Chapter 5
Statistical Inference to Develop Budgets From Activity-Based Funding Costing Data

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ABSTRACT

Activity-based funding (ABF) is a way of funding hospitals whereby they get paid for the number and mix of patients they treat. In order for governments to fund hospitals using ABF, hospitals use costing to inform the development of classification systems which provide valuable information for pricing purposes. Hospital patient costing is essential for understanding the total costs involved in treating a patient including the services or products used. This chapter outlines a methodology using simple statistics to prepare a budget for an inpatient ward using costing data. This method can be extended to other clinical areas (e.g., residential aged care or non-admitted).

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INTRODUCTION

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This paper outlines a methodology using simple statistics to prepare a budget for an inpatient ward using costing data. This method can be extended to other clinical areas, e.g. residential aged care or non-admitted.

BACKGROUND TO HOSPITAL COSTING

In many jurisdictions across the world where activity-based funding is used to inform healthcare funding, hospital product costing is the process of identifying the inputs used in a hospital and attributing the costs of those inputs to the production of products (patient and non-patient). It should be understated that this process is not simple and requires expertise in identifying inputs and outputs, guidance for allocating the costs, and considerable complex numerical processing, which can only realistically be done using purpose-built product costing software.

Broadly, the process of costing products consists of four steps (IHPA, 2014). "The first step is to manipulate the costs recorded in the general ledger to reflect the products that are being costed (this manipulation is best done inside the costing system, not the general ledger). This process involves identifying those costs incurred in the hospital, as well as those costs generated by the hospital that are necessary for producing the products to be costed. It then requires the alignment of the timing of incurring the costs and producing the products. Once all in-scope costs have been identified, the costs reported in all cost centres are mapped to the standard line items, and the cost centres are partitioned into overhead and final cost centres."

"The second step involves apportioning all costs in overhead cost centres to final costs centres. In performing this function it is important to ensure that the cost centres or parts of cost centres that are associated with non-patient products are allocated their fair share of overheads (if necessary, non-patient product costs centres may then be terminated, and only patient products costed to end-classes, typically individual patient service events)."