

Creating Financial Transparency in Public Health: Examining Best Practices of System Partners

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Financial transparency is based on concepts for valid, standardized information that is readily accessible and routinely disseminated to stakeholders. While Congress and others continuously ask for an accounting of public health investments, transparency remains an ignored concept. The objective of this study was to examine financial transparency practices in other industries considered as part of the public health system. Key informants, regarded as financial experts on the operations of hospitals, school systems, and higher education, were a primary source of information. Principal findings were that system partners have espoused some concepts for financial transparency beginning in the early 20th century—signifying an 80-year implementation gap for public health. Critical features that promote accountability included standardized data collection methods and infrastructures, uniform practices for quantitative analysis of financial performance, and credentialing of the financial management workforce. Recommendations are offered on the basis of these findings to aid public health to close this gap by framing a movement toward transparency.

KEY WORDS: public health finance, public health financial transparency, public health accountability, public health financial management

Values for financial transparency in government escalated in the early 1990s with the advent of the Reinventing Government Movement. Accounting scandals in the following decade reinforced public and private anxieties regarding the full and honest disclosure of financial information. Enormous increases to the financial base of philanthropic organizations have also drawn calls for greater accountability of donors and re-

ipients. Organizations seeking to increase and diversify funding streams from these sources should feel a sense of urgency to ensure that transparency practices are institutionalized. If not, difficulties with acquiring financial information in public health could make competing for these resources as difficult as it has been to sustain more historical funding streams.

Quantitative analysis is a fundamental function of public financial management.¹ This is a step beyond the historical perception of governmental accountability, which focused primarily on budgeting and documenting the disbursement of funds.² However, public health lacks an operational framework for basic levels of financial analysis and research. Transparency is clouded by an absence of verifiable, reliable, and timely data that would be useful to decision makers. This systemwide barrier makes attempts at these activities painfully complicated.^{3,4}

● Study Purpose and Methods

Research of the public health system has shown that the fields of healthcare and education contribute to the delivery of essential public health services in jurisdictions across the country.⁵ Similar to public health agencies, they often operate as single organizations working toward broad systemwide goals.

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The purpose of this study was to examine best practices for financial management and analysis in hospitals, schools and school systems, and colleges and universities (higher education). All three fields have decades of experience establishing financial accountability systems much more sophisticated and transparent than those practiced in public health. This aim appeared to be feasible since the same fields were also asked to provide valuable insights when the feasibility of accreditation in public health was researched.^{6,7}

A goal of the study was to describe the key components of these accountability systems and to document incentives for implementation. A primary motivator for the study was to provide public health with knowledge valuable to increasing transparency and to provide best practices that can be used as guides to (1) advance public health finance as a field of study, (2) mainstream financial management practices, and (3) demonstrate the value of financial analysis to organization sustainability. Information was gathered from finance experts who hold leadership roles and significant levels of finance practice and policy experience in each of these fields. Additional information was solicited in interviews with oversight agencies and through literature and Web site reviews.

● Hospitals

A majority of the hospitals and health systems in the United States are in the private sector—either commu-

nity nonprofits (about 80%) or investor owned (about 20%). Even the few public hospitals that exist usually operate separately from the enabling governmental authority. As such, these organizations must operate as private enterprises since their existence often is dependent upon their ability to generate revenues in excess of their expenses over time.

Financial analysis and management practices

A key component of a private enterprise is its need to generate enough resources to sustain current operations and to reinvest for the future. To know whether revenues exceed expenses, and whether financial returns are adequate to reinvest for the future, hospitals and health systems rely on financial analysis, ratio analysis, and benchmarking. *Financial analysis* is the process of assessing the fiscal health of an organization using a variety of standard methods. *Ratio analysis* is a specific analytical method used for identifying an organization’s financial and operational strengths and weaknesses. In financial ratio analysis, the relationship of two or more values is expressed as a single number, with the result used as an indicator of financial status.⁸ A very small sample of highly relevant ratios for conducting financial analysis of hospitals is provided in Table 1. The table presents information that is particularly useful for benchmarking fiscal and operational efficiencies. *Benchmarking* is used to compare financial or operational indicators of peer organizations based on similar size, comparable budgets,

TABLE 1 ● Sample of key hospital financial ratios—2004*

Financial ratio	Formula	Description	Median value	
			>499 bed hospital	<100 bed hospital
Total margin	Excess of revenues over expenses divided by total revenues	Indicator of profits from all operations including operating revenue (main line of business) and nonoperating revenue (other sources of revenue such as interest, parking fees, gift shop, etc)	4.3	3.1
Current ratio	Current assets divided by current liabilities	Reflects the degree that short-term liabilities are covered by liquid assets	1.84	2.23
Days in patient accounts receivable	(Net patient accounts receivable times 365) divided by net patient revenue	Measures the average length of time that receivables are outstanding	49.7	57.6
Revenue per full-time equivalent (FTE)	Total revenue divided by total FTE	Used as an indicator of productivity	\$128,099	\$101,765
Salary per full-time equivalent	Total salary expense divided by total FTE	A key indicator of financial viability	\$44,789	\$39,301

*Data from 2006 Almanac of Hospital Financial & Operating Indicators (Ingenix).⁹

patient mix, and other areas of interest. Without accurate, timely, and comparative financial data, management is unable to answer basic questions regarding financial performance and status from stakeholders. The *Almanac of Hospital Financial & Operating Indicators* is published biannually by Ingenix and contains a comprehensive set of hospital financial performance ratios calculated using financial statements from more than 3,400 hospitals.

