

## **Abstract**

### **Accounting value:**

#### **Applying different accrual accounting frameworks to public hospitals in England**

Accruals accounting has become commonplace in public organisations, but few studies examine the differences and anomalies arising under different forms of accruals accounting adopted by public service organisations. Yet there are marked differences in the commercial accounting frameworks or GAAP<sup>1</sup> (e.g. between UK GAAP and IFRS) and how those frameworks are implemented for public service organisations.

The paper examines the introduction of IFRS in 2009/10 in place of modified UK GAAP for hospitals in England. The paper uses vignettes of National Health Service (NHS) hospital trusts with new hospitals, in particular hospitals constructed under the Private Finance Initiative (PFI), to show how the power of different accounting frameworks constructs different realities (or illusions). The research sources are publicly available documents, working papers and interviews with key accounting personnel at NHS trusts.

The paper analyses the different frameworks and the value attributed to assets on the balance sheet. Under UK GAAP many hospitals did not meet the recognition criteria to be included on the balance sheet, under IFRS the hospitals generally meet the recognition criteria and appear on the balance sheet, but are frequently subject to immediate impairment charges and are hence written down to a fraction of their original cost. The assets shown on the balance sheet provide the basis of the public account, whether the NHS trust meets its statutory obligations and how much the hospital trust must pay in dividends to the government. Thus the form of accrual accounting and how it is adopted is important for performance measurement and public accountability. The paper examines the espoused purposes of the conceptual frameworks; the specific rules of recognition and measurement and how the accounting is applied in public hospitals in England.

*Key words: accrual accounting, UK GAAP, IFRS, public hospitals, asset value.*

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<sup>1</sup> **Generally Accepted Accounting Principles (GAAP)** is a term used to refer to the conceptual framework, accounting standards and guidelines for financial reporting used in a given jurisdiction.

## **Accounting value: Applying different accrual accounting frameworks to public hospitals in England**

In England, public hospitals are directly funded by central government through taxation and form part of the National Health Service (NHS). From 1991 public hospitals in England produced their annual financial statements according to UK GAAP. In 2009, IFRS was introduced and hence a different underlying framework and accounting standards. This paper examines the application of the differing GAAPs in relation to accounting value: the values or objectives embodied in the frameworks and the measurement attributes (values) applied to the public hospitals. Thus the paper seeks to add to the literature examining accounting in context; the theoretical debate surrounding the application of accruals accounting to public sector organisations and, in particular, the problem of asset valuation.

### Accounting in context

The seminal work by Burchell, Clubb, Hopwood and Hughes (1980) set out to contrast the proclaimed role of accounting and how it functions in practice. The accounting framework creates a particular conception of organisational reality. The discourse of accounting could be influenced by pressures from many sources. Standard setters may claim that GAAP reflects economic reality, but as Hopwood (1992) noted

‘Not being mere revelations of an underlying economic potential, accounting practices can possess an autonomy and power of their own. They can thereby often enable more substantive transformations of organizational affairs than sometimes is envisaged, even by their designers’ p142

Similarly, Hines (1988) identified a constructed reality based on a magical or ‘hidden power’ and set out to show how accounting does not merely communicate reality, ‘but in communicating reality, you construct reality’ p.257. Burchell et al. claimed the ‘number of empirical studies of the organizational operation of accounting systems is few indeed, and even less is known about the operation of regulatory bodies in the accounting area or the broader social context of accounting development’ (1980, p.22). Similarly Humphrey and Scapens 1996, p.86 called for accounting case studies examining accounting in practice. Subsequently we have seen a number of papers on standard setting (Walker and Robinson, 1993; Hodges and Mellett, 2002) and case studies have emerged to expose operational difficulties of accounting approaches (Walker, Clarke and Dean, 2000, Ellwood 2008) or

illustrate how organizations like to be portrayed (Arnaboldi and Lapsley, 2004). Accounting cases can also expose how ‘the consequences of accounting do not necessarily have a close and automatic relationship with the aims in the name of which it is introduced and changed (Hopwood 1984). Thus the problems associated with the application of accounting frameworks may lead to unintended consequences not envisaged by the designers. The paper explores the consequences of UK GAAP and IFRS using vignettes from two NHS trusts: the Worcestershire Acute Hospitals Trust and the University Hospitals Birmingham Foundation Trust. The analysis is based on publicly available documents and interviews with key accounting personnel.

### The conceptual frameworks

Conceptual frameworks seek to impose a theoretical logic to accounting standards and financial reporting, but such frameworks are not determined by scientific understanding (Dean 2008). They provide the basis for determining whether hospitals should be included in financial statements and how they should be measured.

The IASB Framework was published in 1989 and the UK ASB’s Statement of Principles in 1999. In 2010, the IFRS Foundation issued new chapters on objectives and qualitative characteristics agreed with FASB as part of the convergence project (IASB 2010).

The UK ASB’s conceptual framework, the Statement of Principles 1999 and the IASB Framework underlying IFRS define assets in a similar way – ‘Assets are rights or other access to future economic benefits controlled by an entity as a result of past transactions or events’ (ASB 1999 p43).

However to be recognized in the financial statements, an asset must also hold a cost or value (measurement attribute) that can be measured with (sufficient) reliability. The UK Statement of Principles (SoP) proposes a measurement approach based on value to the business whereas the IASB Framework did not establish a particular measurement approach but more recently has adopted fair value in many of its standards. Fair value is seen as a predominant measurement approach in the convergence process of IFRS and US GAAP (Whittington 2008). UK GAAP and IFRS have specific standards on the accounting treatment of tangible assets (Table A) that on application to English public hospitals determines whether hospitals are recognised or not on NHS balance sheets and if recognised at what value.

