

Unit Cost 101: Uses of Unit Cost

Basic Application of Unit Cost

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Health Resources and Services Administration (HRSA) Overview

- Supports more than 90 programs that provide health care to people who are geographically isolated, economically or medically vulnerable through grants and cooperative agreements to more than 3,000 awardees, including community and faith-based organizations, colleges and universities, hospitals, state, local, and tribal governments, and private entities
- Every year, HRSA programs serve tens of millions of people, including people living with HIV/AIDS, pregnant women, mothers and their families, and those otherwise unable to access quality health care



HIV/AIDS Bureau Vision and Mission

Vision

Optimal HIV/AIDS care and treatment for all.

Mission

Provide leadership and resources to assure access to and retention in high quality, integrated care, and treatment services for vulnerable people living with HIV/AIDS and their families.



Ryan White HIV/AIDS Program

- **Provides comprehensive system of HIV primary medical care, medications, and essential support services for low-income people living with HIV**
 - More than half of people living with diagnosed HIV in the United States – more than 550,000 people – receive care through the Ryan White HIV/AIDS Program (RWHAP)
- **Funds grants to states, cities/counties, and local community based organizations**
 - Recipients determine service delivery and funding priorities based on local needs and planning process
- **Payor of last resort statutory provision: RWHAP funds may not be used for services if another state or federal payer is available**
- **84.9% of Ryan White HIV/AIDS Program clients were virally suppressed in 2016, exceeding national average of 59.8%**



Source: HRSA. Ryan White HIV/AIDS Program Annual Client-Level Data Report 2016; CDC. HIV Surveillance Supplemental Report 2016;21(No. 4)

Unit Cost Institute - Learning Objectives

- Raise awareness of what is a unit of cost in the Ryan White HIV/AIDS Program (RWHAP).
- Understand how to determine the cost of a unit of service.
- Identify the allowability, allocability, and reasonableness of the costs of a service unit.

Institute Format

- **Unit Cost 101**

- Identify how to estimate the cost of a unit of service funded by the RWHAP
- Identify the federal requirements to be met in determining the unit cost of a service
- Document the actual cost of a service reimbursed by fee for service/service unit

- **Unit Cost 201**

- Identify uses of unit cost
- Determine how to calculate the cost of a unit of service
- Describe how to document the actual cost of a unit of service

- **Unit Cost 301**

- Describe how to make informed resource allocation decisions based on unit cost
- Identify compliance federal requirements in determining a unit cost of service
- Determine the documentation of the actual cost of a service unit



Learning Objectives

At the conclusion of this activity, the participant will be able to:

1. Identify how to estimate the cost of a unit of service funded by the RWHAP.
2. Identify the federal requirements to be met in determining the unit cost of a service.
3. Document the actual cost of a service reimbursed by fee for service/service unit.

Identify the Cost of Unit

- Unit Cost
 - What is unit cost?
 - Glossary of terms
 - Uses of unit cost
 - Determining a unit cost

What unit cost is and is not?

What is
unit
cost?

Unit Cost IS:

- Total expenditure incurred by a company to produce, store, and sell one **unit** of a particular product or service
- Estimate of direct and indirect actual cost incurred to provide a service

Unit Cost is **NOT**:

- A fee charged to a client or a third party
- Average amount of the grant per client or per service
- Specific to agency's funding sources
- A measurement of efficiency or effectiveness

Term	Definition
Allocable Cost	Cost is incurred specifically for the Federal award.
Allowable Cost	Cost is necessary and relevant to the delivery of a particular service.
Average Unit Cost	Total cost of providing the service divided by the total number of services provided.
Depreciation	Reduction in the value of an asset during a given period for time.
Direct Cost	Cost that can be directly assigned to the delivery of the service provided.

Glossary

Term	Definition
Fixed Cost	Cost that does not increase in the short run with the units of service.
Indirect Cost	Refers to Facility and Administration (F&A) costs incurred for a common or joint purpose.
Marginal Cost	Additional or incremental cost of providing one more unit of service.
Opportunity Cost	Lost benefit of pursuing an alternate course of action.
Relative Value Scale	Rank or order of items in relation to each other. In health care, a relative value scale commonly compares level of resources consumed in the production of services.

