

Data Collection for Health System Costing in India

Data collection District Hospital

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THIS DOCUMENT IS PART OF A SERIES THAT PROVIDES A STANDARDIZED METHODOLOGY FOR COSTING HEALTH SERVICES IN INDIA. THE SERIES DESCRIBES THE METHODOLOGY USED IN THE COSTING AND ALSO PROVIDES A MANUAL AND SET OF DATA COLLECTION TOOLS FOR USE IN APPLYING THIS METHODOLOGY. THE METHODOLOGY FOLLOWS STANDARD COSTING PRINCIPLES.

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General instructions for cost data collection at the level of medical colleges

The data collection tool for collecting cost data at the speciality level of a district hospital has been divided into 4 parts based on the division of cost centres at a speciality level i.e., Outpatient department (OPD), Intensive care unit (ICU), Inpatient ward (IPD) and Operation theatre (OT). In addition to these 4 cost centres, there is a section for collecting the background information on the number and wages of human resources, expenditure on overheads, stationary and sanitary items, etc. pertaining to each speciality as a whole has also been included in overall cost data collection tool. The sections pertaining to specific cost centres (OPD, ICU, IPD) are designed to collect information on inputs (like space, equipment, drugs, consumables, etc.) consumed and service output produced as a whole.

The section on OT aims to capture surgery specific information at a more detailed level for both service outputs like number of various surgeries performed by the respective department during the reference period and inputs in term of usage of various equipment for specific surgeries present in the operation theatre. The last sub-section of the tool on OT is designed to collect information based on the interview of key personnel on the following key indicators in the respective department.

- 1. Time taken in performing a particular surgery.
- 2. Average length of stay in the intensive care unit following a particular surgery.
- 3. Average length of stay in the inpatient ward following a particular surgery.
- 4. Number of different personnel involved in the surgery.
- 5. Number of various diagnostic tests prescribed to the patient undergoing a particular surgery
- 6. List of consumables for each of the procedure (list of consumables purchased by the patient before undergoing surgery)

Overall department cost data collection tool for District hospital

Interview Date:	State Name:					
Facility Name:	Department Name:					
	Section 1 : Background information					
Name of the State						
Name of the Facility						
Name of the Department						
	Section 2 : Facility information					
Public holidays in last year (Excluding Sundays)						
Days per week facility is closed						
Hours per day facility is open						
Average length of stay						
Total population under the facility						
Total males						
Total females						
Total children under five years						
Total children > 5 years						

Section 3: Human resource - Salar	1 () () () () ()	(D i i i i i i i i i i i i i i i i i i	i 1 '	1 • 1 1 \
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			Staff				Anı	nual Allowance	25	
S.No.	Designation	Speciality	Utility (OPD / IPD / Operation theatre)	Monthly Salary	Leave days in the reference year for each staff	Incentive/other allowances like TA/DA received for training	Total housing allowance (if received)	Total transport allowance	Total uniform allowance	Period/Days of Posting the year 2014-15
						>				
					77					

^{*}It includes all the staff involved in OPD/IPD-ICU/OT i.e., doctor (Specialist), senior resident, staff nurse, technician, data entry operator, pharmacist, helper, etc.

Section 4 : Capital Space
Area of the Department (Total area in Sq. ft.) (Covered + open space)
What is the rental price of 100 Sq.ft. place where this Public Health Centre is located?
Was there any expense on construction of Department or renovation during the period of data collection?

	Section 5 : Stationary and other miscellaneous items						
S.No.	Name of Item	Quantity	Unit Cost				

Section 6 : Overheads (Overall for the all departments)						
Name of items	Expenditure (Annual)					
A. Building						
Electricity						
Water						
Maintenance						
Telephone						
Kerosene						
Other						
Total (If available)						
B. Equipment						
Maintenance						
Repairs						
Others						
Total (If available)						

	Section 7 : Utilization of funds and grants						
S.No.	Name of grant	Amount					

	Apportion the amount according to the fund utilized in the type of service mentioned below (Enter 1 in below cells highlighted in green colour)							
OPD	IPD	Operation theatre	General Administration	Teaching / Training	Workshop / Conference	Outreach	Meeting	Research