**Table A:**

**Accounting Standards and Interpretations applicable to hospitals in England**

<b>UK GAAP</b>	<b>IFRS</b>
FRS 15 Tangible fixed assets	IAS 16 Property, plant and equipment
SSAP 21 Leases	IAS 17 Leases
FRS 5 Substance of transactions	
FRS 11 Impairment	IAS 36 Impairment
	IFRIC 4 Lease arrangements
	IFRIC 12 Service concessions

Under UK GAAP the accounting requirements for hospitals are set out in FRS 15 *Tangible fixed assets* and for leased assets SSAP 21. FRS 5 *Reporting the substance of transactions* is also relevant, and in particular Technical Note F *Private finance Initiative and similar contracts*. In 1998 the ASB issued *Impairment of fixed assets and goodwill*, subsequently impairment became an important factor. The accounting standards, however, are designed for ‘profit-orientated’ entities (ASB 1991) and therefore are modified for the NHS context (Ellwood 2003, ASB 2007). The modifications to UK GAAP are set out in the NHS Accounting Manual and the FT FReM for Foundation Trusts that are aligned to the Treasury’s Financial Reporting Manual (FReM).

In 2009/10, NHS trusts introduced IFRS<sup>2</sup>. The accounting requirements for hospitals are set out in IAS 16 *Property Plant and Equipment*, IAS 36 *Impairment of Assets* and IAS 17 *Leases* and IFRIC 4 and IFRIC 12. As under UK GAAP, the modifications ‘necessary’ for a NHS context are detailed in the International Financial Reporting Manual (iFReM).

The realities (or illusions) created under the frameworks are illustrated using the financial statements of Worcestershire Acute Hospitals NHS trust. The University Hospitals Birmingham Foundation Trust is also briefly considered to show how a new hospital, the Queen Elizabeth, appears and diminishes under IFRS. Summary information is also obtained from Monitor’s consolidated financial statements of all Foundation Trusts.

### **Comparison of Financial Statements under different accounting frameworks**

The financial statements of Worcestershire Acute Hospitals NHS Trust (WAHT) are shown under UK GAAP and IFRS in Table B. Both the financial position at 31 March 2009 and

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<sup>2</sup> IFRS is introduced into UK public services (excluding local government) in 2009/10 and Whole of Government Accounts are to be produced using IFRS.

Table B:

## Worcestershire Acute Hospitals Financial Statements using UK and IFRS GAAP

(i)

Statement of Financial Position 31/03/2009	UK GAAP £000s	IFRS Restatement £000s	Effect of IFRS £000s
<b>NON-CURRENT ASSETS</b>			
Property, Plant and Equipment	159,352	259,222	99,870
Intangible Assets	549	549	0
Trade and Other Receivables	15,830	2,071	(13,759)
<b>TOTAL NON-CURRENT ASSETS</b>	<b>175,731</b>	<b>261,842</b>	<b>86,111</b>
<b>CURRENT ASSETS:</b>			
Inventories	4,256	4,256	0
Trade and Other Receivables	18,095	18,095	0
Cash and Cash Equivalents	10,145	10,145	0
<b>CURRENT ASSETS:</b>	<b>32,496</b>	<b>32,496</b>	<b>0</b>
Non- Current Assets Held for Sale		350	350
<b>TOTAL CURRENT ASSETS</b>	<b>32,496</b>	<b>32,846</b>	<b>350</b>
<b>TOTAL ASSETS</b>	<b>208,227</b>	<b>294,688</b>	<b>86,461</b>
<b>CURRENT LIABILITIES</b>			
Trade and Other Payables	(35,732)	(35,722)	10
Other Liabilities		(10)	(10)
DH Working Capital Loan	(5,000)	(5,000)	0
Borrowings	0	(1,599)	(1,599)
Provisions for Liabilities and Charges		(330)	(330)
<b>TOTAL CURRENT LIABILITIES</b>	<b>(40,732)</b>	<b>(42,661)</b>	<b>(1,929)</b>
<b>NET CURRENT ASSETS/(LIABILITIES)</b>	<b>(8,236)</b>	<b>(9,815)</b>	<b>(1,579)</b>
<b>TOTAL ASSETS LESS CURRENT LIABILITIES</b>	<b>167,495</b>	<b>252,027</b>	<b>84,532</b>
<b>NON-CURRENT LIABILITIES</b>			
Borrowings		(85,672)	(85,672)
DH Working Capital Loan	(10,000)	(10,000)	0
Provisions for Liabilities and Charges	(2,880)	(2,550)	330
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>(12,880)</b>	<b>(98,222)</b>	<b>(85,342)</b>
<b>TOTAL ASSETS EMPLOYED</b>	<b>154,615</b>	<b>153,805</b>	<b>(810)</b>
<b>FINANCED BY TAXPAYERS EQUITY:</b>			
Public Dividend Capital	139,729	139,729	0
Retained Earnings	(29,767)	(72,987)	(43,220)
Revaluation Reserve	44,097	86,507	42,410
Donated Asset Reserve	1,143	1,143	0
Government Grant Reserve	274	274	0
Other Reserves	(861)	(861)	0
<b>TOTAL TAXPAYERS EQUITY</b>	<b>154,615</b>	<b>153,805</b>	<b>(810)</b>

(ii)

