

Methods for data collection and analysis: costing methods in global health

Presenter: Carol Levin, Ph.D.



Overview

- Review general concepts for costing methods
- Apply to an example for increasing access to PMTCT in Zimbabwe
- Insights for costs of scaled up programs



Prelude

- Bountiful costing terms and methods.
- Purpose determines the choice of methods.
- Time horizon and timing of costing matters.
- Perspective is about whose costs?
- Scale and scope will affect the total and unit costs.

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**The main methodological issues
in costing health care services**

A literature review

CHE Research Paper 7



Basic principles

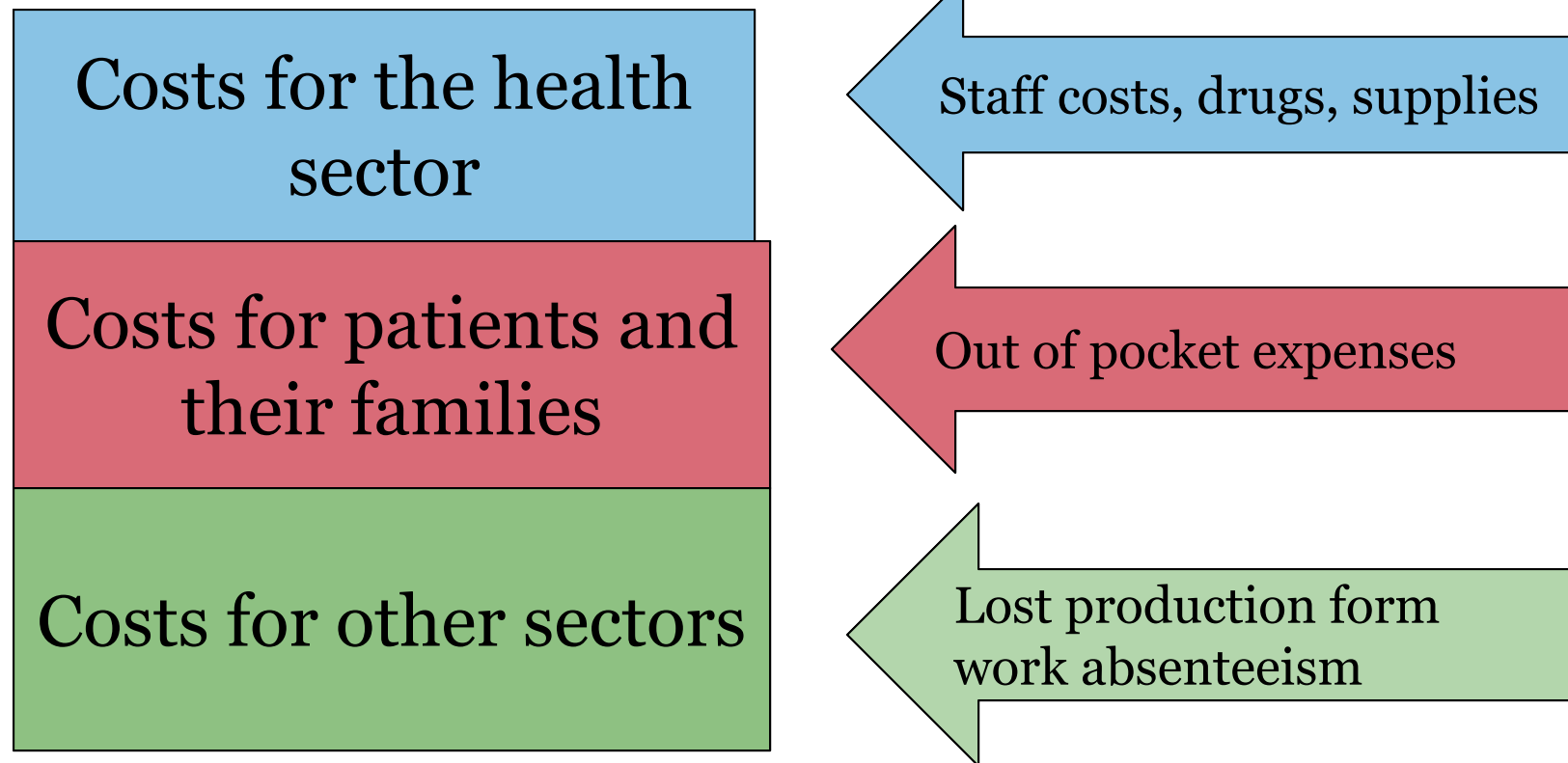
- Define the problem
- Identify
- Measure
- Value

Identifying Costs- types of costs

- Direct Health Care costs
 - Treatment or preventative care
 - Hospital, facilities, communities, home
 - Medication, procedures, tests, equipment
- Direct Non-Health Care costs
 - Out-of pocket expenses- transportation, child care
- Productivity costs (Indirect costs)
 - Lost economic productivity due to disability or death

Identifying costs: Basic elements to consider

For example



Cost methods

- Micro-costing methods
 - Bottom up costing
 - Quantify and cost out every input consumed in preventing or treating disease in an individual
- Gross costing or using average costs
 - Allocate the total budget (expenditures) to a particular department or service.
 - Top down costing
- Not mutually exclusive

Analytical approach- Measurement

Step-down accounting

- Health facility level
- Identify major functions or cost centers of the facility

Dalaba et al. *BMC Health Services Research* 2013, **13**:287
<http://www.biomedcentral.com/1472-6963/13/287>



RESEARCH ARTICLE

Open Access

Cost of maternal health services in selected primary care centres in Ghana: a step down allocation approach

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Abstract

Background: There is a paucity of knowledge on the cost of health care services in Ghana. This poses a challenge in the economic evaluation of programmes and inhibits policy makers in making decisions about allocation of resources to improve health care. This study analysed the overall cost of providing health services in selected primary health centres and how much of the cost is attributed to the provision of antenatal and delivery services.