	Section 8 : Revenue generated							
S.No.	Source	Amount						

	Section 9 : Time allocation									
	Type of activity	F	ixed schedule	e activity			Rou	tine Activity		
Activity name	Fixed=1, Routine=2	Frequency	Hours per day of activity	Days for which the activity was done during the reference year	Time per person (in minutes) (a)	Number of beneficiaries on a routine day (b)	Number of beneficiaries on a routine day (b) (weekly)	Number of beneficiaries on a routine day (b) (monthly)	Number of beneficiaries on a routine day (b) (Yearly)	If not (a) and (b) then how much time to do the activity
Staff Member Name										
OPD										
IPD										
ICU										
Operation theatre										
General administration										
Teaching / training										
Workshop / Conference										
Outreach										
Meetings										
Research										

^{*&#}x27;1' for once a year participation, '2' for twice a year, 3 for thrice a year participation, 4 for quarterly participation, 5 for once every two months, 6 for monthly participation, 7 for fortnightly participation, 8 for weekly participation, 9 for twice a week participation, 10 for thrice a week participation.

Cost data collection tool of OPD for Tertiary care hospital

	Section 1 : Service delivered in different rooms						
S.No.	Speciality (If any)	Number of outpatient consultations delivered					

	Section 2 : Individual Room (Room wise dimensions in the outpatient department)								
S.No.	Name of room	Area in Sq. feet							

Section 3 : Furniture items (Observations & record review)					Qua	antity of fur	niture item	s in each ro	om			
S.No.	Name of Item	Unit cost	Average life	OPD Room no. 1	OPD Room no. 2	OPD Room no. 3	OPD Room no. 4	OPD Room no. 5	OPD Room no. 6	OPD Room no. 7	Corridor	Corridor
								1				

	Section 4 : Equipment / other items (Observations & record review)									
S.No.	Room Name	Name of Equipment	Quantity	Unit Price	Average life	Date of purchase of equipment				
	Room no. 1									
	Room no. 2									
	Room no. 3									

	Section 5 : Drugs (Details of drugs consumed in the outpatient department)								
S.No.	Name of Drug	Quantity consumed	Quantity expired	Unit Price					

	Section 6 : Consumables (Details of consumables consumed in the outpatient department)								
S.No.	Name of Consumable	Quantity	Unit Price						

	Quantity	Expenditure (Annual
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oifferent types of laundry items washed		
otal		
fferent types of diets served		
	-	

Cost data collection tool of IPD for District hospital

	Section 1 : Human resource (List the number of consultants/residents from other departments visiting the inpatient ward (IPD) of the selected department)									
S.No.	Designation	Speciality	Monthly gross salary	Average visits per week in the inpatient ward of the selected department	Average time per visit (in minutes)					

	Section 2 : Annual service detail								
S.No.	Number of patients admitted in the Inpatient ward	Specific reason of admission							

	Section 3: Individual Room (Room wise dimensions in the inpatient department)								
S.No.	Name of room	Area in Sq. feet							

Section 4 : Furniture items (Observations & record review)					Q	uantity of fu	rniture items	in each roor	m			
S.No.	Name of Item	Unit cost	Average life	IPD Ward no. 1	IPD Ward no. 2	IPD Ward no. 3	IPD Ward no. 4	IPD Ward no. 5	IPD Ward no. 6	IPD Ward no. 7	Corridor	Corridor

	Section 5 : Equipment / other items (Observations & record review)										
S.No. Room Name Name of Equipment Quantity Unit Price Average life Date o											
	Ward no. 1										
	Ward no. 2										
	Ward no. 3										

	Section 6 : Drugs (Details of drugs consumed in the inpatient department)								
S.No.	Name of Drug	Quantity consumed	Quantity expired	Unit Price					

	Section 7: Consumables (Details of consumables consumed in the inpatient department)					
S.No.	S.No. Name of Consumable Quantity Unit Price					

Section 8: Utility (Diet & Laundry)				
	Quantity	Expenditure (Annual)		
Different types of laundry items washed				
Total				
Different types of diets served				
Total				

