

How to measure cost to deliver medical care: Micro-costing method

In this section we specifically focus on the micro-costing method. The micro-costing approaches provides accurate and relevant cost information which reflect the true costs to deliver care to the individual patient.

Micro-costing with time-drive Activity Based Costing (TDABC) is an innovative approach to measuring costs across an entire episode of care. Activity-based-costing is a well-known methods that has been increasingly adopted by health care. This method is useful to practitioners and researchers interested in improving the value their intervention delivers to patients or to demonstrate program sustainability. TDABC has been found to be very practical for estimating the costs of new interventions when there is no established estimate of costs.

Micro-costing:

Micro-costing methods or bottom-up costing offers a more precise cost estimation and can reflect the actual resources used as compared to gross-costing. The micro-costing estimation provides the true costs to the healthcare system of the intervention. Micro-costing can be used with cost-benefit or cost-effectiveness analysis studies.

- a. When you would use micro-costing
 - a. Intervention or new treatment that does not have established average costs
 - b. A study of within system procedure variation
 - c. Clinical practice guideline development

- b. Micro-costing steps
 - i. Process Mapping to capture current care delivery process from the provider's perspective.
 1. Each step reflects an activity in patient care delivery
 2. Identify the resources (facility space & equipment) involved for the patient at each step
 3. Identify any supplies used for the patient at each step
 - ii. Activity Measurement
 1. Direct observation and measurement of health care resources used at the patient level (TDABC) OR
 2. Cost of treating the individual with relative value unit (RVU) or work relative value unit (WRVU)
 - iii. Cost Calculation (TDABC costing template)
 - a. Calculate the capacity cost rate (CCR) for each resource
 - b. Calculate the total direct costs (personnel, equipment, space & supplies) of all the resources used over the cycle of care
 - c. Identify and allocate the indirect costs attributable to the cycle of care

