

# **Costing, Funding and Budgetary Control in UK Hospitals**

## **A Historical Reflection**

### **Abstract**

This historical reflection traces the changes in accounting practice in UK hospitals, focussing on costing, funding and budgetary control. The paper finds that, contrary to many implicit assumptions in academic accounting studies, our accounting ancestors promoted, and sometimes used, accounting data in pursuit of similar objectives to those advocated in the 21<sup>st</sup> century. For example, cost comparison information, often prepared with the aim of rewarding 'efficient' hospitals, is a particular feature of accounting practice throughout the last hundred years. This cost information 'evolved', within its historical context, although the process of establishing standard costs was slow and controversial, and the use of such information for funding hospital activity was avoided. The paper also argues that information for control, particularly budgetary control, was central to the nationalised service, and achieved its primary aim of limiting expenditure (Lapsley, 2001a). Finally it is argued that, given the long history of problems, perhaps it is time to reconsider the benefit of producing standard cost data for all hospitals.

**Key Words: hospital history, accounting change, costing, budgeting.**

## Introduction

This paper provides a historical overview of the provision of accounting information in UK hospitals from 1893-2003, exploring the changing role and nature of accounting practice, particularly for control, costing and funding. The aim is to provide a historical reflection that ‘supports contemporary research in policy-making and practice’ and to ‘acquaint accountants with the ideas, experiments and lessons that constitute our heritage’ (Previts *et al.* 1990. p.3).

A number of authors argue that public sector accounting history is limited, certainly when compared to our knowledge of private sector enterprises (Parker, 1993; Carnegie and Napier, 1996). Within UK Local Authority or Municipal Corporations this neglect has been partly filled by the work of Jones (1992) and Coombs and Edwards (1993; 1994; 1995). In UK healthcare there have been histories tracking the origins of depreciation accounting (Mellett, 1992), the wider societal drivers of accounting change (Jones and Mellett, (2007) and the move to departmental costing in the early NHS (Robson, 2003). In US hospitals, Preston (1992) traced the ‘*emergence and transformations of discourses on costs and practices of accounting*’ and Scott et al (2003) explored the rotation between cash and accrual accounting in Australian hospitals.

Carnegie and Napier (1996) suggest two possible reasons for the ‘historical imbalance’ (p. 26)’ between private and public sector accounting research. Firstly, it ‘may reflect the bias towards financial reporting and the activities of professional accountancy ...’, (p.26) and secondly, that accounting history is dominated by the use of ‘economic models of decision making based on notions of profit maximization...to explain the emergence and development of accounting methods’ (p.26). While the absence of the profit motive may indeed explain why public sector accounting histories are relatively rare, it is possible to take issue with the suggestion that public sector institutions do not utilise economic models to drive decision-making, and, indeed, accounting change. For example the numerous calls to improve ‘efficiency’ in the public sector are often accompanied by the mobilisation of accounting information, which could be interpreted as an ‘economic-rationalist’ justification for change (Hopwood, 1984; Perrin, 1988). Of course it is also possible to argue that there is evidence to support other change perspectives. For example, the paper will argue that accounting techniques often followed perceived ‘best practice’ and therefore it is possible to view hospital accounting change from the perspective of ‘institutional theory’ (DiMaggio and Powell, 1983; Covalski *et al.* 1993; Mueller and Carter, 2007).

In addition a number of authors identify the creation of the ‘internal market’ for healthcare in the 1990s as a significant driver of accounting change (Ellwood, 1990; 1990b; Broadbent *et al.* 1991; Chua and Preston, 1994). For Ellwood the internal market reforms were “the most radical change in the operation of the NHS since its inception. The challenge in terms of management accounting is immense; major changes in NHS costing and financial information systems will be required” (1990b. p.24). This paper seeks to assess this claim and to challenge a number of other assertions, or ‘conventional wisdoms’, about hospital accounting practices. These can be broadly summarised:

- Prior to 1979 accounting within the hospital sector was primarily concerned with its treasury function rather than the provision of information for managerial decision-making (Hopwood, 1984; Perrin, 1988; Broadbent and Guthrie, 1992).
- The NHS was a slow adopter of new accounting technologies (Mellett, 1992).
- Accounting tended to be inadequate for the large modern (i.e. post 1960) hospital (Bourn and Ezzamel, 1986; Perrin, 1988).

The paper first undertakes a chronological examination of accounting change from the introduction of uniform accounts in 1893 to the costing of Healthcare Resource Groups [HRGs] in the late 1990s. It draws from the accounting academic literature which is supplemented by reference to government publications, accounting practitioner journals and public records. A wide ranging discussion follows and the paper then presents some conclusions.

### **The Uniform System of Accounts ~ from 1893**

Before the ‘nationalisation’ of UK hospitals in 1948 most UK acute hospitals were part of the voluntary sector, with each hospital a separate legal entity, governed by a local board elected from subscribers (Stone, 1924; 1936; 1953) and funded from a variety of sources. In the 1890s these sources were predominately donations and subscriptions, although a small amount, around 9 % of total income (Burdett, 1901), was received from what was referred to as hospital funding institutions, charities set up to fund hospitals. Waddington (1995; 1996) refers to this as ‘indirect philanthropy’.