<b>Income and Expenditure</b> Year to 31 March 2009	<b>UK GAAP</b> £000s	<b>IFRS</b> Restatement £000s	<b>Effect of IFRS</b> Transition £000s
Revenue from Patient Care Activities	275,017	274,455	(562)
Other Operating Revenue	24,584	25,146	562
Operating Expenses	(286,540)	(282,966)	3,574
<b>OPERATING SURPLUS/(DEFICIT)</b>	<b>13,061</b>	<b>16,635</b>	<b>3,574</b>
Investment Revenue	771	771	0
Other Gains and Losses	(215)	(215)	0
Finance Costs	(1,077)	(10,021)	(8,944)
<b>SURPLUS/(DEFICIT) FOR THE FINANCIAL YEAR</b>	<b>12,540</b>	<b>7,170</b>	<b>(5,370)</b>
Dividends Payable on Public Dividend Capital (PDC)	(6,707)	(6,707)	0
<b>RETAINED SURPLUS/(DEFICIT) FOR THE YEAR</b>	<b>5,833</b>	<b>463</b>	<b>(5,370)</b>
<b>Other Comprehensive Income</b>			
	<b>UK GAAP</b> £000s	<b>IFRS</b> Restatement £000s	<b>Effect of IFRS</b> Transition £000s
Impairments and reversals put to the Revaluation Reserve, the Donated Asset Reserve and the Govt Grant Reserve	0	(20,137)	(20,137)
Gains on Revaluation	(17,135)	530	17,665
Receipt of Donated/Government Granted Assets	67	67	0
<b>Reclassification Adjustments</b>			
Transfers from Donated Asset and Government Grant Reserves	(240)	(240)	0
<b>Total Comprehensive Income for the Year</b>	<b>(11,475)</b>	<b>(19,317)</b>	<b>(7,842)</b>

the financial performance in the year to 31 March 2009 changes dramatically on the move to IFRS (as modified for the NHS context). The total assets change from £208m to £295m; the surplus for the year from £13m to £7m and the total comprehensive income from a loss of £11m to £19m.

Yet for years the ASB has set about reducing differences between UK GAAP and IFRS. The conceptual frameworks and the accounting standards have many similarities.

A deeper investigation of the accounting behind the statements reveals that the differences are largely explained by the accounting for the Worcestershire Royal Hospital which opened in 2002. This is a hospital built under the Private Finance Initiative and its appearance and disappearance depends on the application of specific standards, interpretations and technical

guidance. A detailed, wider analysis of how the financial statements were modified under UK GAAP is provided in Ellwood (2008). In this paper we concentrate on tangible fixed assets: how individual hospitals are invisible, appear and change in value according to the application of UK GAAP or IFRS.

#### *The Worcestershire Royal Hospital PFI scheme*

A contract to construct a new hospital for Worcester was signed March 1999 with a private sector partner, Catalyst Healthcare (Worcester) Limited. Building work commenced March 1999 and was completed 31 December 2001. The hospital opened 16 March 2002. The Concession Agreement runs for 30 years. Catalyst is responsible for the provision of non clinical services through its constituent partners:

- maintenance, materials management, reprographics (Bovis FM)
- catering, housekeeping, linen and laundry, portering, telecommunications, waste management (ISS)
- purchase, maintenance, repair and lifecycle replacement of all equipment and furniture (Siemens)

The capital cost of the Worcester PFI scheme was £102m but WAHT transferred assets into the PFI scheme valued at £19.4m (land £9.8m, buildings £4.9m, and equipment £4.4m). The transfers reduced the financial cost of the scheme. The scheme was financed by Catalyst with money raised by a (non government) bond providing £82m.

#### *Worcestershire Royal Hospital under UK GAAP*

The Worcestershire Royal Hospital is not treated as a capital asset of the Trust during the concession period. At the end of the concession period all buildings and equipment included within the PFI will pass to the Trust at nil consideration. The assets (land, buildings and equipment) transferred by WAHT into the scheme are recorded as deferred assets.

The annual charge for the provision of the hospital and services in the year to 31<sup>st</sup> March 2009 was approximately £25m. A unitary payment is paid on a monthly basis. In addition the Trust pays for any service that falls outside the contract at an agreed rate. The payment relates to availability, performance and volume:

- Availability* --this, theoretically, can result in a penalty if there is non availability of service;
- Performance* --this is self monitored, matrices detail standards completed monthly

*Volume* ---the set occupancy level is 90%, additional charges of several hundred thousand pounds are paid if this is exceeded, (the hospital operates routinely at 98% occupancy and has never been as low as 90%).

At the end of the concession period 2032, the buildings and equipment transfer to the Trust, WAHT will have paid for their use over 30 years but they will have further useful life as they will have been maintained at new state throughout the concession period. The residual value is estimated at £106m (in present value terms). This residual value is built up on the Trust balance sheet on an annuity basis over the concession period. Thus in the Balance Sheet, the fixed assets include a residual interest of £9.5m, at 31<sup>st</sup> March 2009 which has been built up through seven annual transfers from the annual payment. The Income and Expenditure Account bears a charge for the use of PFI assets and services less the amount transferred to residual interest plus the amortisation of the deferred assets as illustrated in Table C below.

Consequently, under UK GAAP, the hospital is invisible, the balance sheet does not include the new hospital but a residual interest that will accumulate to the residual value of the hospital at the end of the concession period and deferred assets (at the value at the start of scheme less accumulated amortisation).

