

Fair Value Accounting for Health Care Entities: Impact on Hospital Performance Reporting

Nancy M. Kane, DBA
Professor of Management
Department of Health Policy and Management
Harvard Chan School of Public Health
Boston, Massachusetts USA

This Special Issue of the *Journal of Health Care Finance* honors Dr. Louis C. Gapenski for his contributions to the fields of health care finance, public health finance and health administration. In his writing, teaching and mentoring, he served as a role model for all of us.

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Abstract

Fair value accounting principles were extended to not-for-profit hospital financial instruments with readily determinable values starting in fiscal year 1996; their impact on reported hospital and health system financial performance has greatly increased since then. Fair value accounting requires the reporting of unrealized gains and losses on financial instruments, which are usually temporary and are created by short-term capital market behavior. These unrealized gains/losses are often included in hospital annual earnings and profit margins.

Large investment portfolios of many hospitals generate both realized and unrealized returns that often exceed the income generated by hospital operations. Accounting rules allow for significant variation in the way unrealized returns on financial instruments are reported in hospital financial statements, including those used for most health services research. This paper explores the impact on hospital total margins of the unrealized returns themselves, as well as the impact of how those returns are reported. Using three examples, the results suggest that fair value accounting has likely introduced significant “noise” into inter-hospital and time trend comparisons of hospital financial performance. The credibility of critical financial information about our hospitals and health systems is undermined by our lack of knowledge and ability to adjust for current FVA practices.

Introduction

In 2009, McKay and Gapenski (2009) highlighted the need to pay attention to the significant contribution that non-operating revenues made to hospital profitability, and urged managers and researchers to better understand these components of financial performance. While acknowledging that investment income was a significant component of non-operating revenue, Gapenski and McKay did not delve into significant sources of variation in non-operating revenue caused by fluctuations in the fair value (referred to as Unrealized Gains/Losses) of financial assets and liabilities (financial instruments) and variation in how they are reported. Fair value accounting (FVA) changes that have been underway since 1996 have had a gradual but increasingly material impact on commonly used financial performance measures of hospitals and health systems. Most health services researchers do not mention this trend or adjust for its impact on research using hospital financial performance measures.

FVA introduces two major sources of complexity into hospital financial analysis:

- It incorporates often very large annual and generally temporary fluctuations in fair value of investments driven by capital market behavior into key hospital performance measures, which can mask the impact of hospital operating performance.
- It can confound cross-hospital comparisons due to the leeway allowed managers in how to report Unrealized Gains/Losses.

For not-for-profit hospitals, two key areas of FVA are subject to significant managerial discretion: the *classification* of securities based upon the intended use upon acquisition, and the *option to apply FVA* or not to financial instruments lacking readily determinable fair value. Both decisions determine how Unrealized Gains/Losses are recognized, and in particular, whether or not they affect hospital income. This paper will focus on the impact of securities classification on total margins, which is a relatively straightforward calculation from publicly available information. The implications of managerial discretion with regard to the fair value option are difficult to quantify with publicly available information, so will not be addressed in this exercise.

A related challenge to hospital financial comparability with respect to the returns on financial instruments is variation in the entity within which the financial instruments are reported. Most health services research is focused on the performance of the hospital entity within a larger health system; however, health systems can choose to report financial instruments and their realized and unrealized returns within the hospital entity, or within the parent or foundation entity, or allocated across several entities.

This paper will illustrate the impact of FVA and entity choices among hospitals and health systems, using examples from three not-for-profit hospital audited financial statements obtained from the municipal repository¹ that makes not-for-profit hospital/health system audited financial statements publicly available for free if they have issued tax-exempt debt since 2009. The three examples illustrate a range of managerial choices with respect to financial instrument classification and

¹ <http://emma.msrb.org/Search/Search.aspx>

reporting entity. The analysis will focus on how those practices affect the reporting of total margins. It will also illustrate the relevance of FVA within the Medicare Cost Report (MCR), Schedule G, which is the most commonly used source of hospital financial data used in health services research.