In 1893 the *Uniform System of Accounts* was published by Sir Henry Burdett (Rivet, 1986). Similar accounting systems were also advocated by other charitable reformers, most notably the Charity Organisation Society (Robson, 2006). The uniform accounts itemized

expenditure by type, e.g. provision costs [food and drink], drugs and nurses wages and this was later described as the *subjective analysis* of expenditure. In the 1916 edition of the accounts, there were over 50 classifications of expenditure and hospitals were required to produce statistical tables detailing information on the number of beds available, and number of in- and out-patients.

Financial and statistical data were combined to provide unit-cost information, most importantly ‘average cost-per-bed occupied’ was published annually by the Kings Fund [for hospitals in London], and for most large hospitals in the UK in the publication *Burdett’s Hospitals and Charities* (Burdett, 1901; Rivett, 1986; Prochaska, 1992). Burdett’s publication was a major source of information for hospital managers as it included data on income sources, type of expenditure and cost-per-bed comparisons, for a substantial number of hospitals. Also in recognition of the higher costs associated with London hospitals and hospitals with medical schools, Burdett’s publication grouped these hospitals together to aid comparison. Indeed the extensive performance measurement information collected and presented would not be out of place in the league table culture of the 21<sup>st</sup> Century.

It is difficult to assess how this information was used and what effect it may have had on hospital performance. Social reformers, such as Burdett and some of the funding institutions, saw the accounts as a means of ‘judging’ performance and rewarding ‘efficient’ hospitals with increased grant income (Rivett, 1986; Prochaska, 1992), although the author has not seen any evidence to confirm that the ‘threat’ was implemented. Certainly cost-per-bed data represented an early attempt to use a standard cost unit to compare hospital performance and reward those institutions considered efficient by increased funding. During World War II cost-per-bed information was used by the Government to fund voluntary hospitals for treating casualties (Titmuss, 1950; Abel-Smith, 1964); a development which represented a direct link between the use of cost information and hospital funding (PRO: MH 137/13).

### **Subjective Budgets and Control ~ from 1950**

After hospital ‘nationalisation’ in 1948 and the creation of the NHS, the UK was divided into 19 Regional Health Boards [RHBs], and, within each, there were a number of Hospital Management Groups [HMGs] reporting directly to their respective RHB. Hospitals with undergraduate medical schools [teaching hospitals] were managerially responsible to the

Ministry of Health and not to the RHB (Acton Society Trust, 1955). The scale of the change was obviously enormous and is illustrated by the fact that, in England and Wales, 2,800 hospitals were brought under control of the State (Acton Society Trust, 1955).

The groups consisted of a number of hospitals in a geographic area, and the formal decision-making body at this level was a board of management, referred to as the Hospital Management Committee [HMC]. This organisational structure, Bevan [Minister of Health] argued, would give local bodies ‘substantial executive powers, subject to broad financial control, and so prevent rigidity’ (PRO: CAB 129/3, quoted in Klein, 1995. p.18). The production of detailed costing information was a high priority and Bevan ‘proposed to introduce a system of comparative costing which would in their view, be one of the most effective ways of checking extravagance’ (PRO: CAB 128/5. p.22).

Indeed the early years of the NHS, 1948-1950, were characterised by controversies concerning overspending (Guillebaud, 1956; Klein, 1995; Webster, 1998) and the lack of financial control. In 1950 Sir Cyril Jones (PRO CAB 134/518, Klein 1995. p.44), a senior civil servant, conducted an ‘*inquiry into the financial workings of the service*’. The subsequent report provides useful insights into budget setting and control, and the use of costing information during the first two years of the service. Jones was critical of budgetary controls, which relied on annual estimates, submitted by hospitals to Regional Health Boards, and then aggregated for submission to the Ministry. Budgets, at hospital level ‘...emerge showing considerable increases under all or most heads of account and are then forwarded to regional boards’ (PRO CAB 134/518, p.7). At regional level the differences in checks on the estimates varied between the ‘widest possible extremes’ (p.7):

*The fact is that the Ministry possesses very limited information regarding the financial administration of the hospitals of the country on the basis of which or the procedure by which the estimates are framed; has no costing yardstick at its disposal by which to judge the relative efficiency or extravagance of administration of the various hospitals (p.9).*

Following concerns about financial administration the Ministry issued a circular (Ministry of Health, RHB 50-16) which stated that budgets for 1950/51 were to be tightly controlled, with hospital management committees required to send monthly returns to the Regional Hospital Board and the Ministry, highlighting expenditure against budget (Hospital, June 1950). This internal budgetary control device was referred to as the *AGD 303, Comparison of Expenditure*

*with Approved Budget* and compared cumulative expenditure [for each Hospital Group] with the proportionate part of the budget to date, using the subjective headings [similar to the uniform accounts]: salaries and wages, provisions, staff uniforms and drugs and dressings (Rigden, 1983). Rigden suggested that this subjective system enabled costs to be “analysed according to the nature of the materials and labour used, irrespective of who uses them” (1983. p.11) or for what purpose. Therefore the heading ‘domestic salaries and wages’ could include “cleaning floors, making beds or washing test tubes’ (Rigden, 1983, p.11). Although a simple system with obvious limitations, it did allow an element of financial control via the Department of Health over the Regional Health Authorities and Hospital Management Committees. In addition to cementing this vertical command it also provided a form of budgetary control for each Hospital Management Committee.