<b>Table C: Worcestershire Royal Hospital - PFI accounting data</b>	
Scheme: capital cost	£102m
WAHT (deferred) assets transferred into the scheme	£20m
Catalyst Healthcare -finance raised by bond	£82m
<b>Income and Expenditure Statement 2008/09 'UK GAAP'</b>	
Annual unitary charge and further payments to Catalyst	
Less annual amount transferred to residual interest	£24.8m
Amortisation of deferred assets	£(0.6m)
<b>Balance Sheet items as at 31 March 2009 'UK GAAP'</b>	
Tangible fixed assets: only residual interest shown	£9.5m
Current assets: deferred assets after amortisation	£13.8m

*Under IFRSs as modified for the NHS context*

The materialization of Worcestershire Royal Hospital under IFRSs explains the major changes between the statements shown under UK GAAP and IFRS in relation to hospital assets (see Table D below).

<b>Table D: Worcestershire Royal Hospital under IFRS</b>	
Scheme: capital cost	£102m
WAHT (deferred) assets transferred into the scheme	£20m
Catalyst Healthcare -finance raised by bond	£82m
<b>Income and Expenditure Statement 2008/09 IFRS</b>	
Annual unitary charge –interest element of PFI	£8.7m
-PFI service element	£15.6m
Depreciation and impairment of PFI assets	£6.0m
<b>Balance Sheet items as at 31 March 2009 IFRS</b>	
Tangible fixed assets: recognise Worcestershire Royal net of impairment	+£100m
Borrowings –initial lease liability 2002 less value of previously ‘deferred assets’ less repayment element of unitary charges 2002-9	£(85.7)

These differing accounting treatments bring about a major change in financial position and performance: a 50% increase in total assets, a 27% increase in operating surplus but a vast increase in finance costs which reduces the overall surplus before dividends by over £5m i.e. reduced by 43%. The Worcestershire Royal Hospital is recognized as an asset, measured and depreciated.

In 2009/10 the Trust produced its financial statements under IFRS and impaired the Worcestershire Royal hospital by £30m.

#### University Hospitals Birmingham Foundation Trust

In nearby Birmingham, one of the largest PFI hospitals opened in 2010/11. The new Queen Elizabeth Hospital is again a PFI hospital: the PFI contractor, Consort healthcare comprises Balfour Beattie, Royal Bank of Scotland RBS; European Investment Bank and Dexia. The hospital is estimated to cost £584m to build and the unitary payment is £47m p.a. (when the hospital is fully operational). The first phase (about 60%) opened in June 2010. Thus it will be accounted for under IFRS.

The accounting disclosures in 2009/10 explained that the new hospital is expected to have a material impact on the 2010/11 accounts. It is expected that the trust will recognize £474m as non-current assets but will also impair the hospital by £235 million. The hospital will be fully operational in 2011/12 by which point £584m of non current assets and £290m of impairments will be recognized in total. The hospital will suddenly appear in the 2010/11 financial statements but immediately shrink to half its 'value'.

### **Application of the accounting frameworks and standards**

The UK Treasury has set out a hierarchy of accounting frameworks, IFRS is the primary framework; where items are not covered within IFRS then UK GAAP is consulted, if no treatment is specified in UK GAAP then IPSAS are used.

How accounting frameworks and standards are interpreted determines how assets are recognized and measured, whether we see hospitals in financial statements and at what value. Indeed under UK GAAP the WRH was invisible on both the balance sheet of the NHS Trust and that of Catalyst the private sector consortia.

### Recognition

#### UK GAAP

The battle between the ASB and the UK Treasury on the accounting for the PFI has been documented in the literature (Broadbent and Laughlin 2003 and 2005, Hodges and Mellett 2002, Ellwood 2008). Basically the Treasury sought to base the accounting for PFI hospitals on the presumption that PFI deals are contracts for services i.e. not taken to be lease transactions and so SSAP 21 does not apply. Furthermore, consideration of their accounting treatment under FRS 5 would not apply as in paragraph 12 the standard excludes from its scope 'expenditure commitments and orders placed until their delivery or payment'. The Treasury Task Force issued a technical note (TN97) to provide interim guidance on PFI transactions which ensured that assets and related borrowings would not appear on balance sheets. The progress of the relevant standards put forward by the ASC and the counters by the Treasury PFI Taskforce are charted by Hodges and Mellett (2002) in Table E below.

Table E: Regulation of Accounting for PFI

SSAP 21	Accounting for Leases and Hire Purchase Contracts	ASC: August 1984
FRS 5	Reporting the Substance of Transactions	ASB: April 1994
TN 97	Technical Note: How to account for PFI transactions	Treasury Task Force TTF: September 1997
ED	Exposure Draft: Amendment to FRS 5 –The Private Finance Initiative	ASB: December 1997
AN	Application Note to FRS 5: Private Finance Initiative and Similar Contracts	ASB: September 1998
CD	Consultation Draft: Accounting for PFI Transactions	TTF: January 1999
TN 99	Technical Note (revised): How to account for PFI transactions	TTF: June 1999
<i>Source: Hodges and Mellett (2002)</i>		

The ASB proposals in 1997 took a different view, it saw PFI as a method of purchasing assets along with related services –these should therefore be separated and treated accordingly i.e. a finance lease and therefore the leased asset should be on balance sheet with associated liabilities. The ED proposed a more stringent test for avoidance of including PFI ‘assets’ on the balance sheet and an Application Note was issued in 1998. The Treasury Task Force countered with TN99 that provided a set of re-interpreted rules that allowed PFI deals to stay off NHS balance sheets. This was largely achieved by emphasising the need for the unitary payment mechanism in a contract to vary appropriately (100% if non available), but the approach is supported by a complex mix of guidelines on quantitative risk analysis and qualitative indicators to determine the accounting treatment. This enabled both the ASB and the Treasury to approve the regulatory outcome but is not without cost (particularly to accounting firms for compiling the risk matrices). On the other hand, the Financial Reporting Advisory Board (FRAB) has long maintained that PFI hospitals should be on balance sheet and has repeatedly criticised the interpretation of UK GAAP that allowed hospitals to not be shown on either the NHS or the private sector consortia’s balance sheet.