Glossary

Term	Definition
Reasonable Cost	When the cost, in its nature and amount, does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost.
Standard Cost	Cost to provide the typical unit of service based on a standardized use of resources.
Total Cost	Total cost of the service is the sum of the allowable direct and allocable indirect costs less any applicable credits.
Unit Cost	Cost to produce or deliver a product or service as defined by RWHAP legislation and Cost Principles (45 CFR 75. Subpart E).
Variable Cost	Cost which increases or decreases with a small change in the number of units of service provided.

Glossary – Allowable Cost

Outpatient/Ambulatory Health Care

Diagnostic and therapeutic services provided directly to a client by a licensed healthcare provider in an outpatient medical setting.

Medical Case Manager

Client-centered activities focused on improving health outcomes and provision of benefit counseling by assisting eligible clients in obtaining access

Cost	Outpatient Ambulatory Health Care	Medical Case Manager
Benefit Counselor		
Pharmacist		
Client pill boxes		
Utilities		
Advertising		
Speaker drug interaction		
Malpractice insurance		
Membership dues		
Construction		
Renovation		
RN		
Refrigerator		



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Client-centered activities focused on improving health outcomes and provision of benefit counseling by assisting eligible clients in obtaining access

Cost	Outpatient Ambulatory Health Care	Medical Case Manager
Benefit Counselor	N	Y
Pharmacist	Y	N
Client pill boxes	Y	Y
Utilities	Y	Y
Advertising	N	N
Speaker drug interaction	Y	Y
Malpractice insurance	Y	N
Membership dues	N	N
Construction	N	N
Renovation	Y	Y
RN	Y	Y
Refrigerator	y	N



Uses of Unit Cost

- Save money
- Increase revenue
- For developing fee for service charges
- For determining the reasonableness of a payment funded by a federal award
- As a reimbursement methodology for subawardees/
sub-recipients
- Increase reimbursement
- Increase donations

Uses of Unit Cost

Note

When using unit cost as the method of reimbursement, Federal legislative and program requirements apply. The reimbursable unit can be derived by adding allowable, reasonable allocable direct program and admin costs, capped at 10%, and dividing by number of units of service to be delivered.

Implementation Method #1

- Project the **unit cost** at the beginning of the sub-award
- At the end of the sub-award period calculate the actual cost of the unit.

Compare, if the reimbursement is too high or too low re-negotiate next subaward payment.

Implementation Method #2

- Medicare Medicaid **fees** used to pay core medical and support services.
- Request an end of the subaward year service cost report reconcile to expenses in the financial system.

Renegotiate next years fees or units if fees pay exceed expenses or expenses exceed fees paid.

Determining Cost of a Unit

- Step 1: Define unit of service
- Step 2: Determine number service units
- Step 3: Determine Direct and Indirect cost
- Step 4: Determine full cost of service
- Step 5: Calculate the Average Unit cost

Step 1 – Define Unit of Service

- **Services in human services are difficult to define as there is no industry standard like in health, which define services by time (ICD-10).**
- **The unit can be defined by:**
 - Identifying the services
 - Using HRSA guidance, industry, and historical information to define the non-medical unit
 - Using an effective and realistic unit service methodology, such as the number of visits or a certain amount of time.