### **Departmental costs ~ from 1958**

While the AGD 303 used a subjective analysis to achieve budgetary control there was also an extensive debate, stretching from 1948 to 1956 on the possibility of introducing budget and costing data based on hospital departments (Guillebaud, 1956; Forte, 1986). The drivers of the move to departmental information were examined by Robson (2003) and can be traced to the influence of changes in accounting practice in the US (Preston, 1992) and to the advocacy of a pressure groups outside the service, particular the Nuffield Trust (1952) and Kings Fund (1952). Although these pressure groups advocated the introduction of departmental budgets, this was rejected by finance managers within the service (Ministry of Health, 1955; Robson, 2003). Instead of monthly departmental budgetary control information, annual departmental costing was introduced on a full costing basis, with comparative information produced for each RHB.

Two studies attempted to evaluate the costing scheme one by a hospital finance director (Montacute, 1962) and the other by a civil servant (Walker, PRO T227/1545). These were generally supportive of the scheme although both suggested that very little use was made of the information by the Department of Health. In addition, practitioner journals, *The Hospital* for managers, and *Hospital Service Finance* for finance officers, suggested that the costs produced were difficult to compare, due to reallocation processes and differences in case-mix which made ‘like for like’ comparison difficult (Feldstein see PRO, MH 148/38).

In the 1960s, and the planning explosion (Barnard, 1974) associated with the Plowden Report (Treasury, 1961), there was a renewed attempt to find a more 'rational' basis for agreeing hospital budgets, based on the concept of a standard departmental cost. A working party on revenue allocation, set up in 1961, attempted to establish departmental norms or standards, although the use of cost norms for resource allocation did not materialize. Instead the annual departmental cost performance data introduced in 1958 was eventually streamlined in 1966 (Ministry of Health, 1965), with a simplified overhead reapportionment and the use of direct, rather than full, departmental costs (Brinley-Codd, 1974).

In this period, 1958-1974, there was also extensive discussion on the need to improve and demonstrate 'efficiency', particularly through the use of Organisation and Methods and improved building design (Klein, 1995; Webster, 1998). However accounting relied on departmental annual costs and the subjective monthly budgets introduced in the early 1950s. Although discussion on standard costs and monthly departmental budgets took place, it was not until the first major reorganisation in 1974 that new accounting technologies were eventually introduced.

### **Functional Budgetary Control ~ from 1974**

The 1974 reorganisation is often seen as the 'high water mark' for 'statism' and 'planning' (Klein, 1995; Jones and Mellett, 2007) which brought with it the necessity of introducing budgets at lower operational levels. The reorganisation was undertaken at the same time as that of local councils and many of the community health services, such as health visiting and domiciliary nursing, previously carried out by local authorities were transferred to NHS control (Bevan et al. 1980). The organisational structure of the NHS created three tiers of management, Regional Health Authorities [RHA] Area Health Authorities [AHA] and Health Districts, the Health Districts were run by a management team. The Regional Health Authorities replaced Regional Hospital Boards and took over many of their functions, while the Health Districts continued much of the operational functions previously undertaken by Hospital Management Committees (Bevan *et al.* 1980). The additional tier of management was the Area Health Authorities and their function was:

*To review and challenge objectives, plans and budgets submitted to it by the Area Team of Officers and the District Management Teams; resolve competing claims for resources between Districts; and agree a plan and budget for each District against which District performance will be assessed.*

(Department of Health and Social Security, DHSS, 1972. p.21)

Management arrangements after the reorganisation rejected any form of general management and argued instead that the ‘appropriate structure’ should be ‘based on unified management within the hierarchically-organised professions, on representative systems within the non-hierarchically-organised medical and dental professions, and on co-ordination between professions’ (DHSS, 1972. p.15).

In addition there was to be a new budgeting system based on hospital functions with functional heads largely corresponding to hospital professions, for example, nursing, pathology and catering. The ‘span of control’ of these functional heads normally extended beyond individual hospitals and these budgets were therefore not quite the same as the departmental budgets proposed by early accounting reformers, such as the Nuffield Trust (1952) and Kings Fund (1952). The need to mimic private sector techniques is also evident and Levitt (1976) noted that:

*Budgets serve three main functions in commercial organisations - planning, controlling and costing. In the NHS these functions have until recently had low priority, but with the reorganisation there will be close parallels between commercial organisations and the operation of the NHS (p.183).*

The functional budgeting system had its roots in the 1960s. There was a major hospital building programme, which continued the expansion of specialist technical departments and this, in turn, saw the growth in status of the healthcare functionalist (Crossley-Sunderland, 1977). Argent (Hospital, 1969. p.355) notes that between 1948 and 1968, hospital managerial responsibility was transferred from hospital administrators to functional service heads (Hospital, 1969. p.355). The movement away from hospital to function-based control was one later commentators found baffling. For example, Bourn and Ezzamel, quoting Drucker, state that ‘functional decentralisation is universally applicable to the organisation of management. But it is the second choice for any but the small enterprise’ (1986. p.57).