The Worcestershire Royal Hospital which opened in 2002 is an early PFI hospital. The unitary payment is structured to, theoretically at least, be variable. A complex risk matrix was compiled to show the transfer of risk (construction, demand and residual) from WAHT NHS trust to Catalyst the PFI consortia. The policy note to the 2008/09 financial statements explains how the application of UK GAAP enables the hospital to be largely covered by a cloak of invisibility in the balance sheet of the Trust.

“The NHS follows HM Treasury's Technical Note 1 (Revised) "How to Account for PFI transactions" which provides practical guidance for the application of the Application Note F to FRS 5 and the guidance 'Land and Buildings in PFI schemes Version 2'.

Where the balance of the risks and rewards of ownership of the PFI property are borne by the PFI operator, the PFI obligations are recorded as an operating expense. Where the trust has contributed assets, a prepayment for their fair value is recognised and amortised over the life of the PFI contract by charge to the Income and Expenditure Account. Where, at the end of the PFI contract, a property reverts to the Trust, the difference between the expected fair value of the residual on reversion and any agreed payment on reversion is built up over the life of the contract by capitalising part of the unitary charge each year, as a tangible fixed asset.”

WAHT accounting policy note 1.9, Annual Financial Statements 2008/09

## IFRS

The Department of Health (2009) claims the accounting standards that apply to PFI under IFRS ‘are very different to the UK standards that they replace in both their scope and their approach in determining the appropriate accounting treatment.’

IFRS does not contain an equivalent to FRS 5 *Reporting the Substance of Transactions* but current DH guidance considers: IFRIC 12 *Service concessions*; IFRIC 4 *Determining whether an arrangement contains a lease*; IAS 17 *Leases* and IAS 16 *Property, Plant and equipment*.

This interpretation of IFRIC 12, (Appendix A AG1-4) uses a criteria based on control rather than risk, as set out in AG 5

**AG5** Control should be distinguished from management. If the grantor retains both the degree of control described in paragraph 5(a) and any significant residual interest in the infrastructure, the operator is only managing the infrastructure on the grantor's behalf—even though, in many cases, it may have wide managerial discretion.

NHS guidance in applying IFRIC 12 asks a series of questions.

- Is the contract in substance a service concession?
- Is an ‘infrastructure’ asset used to provide the service?
- Can the grantor [NHS body] control or regulate:
  - The services provided using the asset?
  - To whom the services are provided?
  - The prices charged for the services?
- Does the NHS body control the residual interest in the asset at the end of the concession?

The answer to these questions will invariably be ‘yes’ for PFI hospitals. Thus the Worcestershire Royal Hospital is controlled by the NHS trust (the grantor) and the Catalyst consortia (the operator) is merely managing the asset.

IAS 17 *Leases* applies and a complex set of accounting treatments are put into play which necessitate hospital assets to be separated from the service element, valued and then depreciated (on a component basis). Thus IFRS removes the cloak of invisibility. The Worcestershire Royal Hospital appears on the balance sheet.

### Measurement

#### UK GAAP

Under UK GAAP hospitals were measured on NHS trust balance sheets at depreciated replacement cost. The relevant accounting policy notes in NHS trust accounts in 2008/09 is

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‘These accounts have been prepared under the historical cost convention modified to account for the revaluation of fixed assets at their value to the business by reference to their current costs.....

The assets are stated at the lower of replacement cost and recoverable amount. On initial recognition they are measured at cost (for leased assets at fair value –where recognized!). The land and buildings are restated to current value every five years using professional valuations as permitted under FRS 15 and in the intervening years by the use of indices. The valuations are carried out primarily on the basis of depreciated replacement cost for specialized operational assets and ‘existing use value’ for non specialized operational assets. Surplus land is valued at open market value. The carrying values are reviewed for impairment (FRS 11).

#### IFRS

Fair value features prominently in IFRSs though in practice private companies are less likely to revalue tangible assets under IFRS because of the requirement to ensure balance sheet values do not (subsequently) differ materially from fair value.

In NHS trust financial statements, property, plant and equipment is measured at cost initially and subsequently at the value of a ‘modern equivalent asset’. The measurement approach is determined by HM Treasury.

The relevant policy note for WAHT is

‘HM Treasury has adopted a standard approach to depreciated replacement cost valuations based on modern equivalent assets and, where it would meet the location requirements of the service being provided, an alternative site can be

valued. HM Treasury has agreed that NHS trusts must apply these new valuation requirements by 1 April 2010 at the latest. The Trust has appointed the District Valuer to assess all properties on its balance sheet in 2009/10.'

There has also been a move away from replacement cost for fixtures and equipment.

Until 31 March 2008, fixtures and equipment were carried at replacement cost, as assessed by indexation and depreciation of historic cost. From 1 April 2008 indexation has ceased. The carrying value of existing assets at that date will be written off over their remaining useful lives and new fixtures and equipment are carried at depreciated historic cost as this is not considered to be materially different from fair value.

The new measurement approaches can lead to huge write downs (impairments) of assets particularly newly constructed hospitals located in the centre of cities such as the new Queen Elizabeth Hospital Birmingham. As the Finance Director of the University Hospitals Birmingham commented:

“The Department of Health assumes our new hospital could be provided in a box on a piece of wasteland not in an impressive curved glass structure in an attractive part of central Birmingham.”

The Queen Elizabeth Hospital, Birmingham



Valuations based on Modern Equivalent Asset (MEA) are not a recent innovation to the UK public sector, (Heald 1990) and it is broadly in line with valuation at fair value under IAS 16. Monitor (the regulator for Foundation Trusts) selected MEA for specialized use assets (e.g. hospitals) for the 2008-09 financial year and has continued with the policy in 2009-10.

‘This change in methodology [use of MEA valuation] results in lower asset values where (a) the existing buildings are very old and therefore would be cost more to recreate than a modern hospital; and (b) for land where an alternative cheaper site is valued, or where a lower value for the existing site is used because the footprint of the site is larger than what would be purchased afresh.’ Monitor 2010 page 10.

However, academic commentators have criticized the non entity specific or location specific nature of fair value accounting under IFRS compared with deprival value in the UK GAAP conceptual framework (see van Zijl and Whittington 2006, Benston 2008).

The Consolidated Statement of Comprehensive Income for all 129 Foundation Trusts in 2009/10 showed £2.5 billion of net impairments. Almost 40% related to seven foundation trusts with large PFI schemes: Central Manchester University Hospitals £185m; Derby Hospitals £96.3m; Sheffield Teaching Hospitals £167.5m; Tees, Esk and Wear Valleys £58.3m; Newcastle upon Tyne £74.7m; County Durham and Darlington £146.7m; University Hospitals Bristol £76.2m.

Impairments reduced the consolidated surplus for the year from £356m to a deficit of £765m and total comprehensive income from £314.8m to a negative £2,201m. However, the cash balance in the consolidated statement of financial position rose by £260m to £2,861m.

The results of the application of different recognition and measurement criteria are substantial. The recognition of Worcestershire Royal Hospital makes a huge difference to both the financial position and the income statement; the Queen Elizabeth Hospital no sooner materializes then shrinks to half its value.

### **Accounting value**

The financial statements under UK GAAP and IFRS give vastly different views which are analysed above according to rules of recognition and measurement. The value of these statements relates to the purpose of the financial reporting. The commercial accounting frameworks, UK GAAP and IFRS both have an investor focus. The converged IFRS/ FASB framework increasingly so.

*'The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying and selling or holding equity and debt instruments, and providing or settling loans and other forms of credit.'*

Differing objectives and users require different conceptual frameworks. By necessity decision usefulness has to be orientated to a specific user group. The qualitative

characteristic of relevance is also determined by the user group –to investors relevant information is predictive of wealth (fair values of assets and liabilities), to the electorate relevant information is feedback information on how managers provided public services and how public services may continue to be provided.

IFRS is adapted by HM Treasury and sanctioned by the Financial Reporting Advisory Board (FRAB) to meet a public service context. Modification is necessary but leads to sometimes unintended consequences. The power of accounting can be used to make hospitals invisible by specific interpretation of UK GAAP, while IFRS reveals the asset, but adaptation of measurement bases reduces the value considerably.

In a public service context capital assets provide services to citizens rather than contribute to future cash flows. Some of the peculiar characteristics of many public sector assets have been clearly enunciated in relation to community and heritage assets (Mautz, 1988; Pallot, 1990; Barton, 1999; Granoff, 1998; Ellwood, 2003). Many public assets are not readily traded in markets, but if they are valued from the point of view of service potential (not ownership wealth) then replacement cost is more relevant. HM Treasury has taken this perspective in its modifications to commercial GAAP.

The Government continues to develop the format and content of accounts to make them more useful to managers and readers. In some cases that may mean making further adaptations from GAAP to reflect the special circumstances of the public sector and to ensure control of public spending. However any further adaptations will be discussed with the FRAB before implementation. (HM Treasury, 2005, 2.39)

Public sector accounting has embraced commercial approaches and developed extensively in recent decades, hospitals in England have applied modified UK GAAP and IFRS. However, although accounting in the public sector may have benefited from the accruals basis of accounting, there are examples of inconsistencies, issues to be resolved and anomalies and some argue commercial accounting should be reserved for businesses (Barton, 2003, 2005; Vinari and Nasi 2008) or at least only extend to government business entities<sup>3</sup> (Christiaens and Rommel, 2008). Simpkins in a recent review of the sector-neutral accounting framework in Australia concludes --

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<sup>3</sup> A GBE has power to contract in its own name; is assigned authority to carry on a business; sells goods and services in normal course of business at a profit or full cost recovery; is not reliant on continuing government funding to be a going concern (other than purchase of outputs at arms length); and is controlled by a public sector entity. [IFAC Handbook of IPSA Pronouncements]

While it will probably always be possible to better meet the needs of users of all entities, in my view the needs of users of public sector and other not-for-profit entities in Australia are not being met to the extent they ought. Furthermore, their needs are not being met as well as those of profit-orientated entities. (Simpkins, 2006, 8.25)

The vignettes using NHS hospitals in England have highlighted some of the problems in achieving valuable reports for users that reflect the value of public hospitals.

