

This is a sample of the instructor materials for Thomas E. McKee and Linda J. B. McKee, *Healthcare Applications: A Casebook in Accounting and Financial Management*.

The complete instructor materials include solutions for all 56 of the book's cases. This sample includes the solutions for Case 1.1, Case 1.2, and Case 1.3.

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### Case 1.1: Blue Sky—Solution

1. What parties are responsible for hiring the top management (e.g., CEO, CFO) of a hospital?  
Board of directors or board of trustees.  
The board of directors for a for-profit hospital is elected by shareholders.  
The board of directors for a nonprofit hospital is typically appointed by trustees.
2. What is a major, regular source of financial information that the parties responsible for hiring a hospital's top management receive at their periodic meetings?  
Financial statements containing an income statement and a balance sheet are typically presented at monthly or quarterly board meetings.
3. What types of information are contained in financial statements prepared under generally accepted accounting principles (GAAP)?  
The income statements show the revenues and expenses that created either a net income [for profit entity] or an operating margin [not-for-profit entity].  
The balance sheet shows assets, liabilities, and equity (net assets for a not-for-profit entity).
4. Who are some other individuals who might want to use the information in the financial statements?  
Managers and employees to evaluate current and future job security and benefit possibilities.  
Creditors to see if they might want to extend credit.  
Shareholders of for-profits to see what their return on investment (ROI) is.  
Patients to see if the hospital has an up to date physical plant.  
Internal Revenue Service to see what taxes are owed and, in the case of nonprofits, if they are meeting the requirement for nonprofit status.  
Community representatives to see if the community needs are being met.  
Investment analysts who are following the stock of public companies to see what they think the future prospects for the company are.  
Bondholders to see if it appears they will be repaid.
5. What specific decisions might the individuals you identified in the previous question make based at least partly on GAAP-based financial statements.  
See previous answers.
6. How would external reporting of GAAP-based financial statements differ for a nonprofit hospital compared to a for-profit hospital?  
Some elements of the financial statements are different, but most of the information is the same.  
Both have to file financial statements with the IRS.  
The board of directors of both types of hospitals would receive the financial statements.  
Public company for-profit entities would have to file with the SEC and stock exchanges.
7. Name at least two government regulators who could demand financial information from a hospital, either nonprofit or for-profit?

IRS  
SEC  
State tax authorities  
CMS-Medicare

8. A famous quote in healthcare circles is, “No margin, no mission.” What does this statement mean, and how does it connect to healthcare accounting?

Margin is the excess of revenues over expenses.

A hospital with consistent negative margins (losses) over the long-term will eventually go bankrupt.

A hospital with a negative margin will have difficulty in accumulating enough cash to buy new equipment, invest in new processes, or add new physical plant.

All organizations must monitor and maintain their “financial health,” just as individuals must monitor and maintain their personal health. Accounting provides information to assist in monitoring and maintaining financial health.

## Case 1.2: Health Diagnostic Laboratory Inc.—Solution

### 1. Is the Medicare \$3 reimbursement for a blood draw the “fair market value”? Why or why not?

*Coding for Medicare is complicated! CPT Code 36415 is for collection of venous blood by venipuncture. The CMS Claims Processing Manual, Chapter 16 states:*

“A specimen collection fee is allowed in circumstances such as drawing a blood sample through venipuncture (i.e., inserting into a vein a needle with syringe or vacutainer to draw the specimen) or collecting a urine sample by catheterization. A specimen collection fee is not allowed for blood samples where the cost of collecting the specimen is minimal (such as a throat culture or a routine capillary puncture for clotting or bleeding time). . . . . Only one collection fee is allowed for each type of specimen for each patient encounter, regardless of the number of specimens drawn. When a series of specimens is required to complete a single test (e.g., glucose tolerance test), the series is treated as a single encounter.”