Hospital Financial Performance in Health Services Research

For decades, health services researchers have used hospital financial performance measures to explore important managerial and policy questions. For instance, in recent years, researchers have explored associations between financial performance and hospital mergers (Noles, et al, 2015), quality (Nguyen, Halm and Makam, 2016; Encinosa and Bernard, 2005; Bazzolia, et al., 2008; Ly, Jha and Epstein, 2011; Dong, 2015), hospital characteristics such as ownership, location, payer mix, size, system affiliation, and market power (Bai and Anderson, 2016) safety net hospitals post-recession performance (Bazzoli, Fareed and Waters, 2014), and hospital governance characteristics (Collum, et al., 2014). Operating Income, Excess Revenue Over Expense, and Operating and Total Margins are the most commonly used measures; these reflect profitability, or the ability of the hospital to generate revenues in excess of the expense of producing that revenue². To the extent that FVA has a significant impact on these measures, research using them to explore questions generally related to the profitability of hospital operations, such as the research cited above, will also incorporate the “noise” from capital market behavior and FVA choices of management. This paper illustrates the potential impact of that “noise” using a few examples.

Evolution of Fair Value Accounting

FVA has gradually replaced historical (acquisition) cost as the basis for valuing financial instruments in the corporate world. The accounting profession began questioning the relevance of historical cost valuation as early as the 1960's; multiple other means of valuing assets were debated over the ensuing decades (Emerson, Karim and Rutledge, 2010). The Financial Accounting Standards Board (FASB) issued at least a dozen statements about financial instrument valuation since its first in 1984; in 1993, it issued SFAS 115, which was the first to require fair value reporting of financial instruments of for-profit, corporate reporting. According to SFAS 115, all debt and equity investments with readily determinable market values should be reported at fair value. It also established three categories of such securities, determined by managerial intent when the instruments were acquired: “trading” securities were debt and equity securities bought and sold with the objective of generating profits on price increases; the two other categories were “held to maturity” securities, which were those that the organization intended to hold to maturity; and “available for sale” securities, a residual classification of securities that were neither “trading” nor “held to maturity” securities. The Unrealized Gains/Losses on trading securities were required to

² Operating Income = (Net Patient Service Revenue + Other Operating Revenue) – Operating expense; Operating Margin = Operating Income / (Net Patient Service Revenue + Other Operating Revenue). Excess Revenue Over Expense = (Net Patient Service Revenue + Other Operating Revenue + Nonoperating Revenue) - (Operating and Nonoperating Expense). Total Margin = Excess Revenue Over Expense / (Net Patient Service Revenue + Other Operating Revenue + Nonoperating Revenue).

be reported within each year's earnings, also referred to as the "performance indicator". For securities not designated as trading, Unrealized Gains/Losses were to be reported in a separate component of equity that is not associated with the performance indicator.

Other FASB statements ensued, extending FVA to the reporting of derivative financial instruments (including interest rate swaps, a common use of derivatives by health care entities) and alternative financial instruments lacking a readily determinable market value such as equity investments, limited partnerships and private equity funds. Determination of the fair value of such instruments required managerial estimates, and the standards permitted management to elect whether or not certain eligible items would be reported at fair value. Depending on the type of financial instrument, different rules applied for reporting annual fluctuations in those values (within or outside the performance indicator).

Until the mid-1990's, not-for-profit hospital accounting principles adhered to the principle of historical cost as the basis for valuing financial instruments. However, FVA standards were extended to not-for-profit hospital financial instruments with readily determinable values starting in fiscal year 1996 by SFAS 124, "Accounting for Certain Investments Held by Not-for-Profit Organizations" (Luecke and Giniat, 1996). Unrealized Gains/Losses on securities valued at fair value were originally only to be treated similar to the "trading" classification, although some leeway was allowed to adopt one of the other two categories.

The 2015 AICPA Audit and Accounting Guide for Health Care Entities current guidance states that not-for-profit health care entities are to report Unrealized Gains/Losses on trading securities within the "performance indicator" (generally equivalent to "Excess Revenue Over Expense"), and Unrealized Gains/Losses of non-trading securities are to be reported "below" the performance indicator (generally, in "Other Changes in Net Assets"). Reporting of changes in the value of derivatives for which management has elected to apply fair value depends on whether the derivative (generally, an interest rate swap) is part of a hedging relationship. Without getting into the complex details, the guidance is that Unrealized Gains/Losses of some derivative instruments are recognized within the "Performance Indicator", while for other derivative instruments, Unrealized Gains/Losses are recognized as "Other Changes in Net Assets".