Various players have influenced the financial reporting for public hospitals from standard setting to accounts preparation. Standard setting is a political process (Horngren 1973) and not necessarily about logic (Solomons 1978), the application of commercial standards for public services such as NHS hospitals is even more likely to be subject to a complex mix of political interventions (Ellwood 2008, Hodges and Mellett, 2002). When UK GAAP was the chosen accounting regime for NHS hospitals, the Treasury exerted its power to influence GAAP (see ASB Application Notes and Treasury Technical Notes above) as well as to modify GAAP through its directives or accounting manuals. In 2009/10, IFRS is introduced, and PFI hospitals suddenly materialize on NHS balance sheets. The materialization is partly due to IFRS i.e. there is no Application Note and counter Treasury Technical Note that would preclude the recognition of PFI hospitals. IFRIC 12 is liberally interpreted alongside IFRIC4 and hence the PFI hospitals are considered leased assets under IAS 17 (and separated from the service element –a feat that was previously argued to be impossible). However, considerable modifications remain. The Treasury has required the introduction of valuations using MEA methodology and the compilation of government indices for revaluations has ceased. MEA embodies some of the principles underlying fair value as adapted for specialist assets but is not an explicit methodology set out in IAS 16 *Property Plant and Equipment* or IAS 36 *Impairment*. IAS 36 is ‘interpreted for the public sector context so that where an asset is not held for the purpose of generating cash flows, value in use should be assumed to be equal to replacing the service potential provided by the asset. It is adapted for the public sector context to achieve consistency with the budgetary regime’ HM Treasury 2007. The consequences of MEA and the resultant impairments are huge. Hospitals may suddenly materialize under IFRSs, but their value is volatile and has consequent effects. Not only to hospitals appear and change in value but this affects financial surpluses (NHS trusts have a legal duty to break-even year on year) and dividend payments to the Department of Health which are calculated as a percentage of net assets.

The audit firms are also evident at each stage in the move to IFRS, lobbying both for the introduction of commercial accounting into the public sector (Christensen and Parker 2010) and the specific standards (Hodges and Mellett 2002). Senior figures in the large accounting firms also hold prominent positions in the direction and oversight of UK public sector accounting<sup>4</sup>. The tussle between the UK ASB and the Treasury over PFI accounting enabled accounting firms to earn huge fees providing expertise on complex risk analysis to permit PFI hospitals to remain off balance sheet under UK GAAP. Under IFRS the firms earn similarly large fees advising on how the hospitals can be brought on balance sheet, valued and impaired. The firms gain by promulgating IFRSs as complex and different. The accounting firms have a vested interest in ensuring 'bright lines' are not apparent.

At local level, directors and managers are wary of the implications of publishing poor financial performance, NHS Trusts need a strong financial position to achieve Foundation Trust status<sup>5</sup>. The move to IFRSs has led to less central direction and given more scope for interpretation of accounting standards at local level. Directors are likely to use discretion to its full extent and employ accounting firms and valuers to exercise judgement that assists in providing the appropriate impression. Lower asset values provide lower depreciation charges in the income statement and lower obligatory dividend payments (which are based on asset values) to the government

Thus the Standard Setters, the Treasury, FRAB, the accounting firms and the local account preparers are integral to the promotion and execution of accounting powers that make hospitals invisible under UK GAAP and materialize and shrink under IFRS. Further research is needed to understand the full implications of the accounting transformations. Were the consequences intentional or, as Hopwood (1980) mooted, not even foreseen by the designers? If the services at the Queen Elizabeth Hospital could be provided by a modern equivalent hospital costing £250m less, then this casts serious doubt on the VFM analysis in the PFI approval process. If the annual financial statements show large reductions in asset values is this reflecting economic value (despite the large increase in cash balances) or

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<sup>4</sup> for example Mary Keegan, Head of the Government Accounting Services (2005-2009) was a partner with PwC; Elwyn Eiledge, the Chairman of FRAB (1996-2010) was a senior partner of Ernst and Young and his deputy, Ken Wild, a partner at Deloitte LLP.

<sup>5</sup> All NHS trusts are to become Foundation Trusts with more autonomy but must first show financial viability.

indicative of scope for manipulation? Is the information shown under IFRSs valuable to users?

## **Conclusion**

The value of different accounting frameworks is shown through the study of the application of UK GAAP and IFRS to public hospitals in England. Under UK GAAP many hospitals did not meet the recognition criteria to be included on the balance sheet, under IFRS the hospitals generally meet the recognition criteria and appear on the balance sheet, but are frequently subject to immediate impairment charges and are hence written down to a fraction of their original value. The assets shown on the balance sheet provide the basis of the public account, whether the NHS trust meets its statutory obligations and how much the hospital trust must pay in dividends to the government. Thus the form of accrual accounting and how it is adopted is important for performance measurement and public accountability. The designers of the accounting system are the standard setters, the Treasury and the Department of Health; the FRAB; the accounting firms and, at local level, the directors and accountants. IFRS results in volatility in performance (asset values, surpluses/ deficits). The inherent flexibility provides scope for manipulation and consequently there is a lack of transparency and poor accountability. Further research is needed to fully understand why the accounting is designed to have such power and whether the effects are intended.

## References

Accounting Standards Board (1984), *SSAP 21 Accounting for Leases and Hire Purchase Contracts*

-----, (1994), *FRS 5 Reporting the Substance of Transactions*

-----, (1998), *Amendment to FRS 5: Reporting the Substance of Transactions: Private Finance Initiative and similar contract.*

-----, (1997), *ED Amendment to FRS 5: Private Finance Initiative and Similar Contracts*

-----, (1998), *Application Note to FRS 5: Private Finance Initiative and Similar Contracts*

-----, (1999), *Statement of Principles for Financial Reporting.*

-----, (2007) *Statement of Principles for Financial Reporting: Interpretation for public benefit entities.*

Arnabaldi, M. and I. Lapsley, (2004), *Modern Costing Innovations and Legitimation: A Health Care Study, Abacus*,.40 (1).