*CPT Code 99000 is for handling and conveyance of blood drawn.*

“CPT code 99000, “Handling and/or conveyance of specimen for transfer from the physician's office to a laboratory,” is intended to be reported when the practice incurs costs to handle and/or transport a specimen to a lab. For example, if the practice employs a messenger service to transport a specimen, that service can be coded using 99000. In comparison, if lab staff pick up a specimen at no additional cost to the practice, it would not be appropriate to report code 99000. Code 99000 also is not intended for reporting the obtaining of a specimen.” (<http://www.aafp.org/fpm/2000/0700/p23.html>, accessed 04/15/2015)

*“Fair market value” is frequently defined as the price at which an item would sell in a voluntary transaction in an active market with a willing buyer and willing seller, neither being under pressure or obligation to buy or sell.*

*CMS sets Medicare reimbursements by studying actual billing and cost data of hospitals and labs. What an item costs to produce or what a service costs to perform is not necessarily its “fair market value,” since individuals trading in a market are trying to make themselves economically better off (a profit).*

“Outpatient clinical laboratory services are paid based on a fee schedule in accordance with Section 1833(h) of the Social Security Act. Payment is the lesser of the amount billed, the local fee for a geographic area, or a national limit. In accordance with the statute, the national limits are set at a percent of the median of all local fee schedule amounts for each laboratory test code.” (<http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ClinicalLabFeeSched/index.html>, accessed 04/20/2015)

*If the Medicare \$3 reimbursement was only for the cost of drawing the blood and did not include handling and processing costs then it would appear to be less than “fair market value” for the services which included drawing, handling, and processing.*

**2. Is a time and motion study a reasonable way to determine the cost of processing and handling blood samples?**

*Yes, a time and motion study is a reasonable way to determine the cost of an activity, assuming the individuals performing the study were knowledgeable, were independent, performed reasonable procedures, and had an adequate sample size.*

*The HDL time and motion study cost of \$17 would be more credible if a qualified, independent third party had performed the study.*

**3. What are other ways to determine fair market value?**

*“Fair market value” can only be determined from prices in an active trading market where trading prices are public and which meet the previously discussed conditions.*

*“Market value” can be an opinion or estimate of what an item would sell for in an active market. Since price is sometimes determined from production cost, “market value” can be estimated as the sum of direct materials, direct labor, overhead, and a normal profit.*

*“Market value” can also be estimated from past market price data.*

*“Market value” may also be estimated from modeling economic factors.*

**4. Do you think a \$20 reimbursement for drawing, processing, and handling blood samples is a “kickback” that does not meet the “safe harbor” provisions of the Anti-Kickback Statute? Why or why not?**

*The Department of Health and Human Services Office of Inspector General issued a special fraud alert on June 25, 2014 which stated the following:*

*Medicare allows the person who collects a specimen to bill Medicare for a nominal specimen collection fee in certain circumstances, including times when the person draws a blood sample through venipuncture (i.e., inserting into a vein a needle with syringe or vacuum tube to draw the specimen).<sup>6</sup> Medicare allows such billing only when: (1) it is the accepted and prevailing practice among physicians in the locality to make separate charges for drawing or collecting a specimen and (2) it is the customary practice of the physician performing such services to bill separate charges for drawing or collecting the specimen.<sup>7</sup> Only one collection fee is allowed for each type of specimen for each patient encounter, regardless of the number of specimens drawn.<sup>8</sup> Physicians who satisfy the specimen collection fee criteria and choose to bill Medicare for the specimen collection must use Current Procedural Terminology (CPT) Code 36415, “Routine venipuncture – Collection of venous blood by venipuncture.”<sup>9, 10</sup>*

Medicare reimburses physicians for processing and packaging specimens for transport to a clinical laboratory through a bundled payment.<sup>11</sup> Physicians who wish to report the work involved in preparing a specimen to send to a laboratory may use CPT code 99000, “Handling and/or conveyance of specimen for transfer from the office to a laboratory.”<sup>12</sup> CPT code 99000 is intended to reflect the work involved to prepare a specimen prior to sending it to a laboratory, including centrifuging a specimen, separating serum, labeling tubes, packing the specimens for transport, filling out laboratory forms, and supplying necessary insurance information and other documentation.<sup>13</sup>

The anti-kickback statute is implicated when a clinical laboratory pays a physician for services. Whether an actual violation of the statute occurs depends on the intent of the parties—the anti-kickback statute prohibits the knowing and willful payment of such amounts if even one purpose of the payment is to induce or reward referrals of Federal health care program business. This is true regardless of whether the payment is fair market value for services rendered. The probability that a payment is for an illegitimate purpose is increased, however, if a payment exceeds fair market value or if it is for a service for which the physician is paid by a third party, including Medicare.