The general implications relevant to health services researchers are that Operating Income, Excess Revenue over Expense and Operating and Total Margin measures can include Unrealized Gains/Losses that fluctuate dramatically from year to year, driven by capital market changes, managerial determinations of the intent of holding investments, and managerial estimates of value for securities lacking publicly available prices. Furthermore, the comparability across hospitals depends on which entity holds the financial instruments. This paper explores the magnitude of fair value - driven fluctuations and the variations in how they are reported by focusing on reported Excess Revenues (deficits) and Total Margins, which is where they tend to have the greatest impact.

Three Health Systems Use of Fair Value Accounting and Reporting

Three health systems were selected from among a group of health care organizations analyzed by the author for a variety of purposes over several years. They are not selected to be representative of any particular population of hospitals; rather, they are illustrations of the variety of ways FVA and entity choices are made, and of the implications of those choices on the comparability of Total Margins across the three systems.

Shore Memorial Health System, located in Somers Point, New Jersey includes a 296 bed acute hospital (Shore Medical Center) as well as a parent, a foundation, professional corporations for employed physicians, and several limited partnerships. The audited financials included supplementary schedules that broke out the financial statements of the hospital from other affiliates; thus the hospital entity data, supplemented by System footnotes, was the data used for this analysis.

Carle Foundation, headquartered in Urbana Illinois, includes the 393 bed Carle Foundation Hospital, the Carle Physician Group, a retirement living center, a foundation, and some insurance businesses, and a critical access hospital. The audited financials for Carle Foundation also provided supplementary schedules so that the financial statements of the hospital entity could be used for the analysis. Financial data from the Foundation entity were also analyzed, for reasons which will be explained further below.

Gundersen Health System is headquartered in La Crosse, Wisconsin, and includes the 249 bed Gundersen Lutheran Medical Center as well as the Gundersen Clinic (a large multispecialty physician group practice), a foundation, and an administrative services organization. The audited financials available for this system did not provide supplementary schedules so the analysis reflects the consolidated results of these entities.

Shore Memorial Health System

As of 2014, Shore Medical Center (the hospital) retained 96% of the financial instruments of the system. The impact of fair value accounting was thus largely felt within the hospital entity. The System annually classified a percentage of its financial instruments as trading securities on which Unrealized Gains/Losses were recognized within the “performance indicator”. A footnote disclosed that a substantial portion of these Unrealized Gains/Losses were reported in “Other Revenue” (included in Operating Income) while the rest were reported under “Non-operating Revenue”.³ The remaining securities were classified as “not trading” securities, and the related unrealized gains and losses were not reported within the “performance indicator”. It is not clear whether they were reported as Other Changes in Net Assets, as Unrealized Gains/Losses of “not trading” instruments were not separately identified in the Statement of Changes in Net Assets.

The proportion of securities designated as trading and not-trading varied significantly from year to year, from 37% to 78% of the total investment portfolio. The pattern over the seven years was

³ Over the period 2008 – 2014, \$1.4 million of Unrealized Gains were reported as part of Other Operating Revenue, while \$3 million of Unrealized Losses were reported as part of Nonoperating Revenue.

that in years of strong unrealized gains, a higher proportion of securities were classified as “trading” and thus bolstered the system’s profitability.

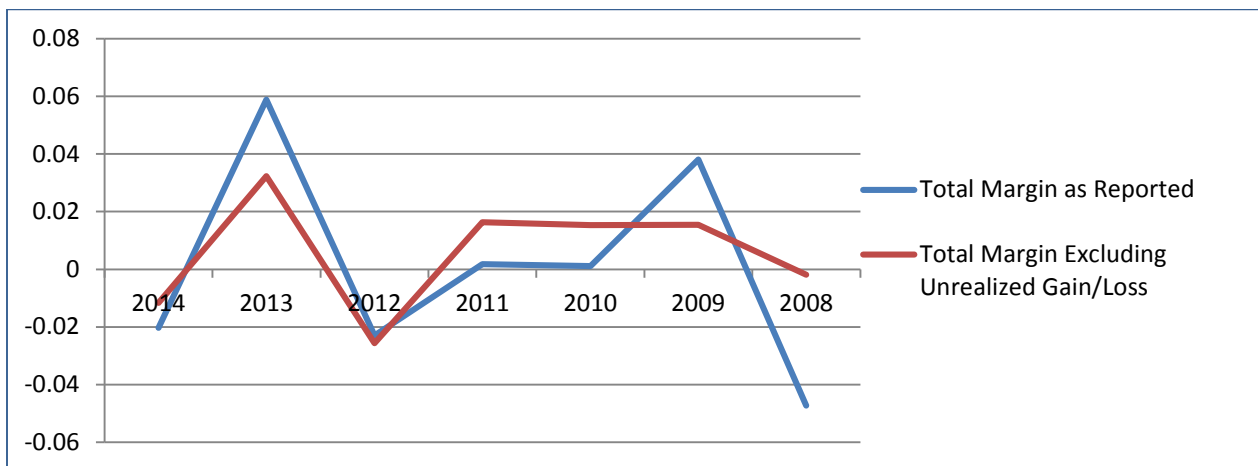
Table 1. Shore Health System Designation of Trading and Not-Trading Securities, 2008-2014 (\$ in thousands)

Year	Trading (% Total)	Not Trading	Reported Unrealized Gains/Losses
2014	23,908 (37%)	40,711	-955
2013	40,734 (78%)	11,351	4,435
2012	34,929 (68%)	16,564	1,015
2011	23,767 (52%)	21,874	-1,015
2010	53,801 (75%)	18,405	560
2009	49,014 (63%)	29,176	6,267
2008	42,225 (48%)	45,576	-8,425

The other large fair value fluctuation affecting Shore Memorial Health System was generated by its interest rate swap agreement, which was “not designated as a hedging instrument”, so the change in fair value of the swap agreement was also recorded in non-operating revenues. The amounts reported varied from plus or minus roughly \$2 million over the period 2010 – 2014; there was no interest rate swap agreement before 2010.

The impact of reported Unrealized Gains/Losses of financial instruments is captured in Figure 1, which shows the hospital’s Total Margin as reported, and the Total Margin excluding the reported impact of unrealized gains and losses from trading securities and interest rate swaps.

Figure 1. Shore Medical Center, 2008-2014, Total Margin with and without Unrealized Gains/Losses on Financial Instruments



In the years of significant capital market volatility, the impact of fair market value fluctuations was of a magnitude sufficient to change the total margin by more than 1% (by 4% in 2008) as well as alter the trend lines. The Total Margin excluding the results of unrealized gains/losses showed less variability (roughly a five percentage point range over the period) than did the Reported Total Margin (just over a 10 percentage point range). Recognized Unrealized Gains/Losses reduced cumulative excess revenue over the period 2008–2014 by roughly 30%.

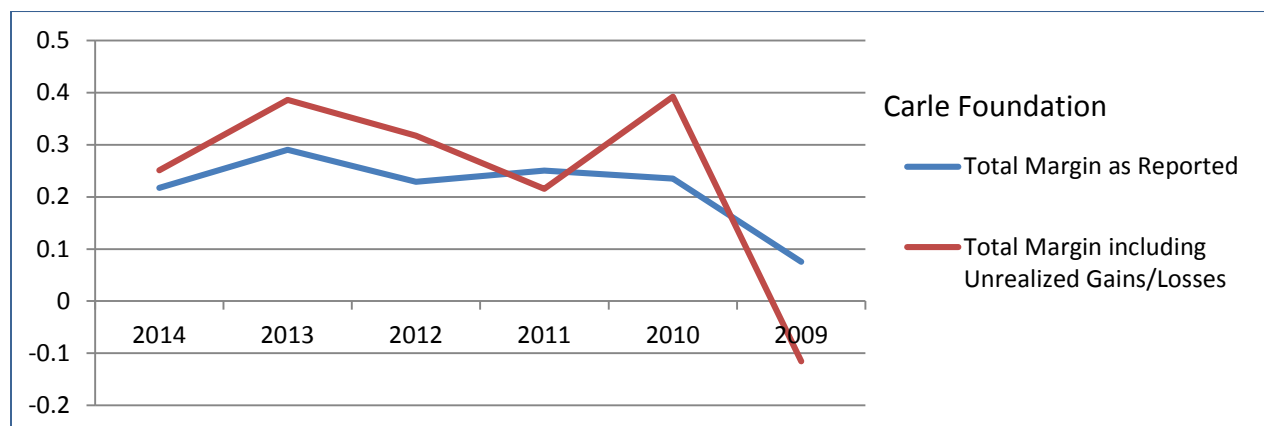
Carle Foundation

This system’s entire \$950 million in securities assets (as of 2014) and the interest rate swap liability were held in the Foundation, not by the hospital entity. Most of the Foundation assets came from equity transfers by the hospital to the foundation: over the period of this analysis (2009-2014), the hospital made equity transfers of \$476 million to the Foundation, or roughly 75% of its hospital earnings over the period. This had the practical effect of taking the financial returns on investments out of the hospital entity.

However, unlike Shore, the Foundation reported almost no Unrealized Gain/Loss on the \$950 million as part of the “performance indicator” or income, because 99% of the securities were designated as “non-trading”. If the Carle Foundation Hospital entity had retained the financial instruments and related returns, and had designated them as trading rather than as non-trading, the hospital’s total margin would have been significantly different than reported. Figure 2 below shows the total margin as reported for the hospital, and what it would have been if both realized investment income and Unrealized Gains/Losses on financial instruments, including interest rate swaps, had been part of the hospital entity and classified as trading rather than as non-trading.

Other than 2009, when capital markets were still significantly depressed, total margins including the Unrealized Gains/Losses and all realized investment income (roughly half of the total return) were in the range of 22 – 39%, compared to a range of 22 – 29% as reported. Had the total investment return been included in Carle Foundation Hospital’s Excess Revenue over Expense over the period 2009 – 2014, it would have been 25 % higher than reported, and 13% higher just on Unrealized Gains alone.

Figure 2. Carle Foundation Hospital Total Margins without and with Total Investment Returns