Barton, A., (2003) *How to profit from defence: A study in the misapplication of business accounting to the public sector in Australia, Financial Accountability and Management*, 20 (3)

-----, (2005) *Professional Accounting Standards and the Public Sector --a Mismatch, Abacus*, .41 (2)

Benston, George J (2008) *The shortcomings of fair-value accounting described in SFAS 157, Journal of Accounting and Public Policy*, 27 101-114.

Broadbent, J. and R. Laughlin (2003), *Control and Legitimation in Government Accountability processes: The Private Finance Initiative in the U.K., Critical Perspectives on Accounting*, 14.

Broadbent, J. & Laughlin, R. (2005). *Government concerns and tensions in accounting standard-setting: the case of accounting for the Private Finance Initiative in the UK. Accounting and Business Research*, 35(3), 207-228.

Burchell, S., Clubb,C., Hopwood, A., Hughes, J. and Nahapiet, J (1980), *The roles of accounting in organizations and society, Accounting, Organisations and Society*, 5, (1).

Christensen, M. and L.Parker (2010), *Using ideas to advance professions: public sector accrual accounting. Financial Accountability and Management* 26, (3) 246-266.

Christiaens, J. and Rommel, J. (2008) *Accrual accounting reforms: only for businesslike (parts of) governments, Financial Accountability and Management*, 24 (1) 59-74.

Department of Health, *Accounting for PFI under IFRS –version 3. 2009.*

Ellwood, S., (2003) Bridging the GAAP across the U.K. Public Sector, *Accounting and Business Research*, 33, (2),.

Ellwood, S. and S. Newberry, (2006) A Bridge Too Far: a common conceptual framework for commercial and public benefit entities, *Accounting and Business Research*, 36, (1)

Ellwood, S. (2008), Accounting for Public Hospitals: A case study of modified GAAP, *Abacus* , 44 (4) 399-422.

Heald, D. (1990), The valuation of Power Stations by the Modern Equivalent Asset Method, *Fiscal Studies*, 86-108.

Hines, R. D., (1988), Financial Accounting: In communicating Reality, we construct reality, *Accounting, Organizations and Society*, .13, (3).

Hodges, R. & Mellett, H. (2002). Investigating Standard Setting: Accounting for the UK's Private Finance Initiative. *Accounting Forum*, 26(2), 126 – 151.

Hopwood A., (1984) 'Accounting and the Pursuit of Efficiency', *Issues in Public Sector Accounting*, edited by A. Hopwood and C. Tomkins, Philip Allan Publishers Limited.

Hopwood A (1982), Accounting calculation and the shifting sphere of the economic, *European Accounting Review*, 1, (1).

HM Treasury, (2005), *Delivering the benefits of accruals accounting for the whole public sector*. HMSO.

-----, *Technical Note No 1: How to account for the Private Finance Initiative Transactions*, [http://www.hmtreasury.gov.uk/media/D75/C6/PPP\\_TTF\\_Technote1.pdf](http://www.hmtreasury.gov.uk/media/D75/C6/PPP_TTF_Technote1.pdf)

Humphrey, C. and Scapens R.W.,(1996) Methodological themes. Theories and case studies of organizational accounting practices: limitation or liberation? *Accounting, Auditing and Accountability Journal*, 9, (4).

IASB (1989), *The Framework for the Preparation and Presentation of Financial Statements*.

IASB (2010) *The Conceptual Framework for Financial Reporting*, IFRS Foundation.

Mautz, R.K., (1988) Monuments, Mistakes and Opportunities, *Accounting Horizons*, Editorial, June, 1988.

Monitor (2010), *NHS Foundation Trusts: Consolidated Financial Statements 2009-10*, Monitor Independent Regulator of Foundation Trusts.

Nasi, S., *Criteria for Choosing a Business Accounting Model in the Finnish Public Sector*, University of Jyväskylä School of Business and Economics Working Paper No. 198, 1999.

Newberry, S., 'Public Sector Accounting: A Common Reporting Framework?' *Australian Accounting Review*, Vol. 11, No.1. 2001.

Newberry, S. and J. Pallot, 'A wolf in sheep's clothing? Wider consequences of the Financial Management System of the New Zealand Central Government', *Financial Accountability and Management*, Vol. 21, No.3, 2005.

Pallot, J., The Nature of Public Assets: A Response to Mautz. *Accounting Horizons*, June, 1990.

Simpkins, K., *A review of the policy of sector-neutral accounting standard-setting in Australia*, Financial Reporting Council of Australia, 2006.

Van Zijl, T. and Whittington, G. (2006), Deprival value and fair value: a reinterpretation and a reconciliation, *Accounting and Business Research*, 36 (2) 121-130.

Vinari, E.M and S. Nasi (2008), Creative accrual accounting in the public sector: 'milking' water utilities to balance municipal budgets and accounts, *Financial Accountability and Management*, 24 (2) 97-116.

Walker, R.G., Clarke E.L. and G.W. Dean, (2000) Use of CCA in the Public Sector: Lessons from Australia's Experience with Public Utilities', *Financial Accountability and Management*, Vol. 16, No.1.

Walker, R.G. and Robinson, P. (1993) A critical Assessment of the Literature on Political Activity and Accounting Regulation, *Research in Accounting Regulation*, 7, 3-40.

Worcestershire Acute Hospitals NHS Trust (WAHT) (2009), Annual Accounting Statements 2008/09.

-----, (2010) Annual Accounting Statements 2009/10.

Whittington, G., (1998), Deprival value and price change accounting in the UK, *Abacus*, Vol.34, No.1.

Whittington, G., (2008), Fair Value and the IASB/FASB Conceptual Framework Project: An Alternative View, *Abacus*, Vol. 44, No. 2.