([https://oig.hhs.gov/fraud/docs/alertsandbulletins/2014/OIG\\_SFA\\_Laboratory\\_Payments\\_06252014.pdf](https://oig.hhs.gov/fraud/docs/alertsandbulletins/2014/OIG_SFA_Laboratory_Payments_06252014.pdf), accessed 04/15/2015)

*If the \$20 reimbursement was actually the cost of drawing, processing, and handling blood samples, then it would be hard to argue that it was a kickback as opposed to a reimbursement, since it would appear to be “fair market value” for the service.*

*The argument for the \$20 fee being actual fair market value is weakened by the fact that four other labs reimbursed less for blood samples drawn.*

*The “safe harbor” exception refers to the “compensation paid” in a manner that does not take into account the value of any referrals. If the actual cost (fair market value) of all the blood draw services was only \$12, then the additional \$8 ( \$20 – \$12 = \$8 ) could be viewed as compensation paid for a referral.*

*In any event, the OIG fraud alert previously quoted indicated that the government’s position is that an illegal payment can occur, even if at fair market value of services rendered, “...if even one purpose of the payment is to induce or reward referrals...”*

**5. What are some possible factors that may have influenced HDL in agreeing to an HHS corporate integrity agreement?**

*HDL might not have wanted to incur the cost of litigating the matter.*

*HDL might not have wanted to continue to receive bad publicity, which could affect current and potential client relationships.*

*HDL might not have wanted to run the risk of being suspended from the Medicare and Medicaid program by continuing to make payments that had been questioned.*

*HDL might not have had sufficient evidence that the \$17 additional cost reimbursement above the \$3 Medicare fee was reasonable.*

**6. Locate the March 31, 2015, HDL corporate integrity agreement at the HHS website (<https://oig.hhs.gov/compliance/corporate-integrity-agreements/cia-documents.asp>). What are the most restrictive provisions?**

*There is no objective answer to this question, as there are a number of provisions that could be viewed as “most restrictive.”*

*One possibility is the paragraph E requirement that, within 120 days, HDL hire an independent accounting or law firm to perform required compliance reviews.*

*Another possibility is the paragraph F requirement that, within 120 days, HDL implement an annual risk assessment and set up an internal audit work plan for auditing these risks.*

*The agreement also provides in Paragraph L that, within 120 days, HDL set up a program to monitor their sales representatives’ meetings with healthcare professionals.*

*The agreement also provides that HDL appoint both an Executive Compliance Committee (compliance officer and senior management) as well as a Board Compliance Committee, which comprises independent members of the board of directors. These committees are supposed to meet regularly to conduct reviews and oversight of HDL’s compliance activities.*

### Case 1.3: High Coastal Hospital Post-acute Care—Solution

*The primary purpose of this case is to make students aware of CMS efforts to make hospitals more accountable for quality.*

1. Assume the CMS reimbursement is 40 percent of the average High Coastal Hospital charge, and compute the estimated CMS Hospital Readmissions Reduction Program penalty that High Coastal Hospital faces. Consult the CMS website or other sources as necessary to help you with this computation.

