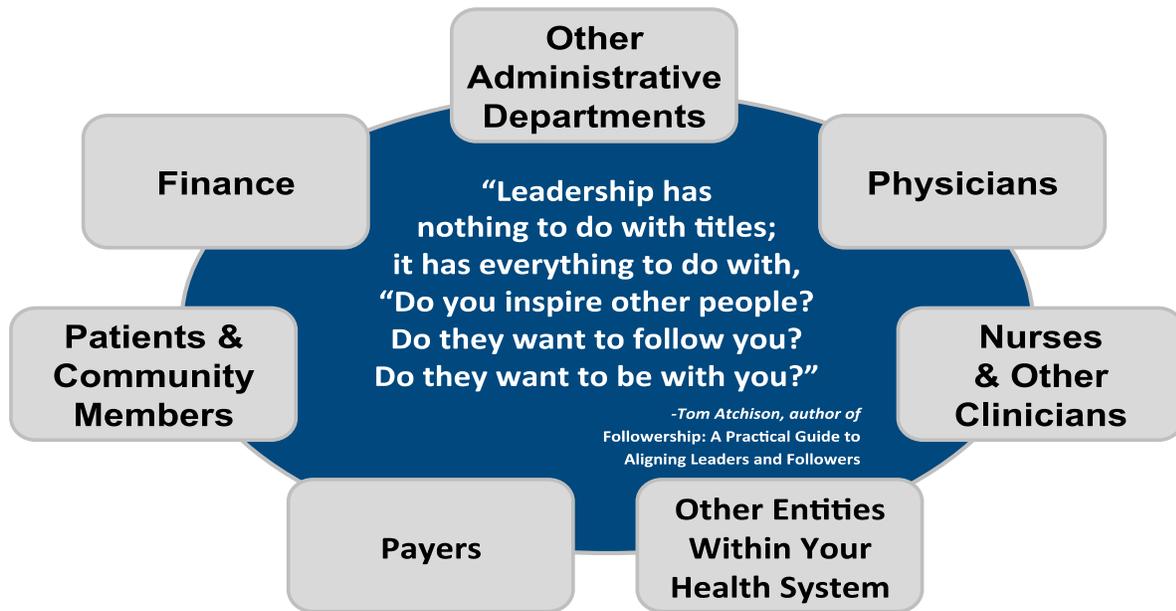
- Key Factors
- Data Strategy
- Determine metrics to monitor: Business and strategic plans
- Access (and timeliness) to data for decision makers
- Maintaining data integrity



12

Aligning for Value

Explain the following diagram by identifying “what’s in the collaboration” for each of the identified stakeholders.



Population Health Management

Population Health Management is:

Pretend you have been invited to explain to a group of new provider and r payer employees the notion of “Population Health Management”. You may use only one slide- image, presented below. What would you say? Create an outline of your presentation.



Implication for you:

- Rapid change in business model: From volume to value
- New skill sets required:
 - Collaborative team skills
 - Multidisciplinary approaches
 - “Optimizing costs”
 - Big picture: less about numbers alone and more about viewing the context of the numbers
 - Insight into clinical sciences i.e. professional practice models
 - Clinical professional must help inform business decisions
 - Focus: benefit the business and the Patient

Notes: