COST ANALYSIS FOR FAMILY PLANNING PROGRAMS

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OBJECTIVES

- Understand the rationale and uses for a cost analysis.
- Describe the data required for cost analysis.
- Understand the methodology for calculating cost per service.
- Analyze the results of cost analysis and understand how to assess implications for agency sustainability.
- Comprehend how to use cost data to identify areas for operation and revenue improvement.

BACKGROUND OF THE COST ANALYSIS PROCESS

WHAT IS COST ANALYSIS?

An analysis that distributes family planning program costs (expenses) to each of the individual services offered by a program.

Estimate the cost for each service delivered!

HISTORICAL PERSPECTIVE OF COST ANALYSIS

Title X Program Guidelines (2001)

• Programs must demonstrate they have done a cost analysis on which their fees are based.

Title X Program Guidelines (2014)

 For persons from families whose income exceeds 250% of the FPL, charges must be made in accordance with a schedule of fees designed to recover the reasonable cost of providing services. (42 CFR 59.5(a)(8)).

WHY DO A COST ANALYSIS?

- In the current health care environment, individual programs need to know the cost of providing services.
- 2. With health care costs rising and flat Title X funding, it is important to examine costs annually and understand the factors causing family planning costs to rise.
- 3. To assist in negotiating rates with various rate payers (including Medicaid).

IT IS GOOD BUSINESS!

Agencies with a sound financial management plan and a complete knowledge of the costs for doing business will remain financially viable.

COST ANALYSIS METHODS

- Cost Accounting System tracks staff and not personnel cost by services
- Step Down Allocation
- Relative Value
 - Resource Based Relative Value System
 - Relative Value for Physicians

OVERVIEW OF COSTING METHODOLOGY

WHAT DO YOU WANT TO KNOW?

The total cost to the program for putting each and every service provided (medical, laboratory, pharmacy, community education).

SELECTION OF METHOD

- A practice *must* know how much it costs them to deliver a service or do a procedure, and using the Resource-Based Relative Value Scale (RBRVS) is a great way to go. In fact, the only alternative is a more time consuming methodologies.
- A relative value unit (RVU) measures the overall consumption of resources committed by a provider for any one of 15,000 individual procedures and services, and for each one, you should know whether you profit, break even, or lose money.

RELATIVE VALUE ANALYSIS IN FAMILY PLANNING

- 1995 Family Planning Councils of America Revised numerous times
- Late 1990s Cost Analysis Methodology by George Christie
- 2014 Focused Cost Analysis using RBRVS

WHY RELATIVE VALUE?

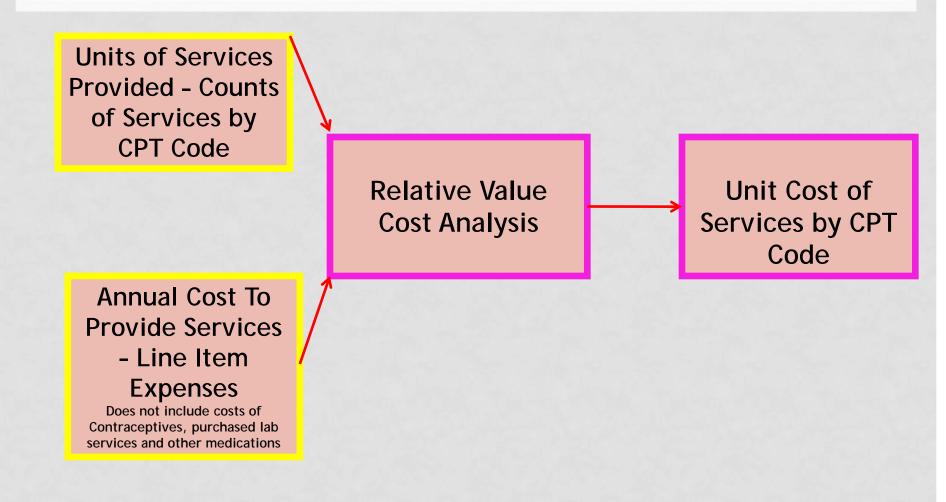
- The national standard of RVUs is the Medicare Resource Based Relative Value Scale (RBRVS).
 Medicare uses this data to pay physicians across the country for Part B claims, and this scale is also widely used among commercial insurers to pay out claims.
- These RVUs are available as part of the National Physician Fee Schedule Relative Value File on the CMS (formerly HCFA) website.

THE COST ANALYSIS

The information required to determine costs should be available from your accounting system and reports from your Patient Management/Clinic Visit Record (CVR) system.

STEP-BY-STEP COST ANALYSIS

ESTIMATING UNIT COSTS BY CPT CODE



COSTING METHODOLOGY

- 1. Select the Time Period.
- 2. Collect data for time period on the services performed by CPT Code.
- 3. Collect total direct and indirect costs incurred during the time period to provide the services.
- 4. Calculate the regional RVUs.
- 5. Compute the total relative value units for each service/CPT Codes and the Relative Value Units for the year.
- 6. Determine the Total Average Cost per Relative Value Unit.
- 7. Determine the estimated cost for each of the CPT Codes.
- 8. Analyze program revenue data in conjunction with cost analysis.

SELECT TIME PERIOD

- For the initial cost study, you may wish to complete it for more than one year.
- Allows comparison of costs over the time periods.
- Assess trends and identify possible areas for improvement.

SERVICES BY CPT CODE - TABLE 1

The goal is to establish a list of visit types which define your family planning services in terms that medical PAYERS recognize and accept.

- For each CPT Code collect data on the number of services provided for that specific CPT Code.
- Think about where you will find the information needed.
- Be sure to check for consistency.

SAMPLE

CPT Code Description	CPT Code	Total Visits	Full Fee Charge
New or Established- Education and Counseling (15 min)	99401		
New or Established- Education and Counseling			
(30 min)	99402		
New - Expanded (Problem Focused, 20 min)	99202	198	
New - Detailed (Problem Focused, 30 min.)	99203	103	
New - Comprehensive (Problem Focused, 45 min.)	99204		
Established - Brief (Problem Focused 5 min.)	99211		
Established - Brief (Problem Focused 10 min.)	99212	598	
Established - Expanded (Problem Focused 15 min.)	99213	578	
Established - Detailed (Problem Focused 25			
min.) Established - Compreh. (Problem Focused 40	99214	215	
min.)	99215		
New, Preventive - Adolescent (12-17)	99384		
New, Preventive - Adult (18-39)	99385		
New, Preventive - Adult (40-64)	99386		
Est, Preventive - Adolescent (12-17)	99394		
Est., Preventive - Adult (18-39)	99395		
Est., Preventive - Adult (40-64)	99396		
Nursing Visit - OC Supply	99211		
Nursing Visit - Depo Supply	99211		
Brief Nurse/Pill Check	99211		
Expanded Nurse/Depo	99211		
Colposcopy	57452		
Colposcopy w/Biopsy	57454		
Cryotherapy	57511		
Diaphragm/Cervical Cap Fitting	57170		

SERVICES VS. VISITS

- Some visits may have multiple CPT Codes.
- Thus, there maybe more services than visits.
- Helpful to collect visits and unduplicated users.

SERVICE UTILZATION

- Services that are not included in CPT visit code descriptions include:
 - Contraceptive supplies
 - External laboratory test ordered during the visit
 - Other medications

- In-house Laboratory Services
 - Pregnancy tests

PROGRAM EXPENSES- TABLE 2

- Collect line item expense (cost) data in the following categories
 - Direct Costs
 - Staff
 - Other than Personnel Services
 - Rent, Utilities, and Telephone
 - Consultants Medical, Other
 - Travel and Conferences
 - Insurance
 - Other
 - Indirect/General Administration
 - In-kind Expenses
- Does not include the cost of contraceptives, purchased labs, and purchased pharmacy

PROGRAM EXPENSES

- Indirect/General Administration
 - Include expenses incurred to support direct care that are incurred for common or joint objectives and, therefore, cannot be identified readily and specifically with a particular project or activity (e.g. administration, housekeeping, or rent).
- In-kind Expenses
 - Include the value of volunteers, donated goods, and donated services that are used by the agency. These may be provided to the agency by some other entity at no cost.

PROGRAM EXPENSES - TABLE 2

Category	2012
Staff Salaries	
Taxes (staff related)	
Staff Benefits	
Professional Services - Lab	
Medical Supplies (not including	
contraceptives, other medications and	
purchased labs	
Office Supplies	
Telephone	
Postage	
Occupancy	
Rental & Maint.	
Printing & Pub.	
Marketing & Advr	
Travel	
Conferences	
Memberships	
Insurance	
Miscellaneous	
Adjustments	
Total Direct	\$-
General & Admin or Indirect Allocation	
or Overhead	
Total Expenses	\$0.00

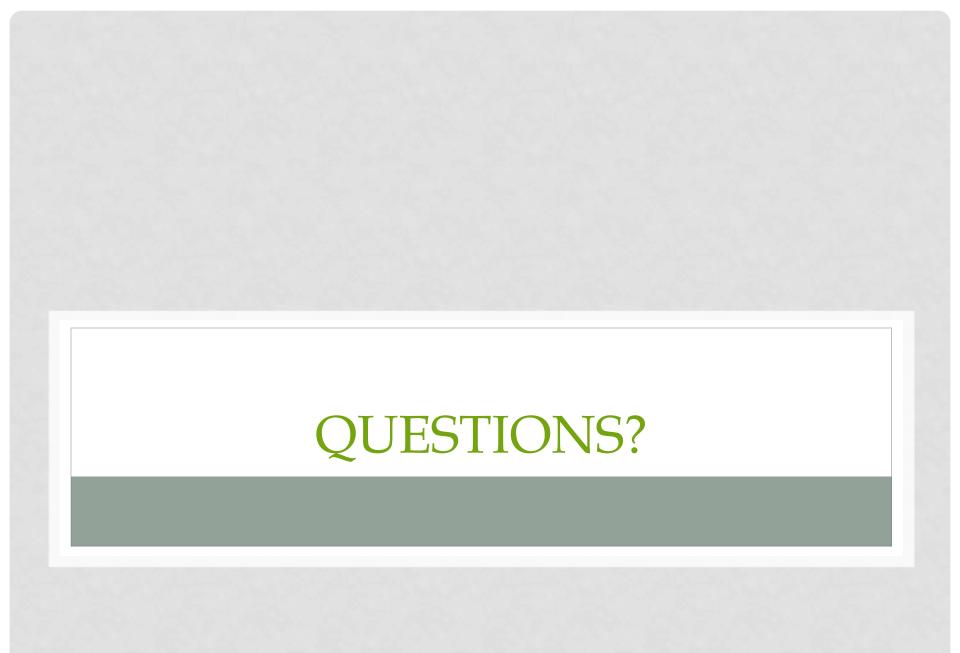
COST ANALYSIS

 Cost analysis does not measure passthrough items, including the cost of laboratory specimens sent to outside reference labs, therapeutics, or contraceptives used in the agency.

 Does not include the cost of contraceptives, purchased labs, and purchased pharmacy.

REVIEW DATA

- Does it pass the giggle test?
- How does the cost per user or cost per visit compare to previous years?





RELATIVE VALUE ANALYSIS

RELATIVE VALUES DEFINITION

A Relative Value is:

A number that relates the amount of time, material, and level of skill of the personnel who are involved in providing a particular service relative to all other services.

RELATIVE VALUES

Relative Values indicate how much one procedure is worth in relation to another procedure.

<u>Example</u> Procedure A Procedure B

10 RVUs 5 RVUs

Procedure A uses Two Times as much Resources as B. Procedure A would cost 2 time Procedure B

WHY RVU?

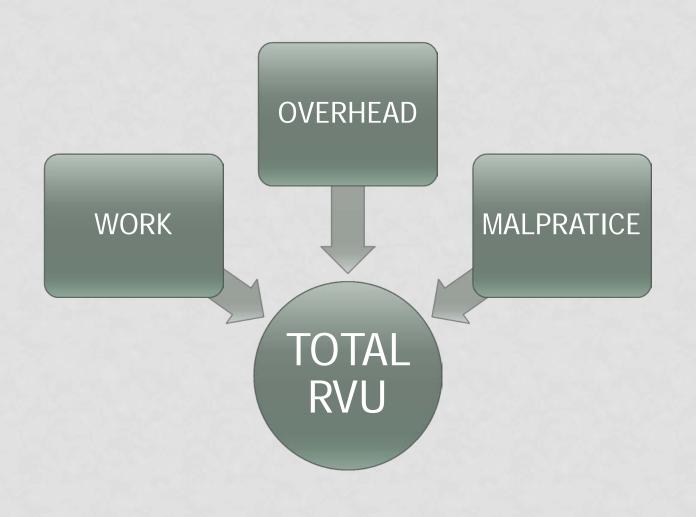
- Objective
- Tied to Intensity of Work
- Available Data

- Easily Measurable
- Comparable
- Required Accurate Coding

SELECTION OF RESOURCE BASED RELATIVE VALUE SYSTEM (RBRVS)

- Several different Relative Value Methods
- Resource Based Relative Value Syste (RBRVS)
 - Used by Medicare for reimbursement.
 - RBRVS have been established over time and are updated on an annual basis.

RESOURCE BASED RELATIVE VALUE SYSTEM (RBRVS)



GEOGRAPHIC PRACTICE COST INDICES

- To adjust national standard for regional/area differences, GPCI have been developed.
- These indices are based upon an analysis of fees in various areas and government studies of variations in economic factors among localities.
- Example Philadelphia
 - Work 1.018
 - Overhead 1.073
 - MP 1.444

ACCESS RVU DATA FOR RBRVS

- To Access RBRVS Data
 - <u>http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Relative-Value-Files-Items/RVU14A.html</u>
 - Use "Fully Transitioned, Non-Facility" RBRVS.
 - Down load Zip Flies RVU14A or any other year and use for following files
 - PPRRVU14.XLSX RVU
 - CY 2014 GPCI _ 12172014.XLSX CPCI



DETERMINE TOTAL RVUS FOR EACH CPT CODE – TABLE 3

- 1. For each CPT Code adjust the National Value by Conversion factor
 - Physician (Clinician) work
 - Practice's (Overhead) expenses (net of malpractice expenses)
 - Cost of malpractice insurance
- 2. BY the GCPI for regional area
- 3. Total all three to arrive at Total Adjusted RVUS

CALCULATING ADJUSTED RVU

• For each item - WORK, OVERHEAD, and MALPRACTICE

The RVU for ELEMENT

Multiplied by

GPCI for **ELEMENT**

Equals THE ADJUSTED RVU for ELEMENT

TOTAL ADJUST RVU PER CPT CODE

Add the Adjusted RVU for each ELEMENT

Adjusted RVU for for Work

Plus

Adjusted RVU for Overhead

Plus

Adjusted RVU for Malpractice

Equals

The Adjusted Relative Value Units for Each Procedure

EXAMPLE - ADJUST RVU TABLE 3

			TRANSITIO NED			Adjusted	Adjusted	Adjusted	TOTAL
		WORK	NON-FAC	MP		Work	Overhead	Malpractice	Adjusted
CPT CODE	Definition	RVU	OH RVU	RVU	Total RVUs	RVU	RVU	RVU	RVU
99201	New Patient - Brief	0.48	0.69	0.04	1.21	0.49	0.74	0.06	1.29
99202	New Patient - Limited Exam	0.93	1.08	0.07	2.08	0.95	1.16	0.10	2.21
		Work	ОН	MP					
PHILLY GPCI		1.018	1.073	1.444					

TOTAL RELATIVE VALUE UNITS - TABLE 4

- Calculate the total number of Relative Value Units for all procedures/visits during the time period.
- Add the Relative Value Units for each of the procedures to get the total Relative Value Units for the period.

CALCULATE TOTAL RELATIVE VALUES FOR ALL SERVICES – TABLE 4

• For each CPT code computer the total number of relative value units the each procedures

The total number of each CPT procedure *Multiplied by*

The Adjusted RVU Relative Value for each CPT code

Equals

The total Number of Relative Value Units for Each Procedure

EXAMPLE – TABLE 4

- There were 215 visits coded with CPT code 99213 Established - Expanded (Problem Focused 15 min.)
- The Adjusted Total Relative Value for CPT code 99213 is: 2.16
- 3,000 multiplied by 2.16 = 464.73 Relative Value Units
- Repeat this for each CPT code

EXAMPLE – TOTAL RVUS

CPT	
CODE	TOTAL RVUS
99201	
99202	436.92
99203	330.69
99204	
99205	
99211	355.62
99212	749.96
99213	464.73
99214	
TOTAL	2337.92

CALCULATE AVERAGE COST PER RELATIVE VALUE UNIT – TABLE 4

 To calculate the average cost per relative value unit

Total Cost for the period (direct and indirect)

Divided by

Total Relative Value Units for all Services

Equals

Average Cost per Relative Value Unit

EXAMPLE -COST PER RELATIVE VALUE

- Total Program Costs Direct and Indirect \$93,256
 Program Relative Value Units 2337.92
- Average Cost per RVU \$39.99

\$93,256

Divided by 2337.92

Equals

Average Cost per Relative Value Unit = \$39.99

CALCULATING SERVICE COST PER CPT CODE

 Calculate the estimated cost for each procedure/CPT code

Cost per Relative Value

Multiplied by

The Relative Value Unit

Equals

Estimated cost for each procedure

EXAMPLE -ESTIMATED COSTS

- For CPT Code 99213 Relative Value Units = 2.16
- The estimated cost = 2.16 units multiplied by the average cost per unit of \$39.88 = \$89.38

2.16units *Multiplied by* \$39.88 *Equals* Estimated Cost for CPT = \$86.22

EXAMPLE -ESTIMATED COSTS

CPT CODE	ESTIMATED COST
99201	\$51.33
99202	\$88.02
99203	\$128.07
99204	\$196.52
99205	\$244.28
99211	\$23.72
99212	\$51.76
99213	\$86.22
99214	\$127.02
TOTAL	\$51.33



INTERPRETATION AND USE OF COST DATA

KEY INDICATORS

- Average Cost per RVU
 - Compare to Medicare Conversion Factor
 - 2014 Medicare Conversion Factor \$35.8228
- Average RVU per Service Intensity of Visit
 - Target Range of .85 to 1.25
- Average Cost Per User/Visit

EXAMPLE

- Average Cost per RVU
- Average RVU per Visit
- Average Cost per Visit

\$55.12

1.38

\$39.88

ANALYSIS OF COST

- Compare cost to fee schedule
- Compare to Medicaid reimbursement
- Other payers

SAMPLE COMPARISON TABLE

CPT CODE	Estimated Cost	Full Charge	Medicaid	Payer #1 (105% RBRVS)
99213	\$86.22	\$50.00	\$63.25	\$81.03

FEE SCHEDULE

- Based on Cost
- Compare to Community
- Lost Revenue

SENSITIVITY ANALYSIS

- Cost Impact with Changes
 - Productivity
 - Visit Utilization

EXAMPLE - SENSITIVITY

CPT CODE	Original Utilization	Change Visit Distribution	Change Visit Productivity
99201	0	0	0
99202	198	198	351
99203	103	103	175
99204	0	0	0
99205	0	0	0
99211	598	478	601
99212	578	430	446
99213	215	483	289
99214	0	0	0
TOTAL	1692	1692	1862

EXAMPLE -SENSITITY

CPT CODE	Original Utilization	Change Visit Distribution	Change Visit Productivity
99201	\$51.33	\$51.31	\$41.42
99202	\$88.02	\$87.97	\$71.03
99203	\$128.07	\$127.36	\$103.34
99204	\$196.52	\$195.00	\$158.58
99205	\$244.28	\$242.71	\$197.12
99211	\$23.72	\$23.90	\$19.14
99212	\$51.76	\$51.74	\$41.76
99213	\$86.22	\$86.14	\$69.58
99214	\$127.02	\$126.98	\$102.50
Cost per RVU	\$38.88	\$35.14	\$32.19

EXAMPLE – SENSITIVITY SUMMARY

Key Measure	Original Utilization	Change Visit Distribution	Change Visit Productivity
Cost Per RVU	\$39.89	\$35.14	\$32.19
Average Cost per Visit	\$55.12	\$55.12	\$50.08
Average RVU per Visit	\$1.38	1.57	1.56

OTHER CONSIDERATIONS

- Analysis over Multiple Years
- Impact of Title X and other grants on Expenses