Step 1 – Define Unit of Service

Examples of how a unit may be defined and coded for individual RWHAP service categories:

Core Medical Services	Unit of Service Example
AIDS Drug Assistance Program treatment	<i>one prescription</i>
AIDS Pharmaceutical Assistance	<i>one prescription</i>
Early Intervention Services	<i>one contact</i>
Health Insurance Premium and Cost Sharing Assistance	<i>monthly payment per person</i>
Home and Community-Based Health	<i>one face to face encounter with a provider, purchase durable equipment</i>
Home Health Care	<i>one face to face encounter with a provider</i>
Hospice	<i>one bed day, one provider visit</i>



Step 1 – Define Unit of Service

Examples of how a unit may be defined and coded for individual RWHAP service categories:

Core Medical Services	Unit of Service Example
Medical Case Management	<i>one hour medical case management</i>
Medical Nutrition Therapy	<i>one face to face visit with a nutritionist</i>
Mental Health Services	<i>one hour mental health visit</i>
Oral Health Care	<i>face to face encounter between a patient and a qualified dentist or dental hygienist occurring during a single visit</i>
Outpatient Outpatient/Ambulatory Health Service	<i>face to face with a provider that can diagnose, treat and prescribed</i>
Substance Abuse Outpatient Care Substance services	one hour of substance abuse services



Step 1
Define unit
of service



Step 1 – Define Unit of Service

Examples of how a unit may be defined and coded for individual RWHAP service categories:

Support Services	Unit of Service Example
Child Care Services	<i>one 4 hour of care</i>
Emergency Financial Assistance	<i>one utility, rent, medication payment</i>
Food Bank/Home Delivered Meals	<i>one meal, one grocery voucher</i>
Health Insurance Premium and Cost Sharing Assistance	<i>monthly payment per person</i>
Housing Services	<i>rent, utility payment one visit case manager</i>
Linguistic Services	<i>one hour of translation</i>
Medical Transportation	<i>one way trip, tokens, subway card</i>



Step 1
Define unit
of service



Step 1 – Define Unit of Service

Examples of how a unit may be defined and coded for individual RWHAP service categories:

Support Services	Unit of Service Example
Non- Medical Case Management Services	<i>face to face office visit of an hour or less</i>
Other Professional Services	<i>face to face office visit of an hour or less with a legal provider, accountant and other professional</i>
Outreach Services	<i>one hour of outreach activities</i>
Psychosocial Support Services	<i>face to face encounter with a professional or peer in an individual or group setting</i>

Step 1 – Define Unit of Service

Examples of how a unit may be defined and coded for individual RWHAP service categories:

Support Services	Unit of Service Example
Referral for Health Care and Support Services	<i>One instance of directing a client to a service in person or through telephone, written, or other type of communication. Each instance of referral should be counted as a separate service unit</i>
Rehabilitation Services	<i>one hour of rehabilitation services</i>
Respite Care	<i>one service activity per eight hours</i>
Substance Abuse Services (residential)	<i>4 days of detoxification; 2 weeks of residence; 4 weeks of transitional housing; and, 12 intensive outpatient counseling sessions = one unit</i>

Step 1 – Define Unit of Service

- How to choose the type of unit to count:
 - What units are already defined?
 - ✓ Third party
 - ✓ Ryan White HIV/AIDS Program Services Report (RSR)
 - ✓ Bureau of Primary Health Care Uniform Data System (UDS)
 - Which unit is easiest for staff to count accurately?
 - Is the time intensity of the unit provided a significant determinant of cost?

Step 2 – Count Total Number of Units in Specific Time Period

Assess agency data collections capabilities:

- Is there an automated information system based on client's records with total number of services provided:
 - ❖ Patient Management System
 - ❖ Electronic Health Record
 - ❖ CAREWare
- If manual system is used, there is a need to have logs, appointment schedules, etc.

Select the report time period

- grant year, calendar, quarterly

Step 3 – Determine Direct and Indirect Cost

Determining
Cost of Unit

Other side of the unit cost equation is determining the full cost of the service

- Fixed costs
- Overhead costs
- Variable costs
- Direct material costs
- Direct labor cost

Divide the cost into direct and indirect

Step 3 – Determine Direct and Indirect Cost

Determining
Cost of Unit

Direct Cost

- A cost that can be accurately traced to a program/service activity with little effort

Indirect Cost

- A cost that is not directly traceable to a program/service activity

Note Ryan White HIV/AIDS Program legislation defines indirect cost for subrecipients part of administration cost and capped at 10% in the aggregate