After the 1974 reorganisation academic accountants began to take an interest in NHS accounting (Lapsley, 1991) and developed a number of criticisms of what they found. These included the lack of involvement of clinicians in resource allocation, poor ‘responsibility accounting’ processes and inadequate cost information systems (Bevan *et al.* 1980). Lapsley argues that while functional budgets “were used to effectively contain costs and balance budgets...they ‘were of limited use in contributing to management’s effective use of



resources' (Lapsley, 2001a. p.336), largely, because of the absence of clinicians from budgetary control decisions (Lapsley, 2001a). This was a criticism echoed by the influential Griffiths Report (1983) and is discussed later in the paper.

### **RAWP and funding reform ~ from 1976**

Before the moves towards clinical budgets there was, in the 1970s, an important attempt to provide more equal healthcare funding throughout the UK with the introduction of the Resource Allocation Working Party [RAWP] formula to distribute additional [growth monies] funds to Regional Health Authorities (Department of Health and Social Security, DHSS, 1976). Each region had a revenue target based on its population, weighted for a number of factors, such as age, sex and mortality rates. Incremental growth monies were to be distributed to those Regions poorest in terms of their resource allocation target.

Prior to RAWP hospitals' funding was based on their historical claim for resources, although to conclude that this meant 28 years of incremental funding is over-simplistic. Firstly, there was a major hospital building and closure programme in the 1960s. The revenue consequences of these capital schemes was a major issue at this time and the new hospitals appear to have received their revenue funds according to a formula based on average costs rather than incremental information. Also, between 1948 and 1976 the process of incremental hospital change had the effect of making hospital funding radically different. Many hospitals were rebuilt or closed, there were new medical techniques and with them new departments and staff with different management structures.

Although RAWP attempted to find a formula that would allocate funds more equitably to regions, and ultimately local hospitals, it also introduced a further complication for finance managers. Growth monies were to be based on the 'distance from their RAWP targets' rather than other possible criteria such as efficiency of service provision (Bevan and Brazier, 1985). This may have had the effect of reducing the search for improved accounting data, when all important additional resources were, in fact, reliant on the funding formula. Certainly this change was to further politicise the funding process (Bevan and Brazier, 1985).

It is interesting to note that funding was not based on accounting information but instead statistically adjusted population. Thus, despite a number of suggestions that cost-per-bed, or

cost-per-departmental-unit, could be used as a standard cost for resource allocation; the use of accounting for hospital funding was again side-stepped.

### **General Management and Budgeting ~ from 1983**

The emphasis on planning, functional budgeting and equity in resource allocation was superseded in the 1980s by a new general management and cost performance culture. The pivotal event was the publication of the Griffiths Report in 1983 (DHSS, 1983). This report (*NHS Management Enquiry*) strongly advocated the introduction of hospital [or unit] general managers, devolution of responsibilities and more involvement of clinicians in the financial and general management decision-making processes. As with most other reforms within the service, similar ideas on general management had been mooted in the past (Harrison, 1988), for example the 1966 Farquharson-Lang Report (Scottish Health Service Council, SHSC, 1966) recommended the introduction of general managers but was ignored. The Griffiths Report had political backing and resulted in a proliferation of Unit Managers (Webster, 1998. p.173) and further devolution of budgetary control within the organisation to front line managers. It was increasingly Unit General Managers [UGMs], based around hospitals, who were responsible for most operational decisions.

Griffiths also advocated the introduction of management budgets (DHSS, HM(86)34, 1986) to 'involve the clinicians more closely in the management process, consistent with clinical freedom for clinical practice... and a fully developed management budgeting approach' (quoted in Brookes, 1986. p.20). Some saw this as a means to make clinicians 'accountable', although, again, this was a view that had been brewing a while. For example the Kings Fund's Accounting for Health Report (1973) argue that there was a need 'to devise management procedures for determining and controlling medical policies without impinging on the clinical freedom of the doctor' (Kings Fund, 1973. p.16). Following the Griffiths report a number of pilot hospitals attempted to introduce management budgeting, but, despite a huge amount of spending on IT systems and associated staff costs, the experiment was widely regarded as a failure (Preston *et al.* 1992).

Nevertheless there was, after Griffiths, a reorientation of hospital management towards unit general managers and more involvement of clinicians and 'front line' staff in managerial decision-making (Bloomfield and Coombs, 1992). Many hospitals moved to clinical

directorate organisational structures and Pollitt *et al.* (1988) found that budgets were increasingly being delegated within the hospital hierarchy, particularly to Unit General Managers. This was coupled with increased delegation to lower level managers, such as ward sisters (Pollitt *et al.* 1988. p.225) and the transference of finance personnel from central departments to hospital units.