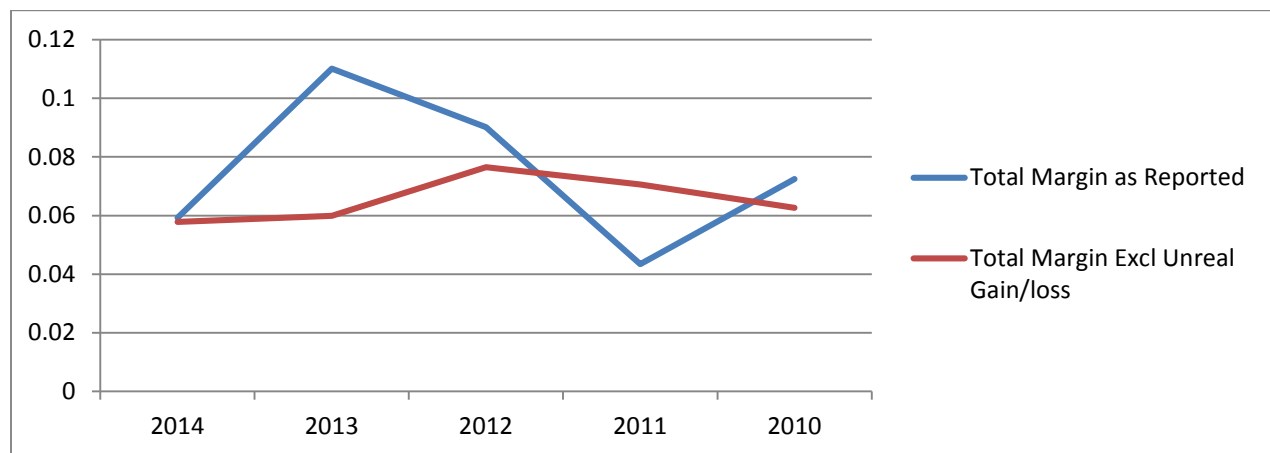


Gunderson Lutheran Health System

While Carle Foundation designated nearly all of its investment portfolio as not trading, and Shore designated roughly half of its investment portfolio as trading, Gunderson Lutheran Health System, designated all of its \$538 million investment portfolio as trading. Thus Gunderson reported all Unrealized Gains/Losses generated by the portfolio as non-operating revenues of the system. The audited financial statements available did not provide consolidating entity reports that would identify which entity held the securities.

The wide volatility of the Total Margin of Gunderson Lutheran as reported reflected the fact that all securities were classified as trading. The range in total margin over the period 2010-2014 was 6.7 percentage points, whereas the total margin excluding Unrealized Gains/Losses had a range of less than 2 percentage points. Unrealized Gains/Losses over the period represented 14% of Excess Revenue over Expense, adding \$48 million to the total of \$347 million in net income.

Figure 2. Gunderson Health System Hospital Total Margins without and with Total Investment Returns



Fair Value Accounting and Reporting in the MCR Schedule G

Most health services researchers rely on the financial data in Schedule G of the MCR to calculate hospital profitability, including total margins (Noles, 2015; Bazzoli, et al., 2008; Bazzoli, et al., 2014; Dong, 2015; Collum et al., 2014, Bai and Anderson, 2016). Thus it is important to consider whether or not variation in FVA is included in the MCR data.

A comparison of hospital entity Reported Total Margins of the audited financials with the Total Margins calculated from the MCR generated similar results in most years for the two hospitals with comparable hospital-entity audited data. The Reported Total Margin from the audited financials of Shore Medical Center were very similar to the Total Margin calculated from the MCR— they were between 0 and 1 % point apart in all years except 2011 and 2013. This suggests that Unrealized Gains/Losses on financial instruments were included in the revenues and expenses

reported on the MCR. The Reported Total Margin from the audited financials of Carle Foundation Hospital were also roughly the same as the Total Margin calculated from the MCR – the differences were at or below 1% in all years of the analysis. Thus comparing Carle Foundation Hospital’s Total Margin based on the MCR to that of Shore Medical is comparing apples to oranges; Shore’s MCR total margins were deflated by 30% by including fair value fluctuations, while Carle Foundation Hospital’s MCR total margins were reduced by 25% by not including fair value fluctuations and investment income on a substantial portfolio of financial assets.

Because Gundersen’s audited financial statements did not have supplemental consolidating entity reporting, it was not possible to match the hospital’s reported total margins to what was reported in the MCR. The Total Margins reported on the MCR were 2-3 1/2 times higher than those calculated from the audited financials of the Gundersen Lutheran Health System.

Unfortunately, it is not possible to adjust for differences in FVA approaches when using MCR financial data. The adjustments require access to the footnotes of audited financial statements to identify fair value accounting policies and to assess their impact on hospital profitability.

The easiest way to adjust for the impact of FVA would be to focus on operating rather than total margins, as that excludes non-operating revenues, where fair value returns generally (but not always, as was seen in the case of Shore Medical Center) have the greatest impact. Unfortunately, the Schedule G does not clearly or consistently identify the components of operating revenue and expenses; instead it focuses on patient versus non-patient revenues, the latter representing a mix of operating and non-operating revenues. In particular, Other Operating Revenues (items such as parking and cafeteria sales, as well as research and educational grants, investment returns on debt service reserve or other trustee-held funds, and other non-specified activities) and Non-Operating Revenues (generally, unrestricted donations, unrestricted investment income, returns on equity investments and joint ventures, and other non-specified activities) are not clearly and separately identifiable on the MCR. In addition, expenses associated with “Other Operating Revenue”- such as those associated with research grants - are not generally reported separately from expenses associated with patient care, so efforts to calculate an Operating Income or Operating Margin often result in a mismatch of revenues and expenses. Finally, the Schedule G is not routinely audited, so it is prone to random errors in reporting. These problems have been previously reported by others and remain problematic (Kane and Magnus, 2001) (Osmeral, Reiter, Holmes and Pink, 2012). Trimming outliers in the Schedule G data, as some researchers do to adjust for errors in reporting on the MCR, is not going to capture the significant noise generated by differences in approaches to FVA.