Step 3 – Determine the Direct and Indirect Cost

Determining
Cost of Unit

Direct Cost

- Personnel Compensation
- Fringe Benefits
- Contractor Costs
- Supplies
- Travel
- Communication Costs
- Copy Machine

Indirect Cost

- Personnel Compensation and Fringe for Agency Management
- Accounting
- Dues and Licenses
- Human Resources
- Financial Audit Contract
- Insurance
- Professional Contracts
- Purchasing
- Overhead cost

Step 3 – Determine the Direct and Indirect Cost

Determining
Cost of Unit

Note

- For RWHAP Part A and B subrecipients, all indirect costs count toward the 10% administrative aggregate limit.
- There is no universal rule for classifying certain cost as either indirect or direct.
- The CONSISTENT treatment of costs is required and essential to avoid double charging of the RWHAP award.
- 45 CFR §75.413 (c) now allows entities to charge salaries of administrative and clerical staff as DIRECT costs under certain circumstances (i.e., integral to the project, individuals can be specifically identified with the project, costs are explicitly included in the budget and are not also recovered as indirect).

Step 4 – Determine Cost of Service

Full versus Actual Cost

Actual Cost of a Unit

- Means the direct and indirect expenses attributed to the cost of the unit

Full Cost of a Unit

- Means paid or accrued expenses recorded in the Financial statements.
Records all expenses inclusive of wasted amount

Full vs Actual

Service: FOOD

Actual Cost

The direct and indirect expenses attributed to the cost of the unit

Full cost

Paid or accrued expenses recorded in the Financial statements. Records all expenses inclusive of wasted amount

Item/Activity	Actual Cost	Full Cost
Outreach Coordinator	X	X
Deputy Director		X
Kitchen Lead (Volunteer)		X
Program Coordinator (60%)	X	X
Fringes	X	X
Local transportation/mileage	X	X
Contracted Dietician, kitchen support, outreach	X	X
Food inventory		X
Personnel Care Items	X	X
Food donations		X
Printing	X	X
Depreciation facility		x
Indirect expenses (10%)	X	x

Step 4 – Determine Full Cost of Service

Full cost include all of the expenses which are directly and indirectly necessary to provide the service.

☐ Definition includes:

Direct + Indirect Cost = Total operational/service cost

Direct and Indirect cost

+

Depreciation

+

Validated of donated goods and services

=

FULL COST

☐ Same time period of data

Step 5– Average Unit Cost

Divide the actual cost by the total number of service units to arrive at the average cost during a particular time period

The Unit Cost Formula is determined by dividing the total allowable costs by the total number of units provided.

$$\frac{\text{Allowable Direct and Indirect Costs of Service}}{\text{Service Category Units of Service as defined}} = \text{Unit cost}$$

Reconciliation to the Cost of Service

Determining the **actual cost** of the service funded with federal dollars

45 CFR 75.301 must be taken in consideration:

“In accordance with above mentioned standard information collections, and when applicable, recipients must also provide cost information to demonstrate reasonableness and cost effective practices (*e.g.*, through unit cost data).”

Principles that apply:

- Cost Principles – 45 CFR 75, Subpart E
- Ryan White HIV/AIDS Program administration definition and limitations – PHS
- Other applicable cost principles, i.e., accorded equal treatment when using an allocation methodology

Reconciliation to the Cost of Service

Note **When using fee for service, you MUST reconcile the fee to the unit cost**

Resources

Calculating Your Cost per Unit, Jeff Kulligren, PMH and Maria Sibela, MA

Determining the unit Cost of Service, U S Department of Health and Human Services Retrieved from <https://careacttarget.org/library/determining-unit-cost-services-guide-estimating-cost-services-funded-ryan-white-care-act>

Cost Analysis Basis, Contracting & Reimbursement Expansion with Medicaid & Marketplace Insurance Plans, National Technical Assistance Center

Questions



Obtaining CME/CE Credit

If you would like to receive continuing education credit for this activity, please visit:

<http://ryanwhite.cds.pesgce.com>



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