While the focus of much of the academic debate was on management budgeting and, later, resource management, most managerial, financial, medical and nursing staff were focussed on devolving budgets, using existing information systems. This was a simple, and largely neglected, change, but perhaps had longer term significance than the high profile resource management initiative. Lapsley (2001b), in his study of Scottish hospitals argues that although management budgeting and resource management initiatives were largely unsuccessful:

*There is evidence that a variant of the initial reform – management budgeting – has succeeded. The specific variant which has succeeded is the use of clinical directors with responsibility for management budgets [i.e. essentially finance-driven, financial information for the management of a directorate]. The evidence of its use is compelling (p.101).*

### **Specialty Costing ~ from 1988**

While Griffiths was preparing his report, a *Steering Group on Health Services Information* (DHSS, Körner Report, 1983) was investigating the information needs of the service (Brooks, 1986) and there was a renewed interest in clinical cost information. This steering group, chaired by Edith Körner, recommended new information sets for the service and the most important requirement, certainly as far as hospital accountants were concerned, was the introduction of a *Specialty Cost* statement.

Again this was not a new idea; as early as 1965 an economist working for the Ministry of Health (Feldstein, see Hospital Service Finance, 1965 and PRO, MH148/38) questioned the usefulness of departmental costing data, arguing that it took no account of hospital case-mix and therefore its use for comparison was severely restricted. In the early 1970s Babson experimented with disease costing data and, in a report to the Department of Health, outlined the familiar roles for such information giving ‘an opportunity to identify areas of inefficiency’ (PRO: MH 166/466, 1971. p.12) and proposed using this ‘standard cost’ information to

reward 'efficient' hospitals with increased funding (PRO: MH 166/466, 1971. p.13). This academic interest in specialty or case-mix costing (Hurst, 1978) continued in the 1970s with a number of studies on a similar theme (Magee *et al.* 1973; Perry, 1973; Weir *et al.* 1973).

The specialty cost statement implemented in 1987/88 was produced on an annual basis for each Health District, rather than hospital, and only included patient treatment costs with the number of specialties limited to 19. The subsequent costing data was not published by the Department of Health; rather it was the CIPFA [Chartered Institute of Public Finance and Accountancy] and the HFMA [Healthcare Financial Management Association] who were left to produce a database of comparative information. Interestingly the CIPFA/HFMA publication was at pains to point out the limitations of the data. For example:

*The first year's figures illustrate that there are many teething troubles in the preparation of the district statements. These relate mainly to different interpretation of definitions. The variation in costs produced is too extensive for the figures to be used for valid comparisons.* (CIPFA, 1989. p.30)

Wise (1991) examined the data for 1989/90 [the following year] and argues that there were 'wide variations in costs between authorities' due to 'length of stay... accuracy of diagnostic coding... artificial distinction between the same procedures carried out as an out-patient or as a day case' (p.17-18). In addition Wise identified the difficulty hospitals had in allocating costs to each speciality, caused by poor information systems, and he concludes that 'the allocation of costs between patient type is largely a once-a-year exercise to complete the financial returns, often requiring a large degree of estimation' (p.18).

On the eve of the most discussed reforms, the internal market, hospital management accounting information consisted of unit budgets prepared along functional lines, with some hospitals adopting a clinical directorate structure, and annual information in the form of subjective, departmental and specialty costs.

### **Costing for Contracting and Capital Accounting ~ 1990**

The introduction of the internal market, with the creation of purchasers and providers, in 1990, has rightly been identified as a time of significant change in the organisation and accounting for healthcare in the UK (Ellwood, 1990; Broadbent *et al.* 1991; Bates and Brignall, 1993; Gray and Jenkins, 1993; Chua and Preston, 1994). The split between purchasers, District Health Authorities and GP Fund Holders (GPFH), and providers

[Hospitals and GPFH] was accompanied by the creation of Self Governing Trusts. For accounting the most important changes were the introduction of capital charges and contract pricing (National Health Service Management Executive, 1990; Department of Health, 1991). Contract prices were based on *full cost* including a capital charge, depreciation plus an interest element based on annual revaluations, and these prices were offered to purchasers as part of their contract negotiation.

Ellwood, in a number of studies, examines the effect of 'cost-based pricing' (1990, 1992, 1995, 1996, 2000) on the operation of the 'market' and concludes that 'the nature of the market [most providers locked into contracts with a small number of major purchasers] made sophisticated costing and pricing unnecessary' (2000. p.26). Bates and Brignall (1993), like Ellwood, questioned the notion that increased cost information would improve efficiency and, in addition, suggested that the focus on cost information would impact on traditional relationships in hospitals, particularly between managers and clinicians. They concluded that although 'historically the NHS's organisational culture, underpinned by medical ethics, has held that providing good quality patient care is paramount and cost is secondary' (p.29) the introduction of contracting will 'superimpose other considerations' (p.33).

In addition to the cost/pricing regime another significant change was the introduction of capital charges. The aim of the reform, like many others, was more 'efficient' use of capital assets and to aid comparison of performance, both within the NHS and with private sector providers (Mellett, 1992; Hodges and Mellett, 1998). It was partly stimulated by long-standing criticisms of the management of the NHS estate and, perhaps, by the appointment of a keen advocate [Sheila Masters], at the Ministry of Health (Mellett, 1992).