Methods: The study has a cross-sectional design and quantitative data was collected between July and December 2010. Twelve government run primary health centres in the Kassena-Nankana and Buiha districts of Ghana were randomly selected for the study. All health-care related costs for the year 2010 were collected from a public service provider's perspective. The step-down allocation approach recommended by World Health Organization was used for the analysis.

Results: The average annual cost of operating a health centre was \$136,014 US. The mean costs attributable to ANC and delivery services were \$23,063 US and \$11,543 US respectively. Personnel accounted for the largest proportion of cost (45%). Overall, ANC (17%) and delivery (8%) were responsible for less than a quarter of the total cost of operating the health centres. By disaggregating the costs, the average recurrent cost was estimated at \$127,475 US, representing 93.7% of the total cost. Even though maternal health services are free, utilization of these services at the health centres were low, particularly for delivery (49%), leading to high unit costs. The mean unit costs were \$18 US for an ANC visit and \$63 US for spontaneous delivery.

Conclusion: The high unit costs reflect underutilization of the existing capacities of health centres and indicate the need to encourage patients to use health centres. The study provides useful information that could be used for cost effectiveness analyses of maternal and neonatal care interventions, as well as for policy makers to make appropriate decisions regarding the allocation and sustainability of health care resources.

Keywords: Cost, Step-down allocation approach, Antenatal care, Delivery, Maternal health service, Ghana

Background

Reducing maternal and under-five mortality through the use of cost-effective strategies continues to be a challenge, particularly in developing countries. The worldwide maternal mortality ratio (MMR), or the number of women who die during pregnancy and childbirth per 100,000 live births, declined from 299 in 1990 to 202 in 2011, representing a 1.9% average annual rate of decline. Globally, under-five

mortality also declined over the past years reaching 7.2 million in 2011 [1].

In Ghana, the MMR declined from 394 deaths per 100,000 live births in 1990 to 328 deaths per 100,000 live births in 2011, a 0.9% average annual rate of decline. Also under 5 deaths in the country was estimated at 47,600 deaths in 2011 [1]. In the Kassena-Nankana and the Buiha districts, however, the MMR was high at 367 and 259 maternal deaths per 100,000 live births in 2010 respectively [2,3].

Given the limited health care resources in Ghana, coupled with the wide range of maternal and neonatal

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Activity based costing

- Program level (i.e. HIV, TB, immunization)
- Identify the major activities of each organizational level of the program and define these as the cost centers.

An activity-based cost analysis of the Honduras Community-Based, Integrated Child Care (AIN-C) programme

John L. Fiedler,^{1*} Carlos A. Villalobos² and Annette C. De Mattos¹

Accepted 12 May 2008

The Honduras AIN-C programme is a preventive health and nutrition programme of the Honduras Ministry of Health (MOH) that relies on volunteers to help mothers monitor and maintain the adequate growth of young children. A quasi-experimental, design-based evaluation found that the programme achieved near-universal coverage and was effective in improving mothers' child-rearing knowledge, attitudes and practices, including feeding and appropriate care-giving and care-seeking practices for children with diarrhoea and acute respiratory illness. The programme is widely regarded as a model. This study was undertaken to provide the first comprehensive estimates of the cost of the AIN-C programme, with the goal of providing a programme and financial planning tool for Honduras. An additional comparison of study findings was also undertaken to determine the cost of the AIN-C programme's community-based services relative to a similar facility-based service. Expressed in mid-2005 US dollars, the study found that after the programme is phased-in: (1) the annual, recurrent cost per child under 2 years participating in the programme is \$6.63; (2) the annual, incremental budget requirements per child under 2 years participating in the programme are \$3.90; (3) the cost of an AIN-C monthly growth monitoring and counselling session per child is 11% of the cost of a traditional MOH, facility-based growth and development consultation per child; and (4) the effect of mothers substituting AIN-C monitor care for MOH facility-based care 'saves' 203,000 outpatient visits a year, with a potential cost saving of \$1.66 million, the equivalent of 60% of the recurrent cost of the programme and roughly equal to the annual incremental budget requirements of the programme.

Sensitivity analysis of the cost estimates is performed to provide insight, for countries considering introducing a similar programme, into how modifications of key characteristics of the programme affect its costs.

Keywords: Nutrition, community-based nutrition, cost analysis, health care financing, community participation, volunteer incentives

Empirical data collection methods

Ingredients approach

- Collect information on quantities and the prices used to value all resources.