**Precise determination of future readmission-related penalties is difficult since Medicare calculations to determine these penalties are very mathematically complex.**

**Based the supposed intent of the law, a reasonable estimation of the penalty would be approximately \$250,000.**

	Average Hospital Charge	Estimated CMS 40% Reimbursement	Excess Readmission Ratio	# Eligible Discharges	Per Case Aggregate Payments Excess Readmissions	Total Aggregate Payments Excess Readmissions
HF	\$28,120	\$11,248	1.0744	930	\$837.06	\$778,466.23
AMI	\$29,168	\$11,667	1.3436	739	\$4,008.36	\$2,962,180.40
PN	\$17,199	\$6,880	3.4533	297	\$16,877.95	\$5,012,751.74
COPD	\$26,266	\$10,506	0.5178	315		
THA/TKA	\$36,121	\$14,448	0.4268	393		
					Total	\$8,753,398.37
					2015 Penalty %	3%
					2015 Penalty \$	\$262,601.95

**However, the actual ACA language requires the penalty to be computed on total admissions for each measure, not just the payments related to expected readmissions. See article by J. Hoffman, 2015, “Overview of CMS Readmission Penalties for 2015” at <http://www.besler.com/2015-readmission-penalties/>. If this interpretation is correct, then the penalty would more than double to \$633,778.**



High Coastal Hospital Case						Per Case	Total Aggregate	Aggregate	Ratio	Higher of
	Average	Estimated	Excess	#	Aggregate	Payments	Payments	Payments		97% or
	Hospital	CMS 40%	Readmission	Eligible	Payments	Excess	All			Ratio
Condition	Charge	Reimbursement	Ratio	Discharges	Excess Readmissions	Readmissions	Discharges			
HF	\$28,120	\$11,248	1.0744	930	\$837.06	\$778,466	\$10,460,640	0.9255814	97%	
AMI	\$29,168	\$11,667	1.3436	739	\$4,008.36	\$2,962,180	\$8,622,061	0.65644172	97%	
PN	\$17,199	\$6,880	3.4533	297	\$16,877.95	\$5,012,752	\$2,043,241	-1.4533333	97%	
COPD	\$26,266	\$10,506	0.5178	315						
THA/TKA	\$36,121	\$14,448	0.4268	393						
					Total	\$8,753,398	\$21,125,942			
					2015 Penalty %	3%	3%			
					2015 Penalty \$	\$262,602	\$633,778.26			

The penalty computations previously shown are not been based on any data or penalty results; thus, they may be incorrect to some degree. The important thing is that students make a reasonable computation to determine that there is a significant cost for excess readmissions.

[The authors would appreciate any experience-based instructor suggestions for improving the penalty calculations in this case!]

2. Compute the cost of implementing either the Care Transition Intervention or the Transitional Care Model, assuming that all discharges in the five categories will participate in a transition program. Assume an iPhone 6 with “FaceTime” features will be issued to each CTI patient for a 30-day period after discharge and to each TCM patient for a 90-day period after discharge.

	Per Patient	Cost 30/90 days	Per Patient	Patients All Categories	Cost
TCI	\$200	\$150	\$350	2690	\$941,500
TCM	\$1,000	\$450	\$1,450	2690	\$3,900,500

3. Make a recommendation to Dr. Thomas based solely on financial factors about what action he should pursue.

From a purely financial perspective, the best course of action would be to accept the CMS penalty and do nothing, since either the TCI (\$941,500) or TCM (\$3,900,500) intervention would cost more than the estimated CMS penalty.

4. Make a recommendation after considering both financial and nonfinancial arguments.

Excess readmissions harm patients, so High Country Hospital, given its mission, clearly needs to work to improve its performance in this area, regardless of CMS penalties.

**The penalties are not just for 2015 but will continue into the future. Clearly, the hospital needs to consider the long-term strategic factors involved. One way of looking at the penalties is “revenue at risk.” The question is, What is the best long-term risk mitigation strategy?**

**It appears the AMI and PN are the areas with the most substandard performance. If implementation cost is the primary concern, it would make sense to initially adopt the lower-cost TCI program in the AMI and PN areas while working through normal quality assurance programs to try to improve HF. Adopting the TCI program for only AMI and PN would cost approximately \$365,750 (1,045 admissions x \$350 per admission), which is not significantly different from the lower CMS penalty estimate.**