Cost data collection tool of ICU for District hospital

	Section 1 : Human resource (List the number of consultants/residents from other departments visiting the intensive care unit (ICU) of the selected department)						
S.No. Designation Specialty Monthly gross salary Average visits per week in the ICU of the selected department minutes)				Average time per visit (in minutes)			

	Section 2 : Annual service detail					
S.No.	Number of patients admitted in the ICU of the department	Specific reason of admission				

	Section 3: Individual Room (Room wise dimensions in the intensive care department)				
S.No.	Name of room	Area in Sq. feet			

Section 4 : Furniture items (Observations & record review)			Quantity of furniture items in each room						
S.No.	Name of Item	Unit cost	Average life	ICU Room no. 1	ICU Room no. 2	ICU Room no. 3	ICU Room no. 4	Corridor	Corridor

	Section 5 : Equipment / other items (Observations & record review)					
S.No.	Room Name	Name of Equipment	Quantity	Unit Price	Average life	Date of purchase of equipment

	Section 6: Drugs (Details of drugs consumed in the intensive care department)					
S.No.	Name of Drug	Quantity consumed	Quantity expired	Unit Price		

	Section 7: Consumables (Details of consumables consumed in the intensive care department)				
S.No.	Name of Consumable	Quantity	Unit Price		

Section 8 : Utility (Diet & Laundry)				
	Quantity	Expenditure (Annual)		
Different types of laundry items washed				
Total				
Different types of diets served				
Total				

Cost data collection tool of OT for District hospital

	Section 1 : Annual service detail				
S.No.	Name of surgery	Annual number of surgeries done in financial year			

	Section 2 : Individual Room (Room wise dimensions in the operation theatre)					
S.No.	Name of room	Area in Sq. feet				

^{*}If the OT complex is common for whole of the institute, then ask about the:

• Number of operation theatres reserved for the respective specific speciality

OR

• If number of OTs are limited and specific days of a week are fixed for each of the department within the institute; then ask about the number of fixed days / week for which the certain number of operation theatres are booked for the department under study

Section 3 : Furniture items (Observations & record review)			Quantity of furniture items in each room									
S.No.	Name of Item	Unit cost	Average life	Operation theatre no. 1	Operation theatre no. 2	Operation theatre no. 3	Operation theatre no. 4	Operation theatre no. 5	Operation theatre no. 6	Operation theatre no. 7	Corridor	Corridor

	Section 4: Equipment / other items (Observations & record review)							
S.No.	Room Name	Name of Equipment	Quantity	Unit Price	Average life	Name the surgery for which it is used	Date of purchase of equipment	
	Operation theatre 1							
	Operation theatre 2							
	Operation theatre 3							

	Section 5 : Drugs (Details of drugs consumed in the operation theatre)							
S.No.	Name of Drugs	Quantity Consumed	Quantity Expired	Name the surgery for which it is used	Unit Price			

	Section 6 : Consumables (Details of consumables consumed in the operation theatre)							
S.No.	S.No. Name of Consumable Quantity Unit Price							

Section 7 : Utility (Diet & Laundry)						
	Quantity	Expenditure (Annual)				
Different types of laundry items washed						
Total						
Different types of diets served						
Total						

Key personnel interview

Ask the following information from a key personnel for each of the surgery to be costed in a particular department:

Procedure - 1								
Average time taken for performing the procedure in the operation theatre Average length of stay in the intensive care unit (if any) Average length of of stay in the inpatient ward			Number of specific personnel involved in the surgery (Consultant, Senior resident, Junior resident, Anesthetist, Residents of an aesthesia, OT technicians, etc.)	Number of various diagnostic tests performed on a patient undergoing the procedure	List of consumables for each of the procedure (list of consumables purchased by the patient before undergoing surgery)			

Procedure - 2							
Average time taken for performing the procedure in the operation theatre	Average length of stay in the intensive care unit (if any)	Average length of stay in the inpatient ward	Number of specific personnel involved in the surgery (Consultant, Senior resident, Junior resident, Anesthetist, Residents of anesthesia, OT technicians, etc.)	Number of various diagnostic tests performed on a patient undergoing the procedure	List of consumables for each of the procedure (list of consumables purchased by the patient before undergoing surgery)		