Expenditure approach

- Use total expenditure from budget or expense reports from Ministry of Health, implementing organization (i.e. NGO), or donor.

| | | | | | | | | | | |
|------------------------------------|-----|-------------------------------------|---------|---------|-------|---------|---------|---------|---------|------|
| 08/03/11 | 169 | Communication | 5000 | 0 | 5000 | 0 | 0 | 0 | 0 | 0 |
| 10/03/11 | 170 | Motorbike Maintenance | 4000 | 0 | 0 | 0 | 0 | 0 | 4000 | 0 |
| 12/03/11 | 171 | Safari allowance | 9375 | 0 | 0 | 0 | 0 | 0 | 0 | 9375 |
| 24/03/11 | 172 | Baseline Survey/Home visits | 8000 | 0 | 0 | 8000 | 0 | 0 | 0 | 0 |
| 25/03/11 | 173 | Quarterly Meeting | 8000 | 0 | 0 | 0 | 8000 | 0 | 0 | 0 |
| 25/03/11 | 174 | Logistical support | 2325 | 0 | 0 | 2325 | 0 | 0 | 0 | 0 |
| 25/03/11 | 175 | Safari allowance | 9375 | 0 | 0 | 0 | 0 | 0 | 0 | 9375 |
| 25/03/11 | 176 | Salaries for March | 33125 | 33125 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28/03/11 | 177 | Stationery | 5000 | 0 | 5000 | 0 | 0 | 0 | 0 | 0 |
| 28/03/11 | 178 | Fuel | 8000 | 0 | 0 | 0 | 0 | 0 | 0 | 8000 |
| 01/04/11 | 179 | Training Ag Extension Officers | 79320 | 0 | 0 | 0 | 79320 | 0 | 0 | 0 |
| 02/04/11 | 180 | 2 nd Vase Multiplication | 30000 | 0 | 0 | 30000 | 0 | 0 | 0 | 0 |
| 02/04/11 | 181 | Purchase of Fertilizer | 24500 | 0 | 24500 | 0 | 0 | 0 | 0 | 0 |
| 11/04/11 | 182 | Communication | 5000 | 0 | 5000 | 0 | 0 | 0 | 0 | 0 |
| 12/04/11 | 183 | Fuel | 8000 | 0 | 0 | 0 | 0 | 0 | 0 | 8000 |
| 14/04/11 | 184 | Safari Allowance | 9375 | 0 | 0 | 0 | 0 | 0 | 0 | 9375 |
| 14/04/11 | 185 | Logistical Support | 2325 | 0 | 0 | 2325 | 0 | 0 | 0 | 0 |
| 15/04/11 | 186 | Follow-up Visits | 5000 | 0 | 0 | 0 | 0 | 0 | 0 | 5000 |
| 19/04/11 | 187 | Stationery | 5000 | 0 | 5000 | 0 | 0 | 0 | 0 | 0 |
| 21/04/11 | 188 | Salaries for April | 33125 | 33125 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21/04/11 | 189 | Labels for beneficiaries | 8000 | 0 | 0 | 0 | 0 | 0 | 8000 | 0 |
| 24/04/11 | 190 | Stakeholders Meeting | 5000 | 0 | 0 | 0 | 5000 | 0 | 0 | 0 |
| 26/04/11 | 191 | Demo plot Establishment | 89850 | 0 | 0 | 0 | 0 | 0 | 89850 | 0 |
| TOTAL AMOUNT IN LOCAL CURRENCY (*) | | | 682768 | 132500 | 97500 | 100520 | 152220 | 121153 | 78875 | |
| TOTAL AMOUNT IN US DOLLAR (**) | | | 8753.43 | 1698.72 | 1250 | 1288.72 | 1951.54 | 1553.24 | 1011.23 | |

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SIGN *Lydia*

In practice, it is a combination of both methods

Cost Classification

Different way to consider costs categories

- Inputs
- Cost centers/function/activities
- Source of funding
- Level of service delivery
- Start-up costs verses recurrent
- Intervention specific costs verses joint or shared costs
- Combine categories inputs by activity

Cost categories: Inputs

Fixed costs* - remain the same regardless of the quantity of output produced

- Equipment (Vehicles, laboratory equipment, computers)
- Development of training or communication materials
- Overhead (building, utilities, indirect expenses)

Variable costs- depend on the quantity of output.

- Personnel allowances –travel and per diems
- Supplies (IEC materials, drugs and health commodities)
- Transport costs (fuel, maintenance, taxi, public transport)

* In the long-run there are no fixed costs

Valuing capital costs

- Large expenditures that last over one year.
- Could be a hospital, vehicle, laboratory equipment.
- Depreciation is included in costs.
- Also often investments that must occur at the beginning of a project or program.



Valuing volunteer labor

- Community health workers (CHW) provide a lot of support at both the community and health facility level.
- Economic or opportunity cost of next best use of CHW time.



Sources & methods for collecting quantity and price data

- Administrative data bases
 - From health facility
 - Project expense reports
 - MOH centralized records



- Standardized reporting forms
- Surveys for providers and beneficiaries
- Review of patient charts
- Observation or time-motion studies
- Expert panel
- Published price lists

Assessing costs and effectiveness of expanding high quality PMTCT services by community and facility strengthening in Mashonaland Central Province, Zimbabwe

Example

Zimbabwe ARISE Project: Intervention objectives

- Increase access to the WHO's recommended PMTCT prophylaxis regimen, including highly active antiretroviral therapy (HAART) to all pregnant women who need it for their own health.
- Increase community access to and uptake of PMTCT services.
- Evaluate the effectiveness of the intervention by measuring the decrease in HIV infection among HIV exposed infants.