Although it is possible to debate the merits of contract pricing and capital charging, there appears to be little argument that they stimulated renewed interest and indeed investment, via new staff and information systems, in the accounting function in hospitals. However, the difficulties of establishing full, and meaningful, contract costs soon became apparent. This led to renewed interest in establishing appropriate, or more valid, units of measurement or standard costs, and in the 1990s we see a renewed effort to cost clinical activity, using Health Resource Groups [HRGs].

## **Health Resource Groups and Reference Costs**

Health Resource Groups [HRGs] are treatments that can be grouped together because they are clinically alike and have a similar range of costs (Department of Health, 2000; Jones, 2001). The groups are derived from the International Classification of Diseases and the Office of Population Censuses and Surveys (Jones, 1999; Jones, 2001). Disquiet about the information and costing systems in the early 1990s led to further investment in clinical costing and a new emphasis on HRGs (Jones, 1991). The NHS Management Executive believed a database of comparable HRG costing data would ensure; 'a standardised currency for the acute sector... a more refined language for interaction between clinicians and administrators; and a 'currency' for monitoring contract performance' (Jones, 1999. p.6).

Jones (1999) concludes that, overall, the HRG exercise, perhaps because of the increased involvement/interest of clinicians, had met with a 'measure of initial success' (1999. p.18). Progress in the production of HRG information was slow, with hospitals only producing HRGs for one specialty in 1994/5, but by 1997 the information 'had become more robust and comprehensive' (Jones, 1991. p.8). However there were still questions as to whether the HRG costs were accurate enough to be used for comparison, as the 'complexity of cost allocations and behavioural overtones associated with costs, may militate against cost transparency' (Jones, 1999. p.11).

The need for an HRG standard cost continued after the election of New Labour in 1997 (Department of Health, 1997). Llewellyn and Northcott (2005) argue that 'the government emphasised 'comparison' rather than 'competition' (p.558) and attempted to use comparative cost data in the form of reference costs that were, effectively, standard HRG costs [referred to as tariffs] as the primary method of 'benchmarking'. In addition they argue that 'the HRG simultaneously creates standardization in hospitals and imposes it' (p.561). Their examination of HRG data suggests that hospitals were pulled 'toward the average' (p.578) and that 'there is... some prima facie calculative evidence that standardisation of clinical practices has played a major part in the trend to the average cost' (p.579). They identified other potential problems in using the HRG [reference costs] data, including the fact that 'it may deter clinicians from meeting the very expensive care needs of particular patient...and constrain innovation through reducing providers' propensity to take risks' (2005. p.580).

## Discussion and Reflection

Perhaps the most obvious issue debated within hospital accounting has been ‘what should the cost-unit be? It started as cost-per-bed, and was followed by department, speciality and HRG. Perhaps, as Preston (1992) and Robson (2003) allude to, each cost-unit seemed suitable within its historical context. Cost-per-bed data was appropriate where the majority of hospital costs were of a residential hotel-like nature (Preston, 1992), whereas with high-tech hospital care, and its related costs, one sees the search for more sophisticated costing units, culminating in the HRG. This suggests a gradual evolution of cost information, an increasing numbers of cost-units and more intricate allocation processes. However there was a reluctance to drop previous costing information on the adoption of new data, resulting in a multi-layered approach, for example cost-per-day continued when departmental data was created and departmental information continued after specialty costing data and HRG. ‘*Continuity and change*’ (Edwards *et al.* 1995) appears to be just as prevalent in hospital accounting as in the commercial sector. This reluctance to discontinue previous hospital costing information may suggest a degree of mistrust of the new but equally it could be argued that given the complexity of the information requirements of the modern hospital there was a logic in having ‘different costs for different purposes’. For example, specialty cost information may be of value in comparing costs of clinical teams but of little value to departmental heads, who in turn might find some value in departmental cost information. However, it did make the collection of information more difficult and perhaps the amount produced contributed to problems with overload and accuracy.

Another factor that spans the whole period is the influence of commercial practice, or perceived commercial practice, and the desire to satisfy professional norms is very evident (DiMaggio and Powell, 1983). For example, the demand for accounting uniformity was also common in both the profit and other ‘not for profit’ sectors. Parker (1984) traced demands for uniformity in company accounts to the mid 19<sup>th</sup> Century, while Coombs and Edwards (1993) identify uniformity as central to the accounting change agenda within local government in the latter part of the 19<sup>th</sup> Century. Similarly between 1918 and 1967, Edwards *et al.* (2003) argued that the British Steel Industry made repeated attempts to introduce and use uniform costing data to measure performance.

Even the debate between the Kings Fund and the Nuffield Trust on whether to use full or direct costing for hospital departments, mirrors the debate taking place within the wider

accounting professional community in the late 1950s and early 1960s (Dugdale and Jones, 2003). The hospital service tried both systems; introducing departmental costing information based on full costing in 1956, but changing to direct costing in 1965. Specialty costs were prepared using direct patient treatment costs, whereas contract prices and Health Resource Groups used full costs. Related to this debate was how to account for full costs, using either an absorption or activity based costing [ABC]. Unlike the academic and accounting professional communities, very little attention appears to have been devoted to this issue within hospital accounting. Perhaps this was because the ABC debate coincided with the internal market reforms and ‘change overload’ was already gripping NHS managers, or, more likely in the author’s view, because finance managers were already using a multiple cost drivers approach.