Recommendations

Health services researchers need valid hospital financial performance measures to assess a wide range of important policy and management issues. With the increasing use of FVA, some of those performance measures are subject to material variation in the accounting approaches used to produce them. The MCR is woefully inadequate for adjusting financial performance measures for FVA impact and variation in approach.

The ideal situation would be for the Center for Medicare and Medicaid Services (CMS) to require that hospitals report on the Schedule G the same data used to produce an audited financial statement, with footnotes disclosing accounting policies at the same level of detail as those used to produce an audited financial statement. To the extent that the data could be automated, obviously this would also be useful, although it would still need to be adjusted for variations in order for valid comparisons to be made across hospitals.

At a minimum, it would be helpful to require hospitals to attach an audited financial statement with consolidating supplemental information disclosing the income statements and balance sheets of each hospital/hospital grouping with a separate Medicare ID with their submission of an MCR. While this means that substantial standardization and data entry would be required of the analyst, at least the audited data would be publicly available for all hospitals in the United States. On the negative side, this would represent a substantial increase in the reporting burden for some large, multihospital chains that generally consolidate the financial data of all of their hospitals into one “hospital division” or geographic region for purposes of audited financial statement reporting. Less onerous would be for CMS to design a more meaningful Schedule G that was more representative of the way hospitals report revenues and expenses in audited financial statements, specifically separating revenues and expenses into operating and non-operating categories rather than patient and non-patient categories. Then the effects of FVA could be reduced to reflect only the impact of Unrealized Gains/Losses reported in Other Operating Revenue/Operating Expense, which tends to be much less than that reported in Non-Operating Revenue/Expense. The downside to this approach is that the significant returns earned on investment portfolios, coupled with other significant sources of non-operating revenues, would be excluded from a comparative analysis. Also, neither of these approaches addresses the variation in managerial selection of which entity reports investment portfolio returns.

Lacking a national approach, health service researchers may be better advised to seek smaller populations of hospitals to analyze, and focus on those with audited financial statements that are publicly available from the municipal repositories regulated by the Securities and Exchange Commission (SEC).⁴ This would still require that the analyst standardize the information to be able to compare apples to apples – no small task - but at least the results are more likely to be valid. It would also exclude many smaller and/or financially weaker hospitals that do not issue tax-exempt debt, or public hospitals that may issue their debt through the county or city that owns them.

There is no easy national solution, but the current use of MCR for financial analysis may not be producing valid results for many research questions that involve comparisons across hospitals or over time at the hospital entity level. A longer-term, partial solution would be to encourage FASB to reduce the opportunities for reporting variation currently allowed by FVA policy statements. For instance, allowing management to classify securities based on intention, which then affects whether or not Unrealized Gains/Losses are considered part of the performance indicator, provides significant opportunity for earnings management. Tax-exempt hospitals with hundreds of millions, even billions of dollars of investments, buy and sell securities often, permitting easy reclassification between trading and non-trading designations.

⁴ These can be found at <http://emma.msrb.org/Search/Search.aspx> and downloaded without charge.

Future research is needed to examine the audited financial statements of a representative sample of hospitals, randomly selected within representative categories, to establish the prevalence of and variation within FVA practices – including the classification of securities, and identifying the entity that holds the securities. The impact that variation in practices have on key financial measures such as hospital profitability needs to be estimated, as well as their impact on what is reported in the MCR. The credibility of critical financial information about our hospitals and health systems is undermined by our lack of knowledge and ability to adjust for current FVA practices.

Corresponding Author

Nancy M. Kane, DBA
Department of Health Policy and Management
Harvard Chan School of Public Health
677 Huntington Avenue
Kresge Building Room 313
Boston, MA 02115
Phone: 617-432-4512; E-mail: nkane@hsph.harvard.edu

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