Research Objectives

Economic evaluation objective:

- Determine *the CIDA funded frontline cost* per infant infection averted
- Sub-objectives:
- Costs: Estimate the *incremental program costs* incurred to provide Option A in Mashonaland Province
- Impact: Calculate the incremental cost-effectiveness, measured as *cost per infection averted*

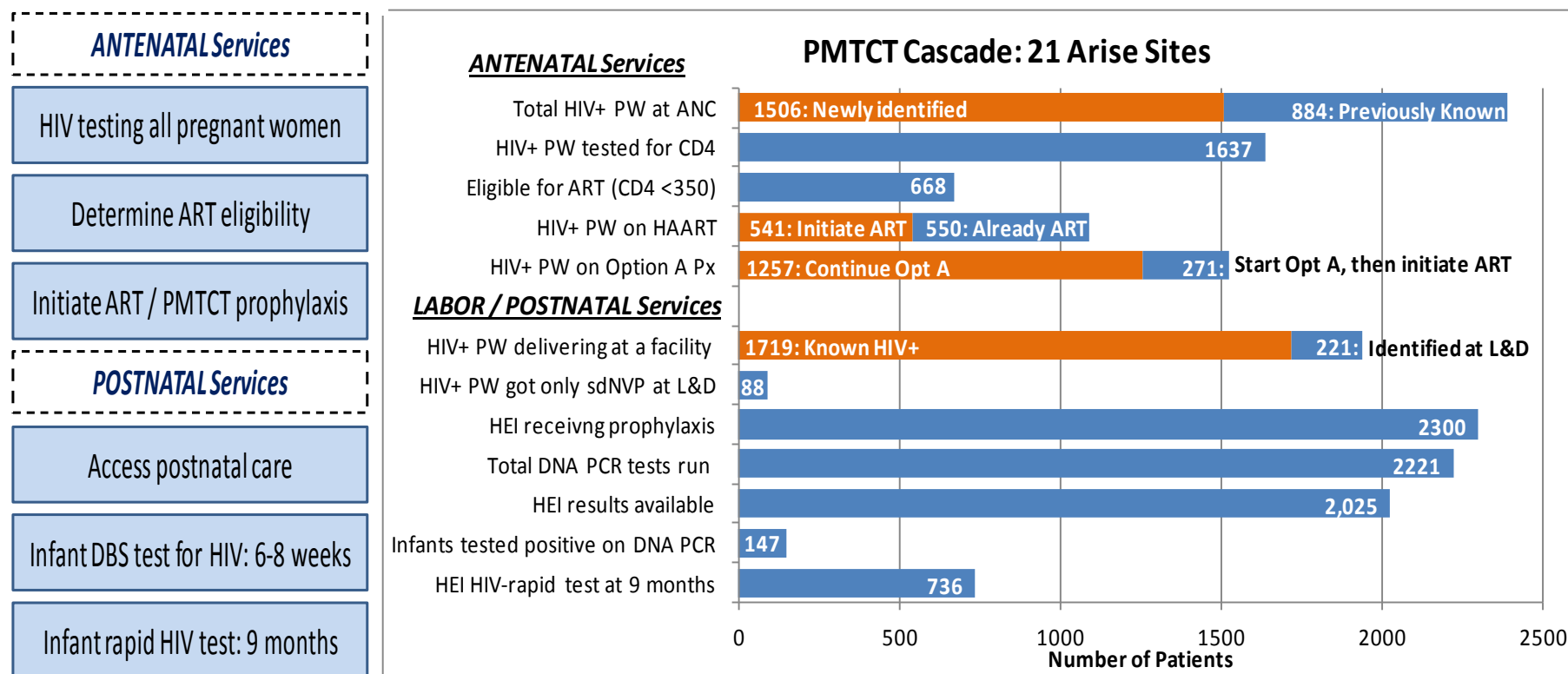
Comparison of PMTCT options

Table 1: Comparison of Zimbabwe’s WHO 2006 (“MER-28”) and WHO 2010 Option A (“MER-14”) guidelines for HIV-positive women and their HIV-exposed infants¹

| WHO 2006, Prophylaxis | WHO 2010, Option A Prophylaxis | WHO 2010, ART |
|--|---|---|
| Mother (CD4>350): | Mother (CD4>350): | Mother (CD4<350): |
| <ul style="list-style-type: none"> ANC: Single-dose nevirapine (NVP) or dual-drug prophylaxis regimen containing zidovudine (AZT) starting at 28 weeks gestation until BF cessation | <ul style="list-style-type: none"> ANC: 2x/daily AZT starting at 14 weeks gestation through pregnancy Labor: Single dose NVP at labor, plus initiation 2x/daily AZT+3TC for 1 wk postpartum | <ul style="list-style-type: none"> Triple ARV therapy starting at 14 weeks gestation and continued for life. TDF+3TC+EFV is preferred regimen |
| Infant: | Infant: | Infant: |
| <ul style="list-style-type: none"> Daily AZT from birth until 6 wks age (irrespective of feeding method) | <ul style="list-style-type: none"> Breastfeeding (BF): Daily NVP at birth through 1 wk after BF cessation Non-BF: Daily NVP at birth until 6 wks age | <ul style="list-style-type: none"> Daily NVP or 2x/daily AZT from birth until 6 wks age (irrespective of feeding method) |

¹ Fasawe, O, Avila C, Shaffer N, et al. Cost-Effectiveness Analysis of Option B+ for HIV prevention and treatment of mothers and children in Malawi. *PLoS ONE* 2013, 8(3).

Figure 1. PMTCT cascade¹ and corresponding mother-infant patient volumes during the costing period, February 2012-January 2013.



Source: Campbell J, Shelley K, Mangwiro A, Antoinette Bhattacharya A, Gaurav Bhattacharya G and Levin C. 'Assessing costs and effectiveness of expanding high quality PMTCT services by community and facility strengthening in Mashonaland Central Province, Zimbabwe.' Final Report for ARISE Enhancing HIV prevention programs for at-risk populations, CHAI, ZAPP, Population Council, PATH, CIDA 2013.