Another recurring theme associated with each costing reform was criticism of the accuracy and appropriateness of the previous system. Stone (1924) argued that comparison using cost-per-bed data, was ‘largely absurd’ and Montacute (1962) and Walker (PRO, T227/1545) draw attention to difficulty in using the enormous volume of information generated by departmental costing in 1958. Wise (1987) questions the use of ‘specialty’ as a cost-unit and its accuracy, while similar criticisms were levelled at contract costing by Ellwood (2000). Both identified extensive differences in costs for similar procedures and questioned the accuracy of diagnostic coding and the problem of the apportionment of costs between different cost units. It is important to recognise that hospitals were not introducing simple costing systems and, indeed, the complexity and variety of data produced perhaps caused its own problems. For example, the number of different cost-units or departmental ‘cost drivers’ for 1956 were extensive, and, by the standards of the time, a vast volume of information was produced, although senior managers were unsure of its validity or usefulness (Montacute, 1962).

A frequent ‘rallying cry’ for accounting data was the demand for ‘standard costs’. This was evident from the proposed use of cost-per-bed information to drive ‘efficiency’ and reward hospitals in the pre-nationalised service. The Nuffield Trust (1952) report on department costs argues that these could be used as a benchmark to compare performance. Babson (see PRO, MH 166/466) argues that disease costs could provide standard cost data and, more recently, costing for contracting and Healthcare Resource Groups were promoted as ‘a standardised currency for the acute sector’ (Jones, 1999. p.6). But even into the 21<sup>st</sup> Century questions still remain about the validity, and indeed the benefits, of using standard cost information in the



hospital sector (Llewellyn and Northcott, 2005). Perhaps the best summary of the problem is provided by Enoch Powell, a former Minister of Health who argued that:

*The most carefully constructed parallels between one hospital or hospital group and another dissolved on closer examination into a baffling complex of dissimilarities. Every attempt to apply a common standard had the effect of disclosing a deeper level of individual differences and immeasurables (Powell, 1966. p.52).*

Closely related to the search for standard costing data is the question of resource allocation or hospital funding. Prior to the creation of the NHS there is some evidence to suggest that hospital reformers wanted to use standard cost comparison data, in the form of cost-per-bed information, when deciding how to allocate funds. In the early years of the NHS, the Nuffield Trust (1952) and Kings Fund (1952) both suggested that a standardised unit departmental cost could eventually provide the basis for revenue allocations to hospitals. By the 1960s the government was promoting '*forward looks*' which were longer term plans suggested by the influential Plowden Report (Treasury, 1961) and a Working Party on Revenue Allocations in 1961, suggests that funding 'norms' could be established. Progress on establishing such norms was, at best, 'patchy'. It was the mid-1970s before hospital funding was to again appear on the political agenda when the Resource Allocation Working Party report attempted to provide more equal funding across Regions. However, the formula for distributing additional funds was based on weighted population, rather than standard cost, and this may have had the effect of reducing efforts to produce and use accounting data as a basis for resource allocation.

Even though in the 1960s and 1970s accounting reformers, like Montacute and Babson, suggested standard cost information could be used as a basis of hospital funding, this was not taken up. Instead it was hospital budgeting that proved to be the primary control device and it would appear that budgetary control was, to use a contemporary phrase, 'fit for purpose'; certainly in the limited aspiration of controlling expenditure. The AGD 303, introduced in the early 1950s survived for over 20 years, being replaced by functional budgeting in 1974, with both methods regarded as having a degree of success for cost control (Perrin *et al.* 1978; Lapsley, 2001a). After the election of New Labour in 1997 there was renewed interest in standard cost data, based on health resource groups, to benchmark performance. This led to the use of these standard costs (referred to as tariffs) to fund some hospital activity under the payment by results regime (Department of Health, 2007). Whether payment by results

succeeds, and the use of standard costs for hospital funding has finally arrived, is a judgement for future historians.

More sophisticated control devices, such as resource management were widely regarded as failures (Preston *et al.* 1992). Indeed attempts to provide information systems with multiple objectives, such as providing information for clinicians, signalling the efficiency of processes and financial control, were beset with difficulties, including problems with IT systems, and limited commitment from both clinicians and finance staff. Nevertheless it is important that these ‘failures’ do not obscure some success in devolving more financial control to lower levels within the organisational hierarchy and moving decision-making closer to those more directly involved with patient care, particularly through the creation of clinical directorates (Pollitt *et al.* 1988; Lapsley, 2001b).

There were a number of attempts to align budgetary control with the organisational structure of the service, individual hospital, departments, functions and directorates were all, at some stage, the focus for budgetary control information. It is not clear whether the, somewhat slow, devolution of financial control was due to resistance from clinicians or disinclination on the part of managers and finance officers. Montacute’s (1962) early study of the 1958 costing system found only limited support among finance managers for budgetary devolution and most efforts to increase manager’s financial autonomy were motivated by official reports, such as that by Griffiths (Department of Health, 1983). By the turn of the new century there is some evidence to suggest a measure of success in achieving the much sought after clinical ‘involvement with costs’. Lapsley’s (2001b) suggests that clinicians had embraced management budgets as the basis for control within hospital clinical directorates even if the more complex resource management initiative had failed. Similarly Jones (1999) argues that the efforts to establish Health Resource Group costs had helped increase interest from clinicians in cost information but Llewellyn and Northcott argued this could have adverse consequences, such as risk avoidance and the limiting of clinical innovation (2005. p.580).