Perspective and cost definitions

- **Donor perspective (CIDA)**
 - **Frontline (financial) costs** represent actual project expenses paid for by the project to deliver goods and services
- **Ministry of health perspective (MOH Zimbabwe)**
 - **Economic or opportunity costs** value all resources used to provide services even if not paid for in the current project budget:
 - Donated goods and services, volunteer labor, contribution of goods and services by MOH

Start up activities

- Intervention
 - Microplanning
 - Development and prodn of IEC materials
 - Development and prodn of training materials
 - Sensitization and awareness raising
 - Training



Recurrent activities

- Health system strengthening
- Procure CD4 machines
- Mentoring program
- Training and capacity strengthening
- Procurement
- Health Service Delivery (MOH)
- Community activities to increase demand for services
 - Continuous awareness raising and sensitization
- Supervision



Cost input/activity categories

Variable costs

- Health commodities
- Transport
 - Fuel, parking, maintenance, repairs, taxis, tolls, insurance)
- Personnel
- Office facilities
- Management meetings
- Training/supervisory meetings
- Overhead costs

Fixed or capital goods

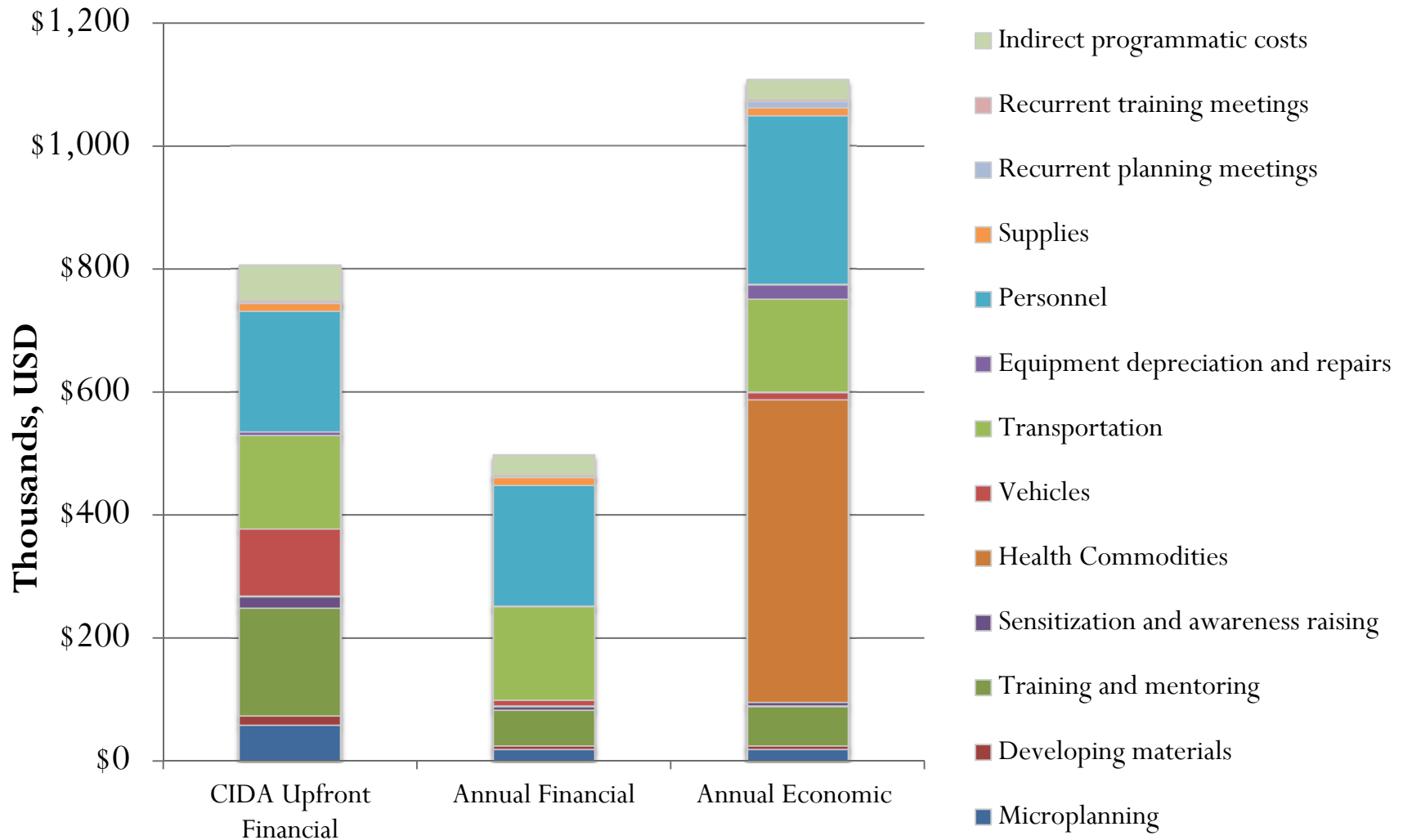
- Vehicles
- Equipment
 - CD4 machines
 - Computers
- Start-up activities
 - Microplanning
 - Developing materials
 - Training
 - Sensitization and awareness raising



Cost outcomes

- Total intervention cost
- Cost profile (share of costs to inputs or activities)
- Cost per pregnant woman screened for HIV
- Cost per HIV positive woman treated
- Cost per infant infection averted

Arise Zimbabwe project: Costs of strengthening access to PMTCT (US \$2012)



Start-up and recurrent costs by implementing partner (US 2012)

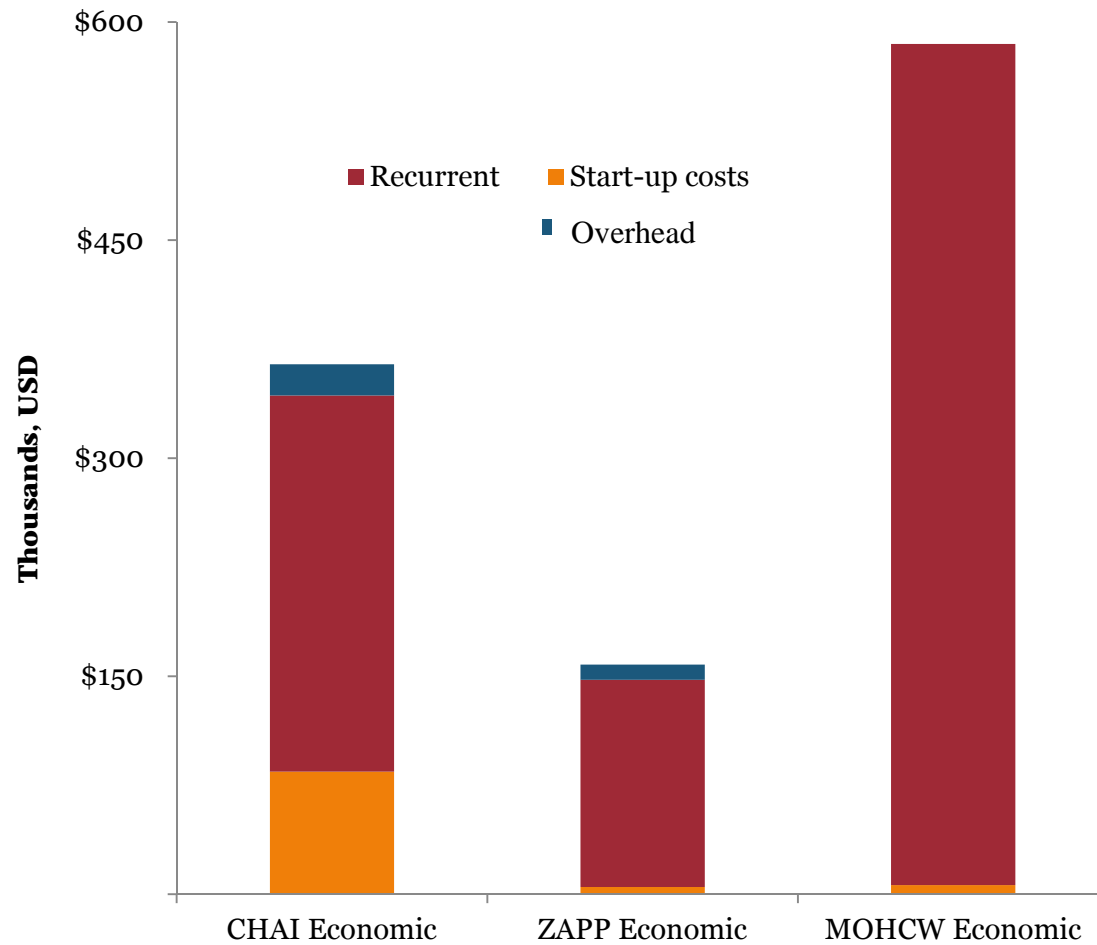


Table 1: Annual financial and economic costs by cost category (US \$2012)

| Cost Category | Unit costs |
|--|-----------------|
| | US \$ 2012 |
| # of beneficiaries | 20,954 |
| <i>Start-up</i> | |
| Microplanning | \$ 0.93 |
| Developing materials | \$ 0.24 |
| Training and mentoring | \$ 3.08 |
| Sensitization and awareness raising | \$ 0.31 |
| <i>Sub-total Start-up</i> | \$ 4.57 |
| <i>Recurrent</i> | |
| Health Commodities (consumable supplies) | \$ 23.46 |
| Transportation | |
| - Capital (vehicles annualized depreciation) | \$ 0.60 |
| - Recurrent (Fuel, parking, maintenance, repairs, taxis, tolls, insurance) | \$ 7.24 |
| Equipment (CD4 machines, computers annualized depreciation) | \$ 1.13 |
| Personnel - implementation staff (excludes management team) | \$ 13.09 |
| Office facilities (supplies and communication, such as copying, telephone, postage, stationary, registers, support to PMTCT program) | \$ 0.61 |
| Project management meetings | \$ 0.48 |
| Training/supervisory meetings | \$ 0.16 |
| <i>Sub-total Recurrent</i> | \$ 46.76 |
| Overhead | \$ 1.52 |
| Total Cost per beneficiary | \$ 52.85 |

Summary of ARISE

Zimbabwe intervention costing methods

- Micro-costing approach
- Bottom up approach
 - Combine activity based costing, ingredients approach and budget expenditure data
- Payer perspectives
 - Donor and Ministry of Health
- Multi-level:
 - National (NGO), health facility, community
- Sub-sample of project intervention health facilities
- Incremental cost to existing PMTCT services

Limitations of micro-costing data

- Using data from demonstration projects may have limited information on cost of actual nationwide introductions
 - Depends on scope of demonstration project
 - How coordinated project is with national program
 - Assumes HR and capital requirements are in place
- Projections of cost of scaling-up are based on assumptions
 - Need information on health system infrastructure
 - Identify resource gaps

Going to scale: project verses program-what is the difference?