The slow process of change, recurring problems around implementation and the often disappointing results associated with accounting reforms, noted above, are also characteristics that can be observed in private sector institutions. For example, Edwards *et al.* (2003), in relation to the British Steel industry, note that efforts to introduce uniform cost systems within in the 20<sup>th</sup> century “was a very gradual process” (p.44) and indeed that there were “technical

and behavioural problems in obtaining acceptance of successive editions of Uniform Cost System” (p.43). The examination of the introduction of new accounting control systems in a large multi-divisional company, by Scapens and Roberts (1993), also suggested that it was a complex process and generated “resistance” from within divisional units. Perhaps most significantly, Johnson and Kaplan’s work suggested that accounting information for managers “is too late, too aggregated, and too distorted to be relevant” (1987, p.1). But even subsequent costing systems, such as activity-based costing (ABC), are littered with “failures” (Malmi, 1997). Malmi in his case study, of ABC implementation, finds resistance to accounting change particularly where “the dominant culture”, was that of “engineers, with accounting playing only a minor role in the unit management” (1997. p.475). While a long range historical study of standard costing in UK and US firms concluded “that the propriety and effectiveness of standard costing to achieve operational control may have been significantly oversold” (Fleischman and Tyson, 1998).

## **Conclusions**

In the introduction to this paper reference was made to a number of assertions or ‘conventional wisdoms’ regarding accounting for hospitals. Firstly, the assertion that the introduction of the internal market introduced accounting reforms substantially different from previous initiatives is questionable. In the late 1890s hospital reformers, like Burdett and the funding institutions, had attempted to gather data that would allow them to ‘judge’ the performance of hospitals and then again in the early years of the NHS (1948-1954) there was intense interest in departmental accounting. There was a change in the 1960s and early 1970s to a more ‘steady state’ but accounting change was firmly back on the agenda after 1974.

The idea that pre-1979 accounting information was primarily concerned with the treasury function, (Hopwood, 1984; Perrin, 1988) tends to ignore the previous reforms that introduced performance measurement and control information. The departmental costing scheme used unit-cost information to compare hospital performance, and the debate on the introduction of departmental budgets also illustrates that a number of groups were advocating financial devices to control hospital entities. The functional budgeting system introduced in 1974 recognised the new power structures within hospitals and the increasing dominance of these managers.

There is evidence to suggest that accounting change was generally a slow and often complex process. Obviously change is continuous and it is difficult to identify precise starting points but demands for departmental information began in the mid 1920s and intensified after 1946, but was only introduced in 1956, with a partial victory for accounting reformers as departmental budgets were not introduced. Budgeting at the local functional level took another eighteen years and the reorganisation of 1974. Babson was advocating disease costing in 1971 but even highly aggregated information, in the form of speciality costs, was to take another fifteen years. Similarly Health Resource Groups were produced in 1994 but it was to take another ten years before they were used as part of the payment by results system (Appleby *et al.*, Kings Fund, 2005).

That accounting technologies were predominately promoted by government is partly borne out by evidence after 1948. Both accounting practitioners and civil servants were ‘lukewarm’ in their support for departmentalisation and this remained even after the production of early departmental information in the early 1960s. Indeed accounting practitioners, although there were exceptions, such as Stone and Montucute, appear to have been conservative and incremental change reformers.

The final contention that accounting information systems were inadequate for a large scale organisation is debatable. Certainly, early in the life of the NHS, Hospital Management Committees seemed to operate relatively well with simple information systems based around the AGD 303 form for budgetary control. Overspends were contained and healthcare was largely left to medical professionals, with political debate on healthcare change limited. Hospitals historically were smaller, more numerous and indeed more local than those introduced with the development of the District General Hospital and therefore perhaps complex costing and control systems were not required.

Institutions funding hospitals, both voluntary and later Government, have always looked towards accounting to fulfil the three functions of measuring financial performance, allocating resources and controlling expenditure. This review suggests that the first two were often beyond the capability of accounting. However, even though data, for measuring performance and allocating resources, may have been ‘flawed’ it was often all there was, and therefore seen as ‘better than nothing’ or a move to more sophisticated data, when time and resources allowed. For example, in the mid 1980s specialty costing was regarded as “a transitional progression towards clinical costing” (Perrin, 1988, p.67) and this did indeed lead to Health

Resource Group (HRG) costing. But questions remain about the ability of HRG costs to help generate substantially improved performance rather than encouraging hospitals to move towards the average cost (Llewellyn and Northcott, 2005). Perhaps it is time, given the long history of hospital costing, to question the need, or indeed the feasibility of collecting standard cost information for every UK hospital. Why not spend resources on establishing standard tariffs to fund hospital activity? These could be adjusted from tariffs from other countries or indeed sample hospitals in the UK. After establishing price (tariff) and activity information, each individual hospital would then be left to prepare what management accounting information it felt appropriate.

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