- Scale and time horizon (returns to scale)
- Demonstration project informs scaled up program
- May or may not be integrated into existing services, systems (infrastructure, training, communication, job aids, staff, processes)
- Project may involve inputs and activities that would not occur in the absence of external donor support.
 - Abundance of planning meetings, awareness raising and sensitization activities
 - Capital expenses to support project
 - International technical expertise

Scaling up to national programs

- Constant returns to scale? Not likely.
- Increasing returns to scale? Lower cost per impact achieved?
 - Scale up yields economies of scale.
 - Investment in physical and human capital < extra cost of increasing coverage
- Diminishing returns to scale?
 - Marginal cost of reaching more remote areas with intervention > than economies of scale achieved with scale up.

Concluding remarks

- There is general consensus on the principles of costing
 - Define the problem
 - Describe the intervention
 - Identify resources
 - Measure resources
 - Attach a value to resources
- There are multiple ways to value resources—or measuring ‘costs’ and there is no single “right” way to do it.
 - All have advantages and disadvantages



Best practice depends on...

- Purpose of the study
- Perspective
- Type and complexity of the health intervention or technology
- Precision required
- Generalizability and representativeness required
- Feasibility and costs of measurement method

Thank you !

| PMTCT Cascade | Average time spent by primary care counselor (minutes) | Average time spent by primary care nurse (minutes) | Average time spent by registered general nurse (minutes) | Average time spent by registered midwife (minutes) | Average time spent by community mobilizer (minutes) | Total labor cost per HIV + PW or HIV - PW |
|--|--|--|--|--|---|---|
| General ANC care (health education only) | | | | | | |
| Testing for HIV (pre-test counseling, HIV test, post-test counsel, return results) | | | | | | |
| HIV positive PW | | 45 | | | | |
| HIV negative PW | | 20 | | | | |
| Enroll all HIV+ PW in care (Begin on MER 14 prophylaxis) | | 30 | | | | |
| Determine ART eligibility (CD4 testing, return CD4 results) | | 32 | | | | |
| Initiate ART for eligible PW (ART prep sessions 1, 2, 3 and initiation) | | 135 | | | | |
| Follow-up during ANC (time for drug dispensing during ANC only) | | 25 | | | | |
| Labor and delivery | | 25 | | | | |
| Access postnatal Care (3 days, 7 days, 6 weeks) | | 60 | | | | |
| Re-test HIV negative PW (with results older than 3 months) | | | | | | |
| Drug dispensing (Nevirapine prophylaxis and Contrimoxazole)- | | 45 | | | | |
| Determine HIV status of infant at 6 weeks (DBS sample, counsel, document) | | 50 | | | | |
| Return HIV result to caregiver | | | | | | |
| Rapid HIV Test for HIV-exposed infants at 9 months | | 20 | | | | |
| Initiate HIV+ baby on pediatric ART | | 20 | | | | |
| Drug dispensing pediatric ART | | 45 | | | | |
| Total clinical time HIV + PW (minutes) | 0 | 533 | 0 | 0 | 0 | |
| Total clinical time HIV -PW (minutes) | 0 | 21 | | | | |
| Cost per minute | \$ 0.03 | \$ 0.07 | \$ 0.08 | \$ 0.08 | | \$ 37.64 |
| Total clinical cost HIV + PW | \$ - | \$ 37.64 | | | | \$ 1.48 |
| Total clinical cost HIV -PW | \$ 0.00 | \$ 1.48 | \$ - | \$ - | \$ - | \$ 18.86 |
| Total clinical cost of HIV+ partner | | \$ 18.86 | | | | \$ 1.41 |
| Total clinical cost of HIV- partner | | \$ 1.41 | | | | |

Methods for data collection and analysis

How to choose which health economic analysis to do?

Choosing the appropriate economic evaluation method

- What is the research question?
- Who is your audience?
- How will you use the information?
- When do you need it?
- How much money do you have?



What is the objective of the economic evaluation?

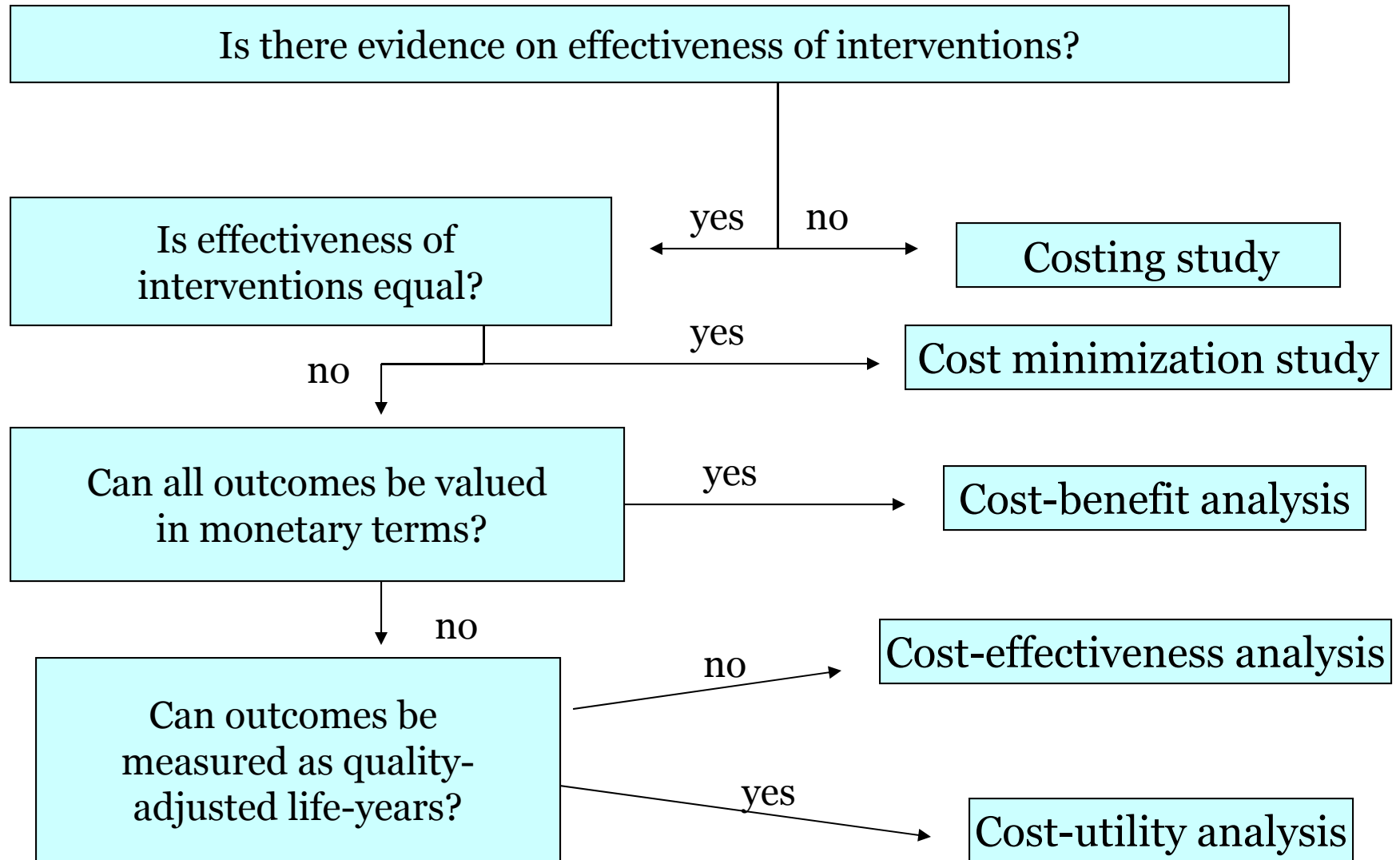
- Comparing costs and effects of alternative interventions using CEA or CEU?
- Costs of a new health intervention or technology?
- Costs of a demonstration project?
- Costs associated with project impact?
- Costs associated with scaling up?
 - What it would cost a national program to achieve a planned impact? (i.e. 70% coverage of ART therapy for HIV positive individuals).
- One or more of the above?

Defining the economic evaluation

| <i>Describe</i> | <i>Questions to consider</i> |
|---------------------------------|---|
| Study objective(s) | What is the specific research objective for the economic evaluation? |
| Study design | How will costs and effects be evaluated as part of the overall monitoring and evaluation strategy? |
| What is being evaluated? | <ul style="list-style-type: none"> • Health outcomes • Health outputs (coverage, utilization) • Other performance or operational indicators • Costs |
| <i>Health outcomes</i> | Which health outcomes will be evaluated? <ol style="list-style-type: none"> 1. Cases averted 2. Deaths averted 3. Disability averted |
| <i>Health outputs</i> | What additional intermediate output indicators will be evaluated? <ul style="list-style-type: none"> • Number of target group reached by intervention • Number of target group tested • Number of target group diagnosed (number positive, number negative) • Number of individuals treated |

Defining the economic evaluation

| <i>Describe</i> | <i>Questions to consider</i> |
|--|---|
| <i>Performance or operation indicators</i> | What operational indicators will be evaluated? <ol style="list-style-type: none"> 1. Quality or other performance indicators 2. Number of tests correctly identifying individuals for treatment. 3. Number of target group correctly treated. 4. Loss to follow up |
| <i>Costs</i> | Which costs will be included in the analysis? <ol style="list-style-type: none"> 1. Intervention costs 2. Medical treatment costs averted 3. Client costs incurred or averted |
| What will this data reveal? | <ul style="list-style-type: none"> • Cost per case or death averted • Cost per individual (in target group) reached • Cost per person screened • Cost per person treated • Cost breakdown (cost profiles) for intervention components (inputs/activities) • Information for program planners on the costs and benefits of proposed intervention. |
| How will the data be used? | <ul style="list-style-type: none"> • Used in cost-effectiveness analysis to compare new intervention to status quo • To consider introduction or scaling up existing prevention or treatment activities in the country • To evaluate financial sustainability or affordability to the government |



Source: Gray, A. Economic Evaluation in Dawes, et al. Ed. Evidence Based Practice: A primer for health care professionals. 2001.

Basic types of health care evaluations

Are both Costs and Outputs measured?

| | | | | |
|---------------------------|--------------------------------------|---|--|-----------------------------|
| Compare two alternatives? | NO | NO | YES | |
| | NO | Examines Consequences Only | Examines Costs Only | Describe Costs and Outcomes |
| | | Describe Outcomes | Describe Costs | |
| YES | Efficacy or Effectiveness Evaluation | <ul style="list-style-type: none"> • Cost Analysis | <ul style="list-style-type: none"> • Cost-Effectiveness Analysis • Cost-Benefit Analysis | |

Source: Drummond et al.



Getting started- a few ideas

- Integrate cost analysis into on-going evaluation.
- Depending on resources and when analysis is needed, may consider a rapid approach.
- Focus efforts on obtaining data on the largest input categories.
- Work closely with local counterparts to collect basic data and cost information.
- Look for local health economists who can direct you to resources.



Thank you.