Standardized data

Almost all hospitals and health systems are required to have annual financial audits performed by independent, licensed public accounting firms using either Financial Accounting Standards Board or Governmental Accounting Standards Board standards. As such, management must maintain the financial records in accordance with these standards, using a fairly standardized chart of accounts. The standardized healthcare chart of accounts, initially developed in 1979 with support from the Kellogg Foundation, also facilitates benchmarking and multiorganizational comparisons. For hospitals, the Healthcare Financial Management Association maintains the most broadly used chart of accounts.

Professional association

Founded in 1946, the Healthcare Financial Management Association provides services that include professional development programs, publications, certification programs for credentialing the workforce, job postings, professional standard setting, and so on. These services provide information on key trends, industry regulations, and new and necessary skills, and provide networking opportunities to solve common problems.

● Schools and School Districts

The financial analysis of schools and school districts benefits from a robust, uniform pool of financial, demographic, and operating data. Through the US Census Bureau and the National Center for Education Statistics (NCES), the federal government centrally collects a wealth of information about elementary and secondary education in the United States, including annual financial results. School districts are funded primarily through legislatively mandated funding formula apportionments, but they also rely heavily on local tax levies to enrich their capacities. The availability of this financial data promotes transparency and accountability throughout the nation's school systems. All of the

information can be readily accessed and manipulated at the NCES Web site, www.nces.ed.gov.

Standardized data collection and reporting

The principal database for financial information is the *Common Core of Data*, which consists of five annual surveys administered to state education departments and encompassing the approximately 17,000 school districts and 94,000 individual schools. The *Common Core of Data* contains descriptive information about schools and districts, student and staff data such as enrollment and demographics, and financial data. The finance survey utilizes the F-33 US Census Bureau form to track financial resources by source (eg, local, state, and federal) and expenditures for major functions (such as instruction, pupil support services, operations and maintenance, transportation, food services, and so on) dating back to 1995. It also offers data for specific expenditure objects, including facilities acquisition and construction and debt service, as well as beginning and ending outstanding debt and the amount of debt retired during the year. An annual report, *Revenues and Expenditures by Public School Districts*, is published by NCES.

The central national database contains extensive information that can be parsed at the school, district, and state level. The information is comparably and consistently collected and measured, enabling meaningful apples-to-apples comparisons between multiple schools and districts and historical trend analysis for assessment of financial status (Table 2). Using the information given in Table 2, stakeholders can make uniform assessments of financial health, risk, and productivity. The Governmental Accounting Standards Board has produced several publications geared to educating stakeholders on information included in the various financial reports as well.¹¹

Tiered credentialing

Credentialing of school business managers is offered at three levels through the Association of School Business Officials. Credentials are awarded on the basis of levels of education and training. This unique system of credentialing embraces the concept of professional registration to facilitate peer recognition and to raise professional standards in the field.

● Colleges and Universities

Institutions of higher education have many stakeholders, and as such are required to respond with transparency, accountability, and reliable financial information. Academic values for transparency have contributed to these familiar and accepted practices.

TABLE 2 ● Sample of basic school district financial ratios*

Financial ratio	Formula	Description
Financial position		A school district's financial standing at a given point in time (usually the end of the fiscal year)
Long term	Net assets divided by total expenses	
Short term	Fund balance divided by total expenditures	
Financial performance		A school district's ability to raise sufficient resources to meet costs on a continuing basis
Long term	Change in net assets divided by total expenses	
Short term	Change in fund balance divided by total expenditures	
Debt burden		A school district's ability to pay bonds and other long-term debts and to issue new debt if needed
Debt per pupil	Total long-term debt divided by student enrollment	
Debt service burden	Debt service expenditures divided by total expenditures	
Unit costs		A common-size measure of the cost of providing education services, for the purpose of longitudinal and cross-district comparisons
Costs per pupil	Total expenses divided by student enrollment	
Instructional cost per pupil	Instruction-related expenses divided by student enrollment	
Administrative cost per pupil	Administrative expenses divided by student enrollment	The share of spending that goes to overhead rather than service delivery
Efficiency/service level		A measure of the efficiency with which staff are employed; conversely, a measure of the level of service provided
Student-teacher ratio	Student enrollment divided by instructional staff	

*From Mead.¹⁰

The National Association of College and University Business Officers (NACUBO) has been the professional home for chief finance and administrative officers since 1962. Similar regional organizations can be traced back to 1951. NACUBO documents industry standards for practitioners and stakeholders in publications such as *College and University Business Administration*, the *Financial Accounting and Reporting Manual*, *Federal Auditing Information Services for Higher Education*, *A Guide to Managing Federal Grants*, and *A Guide to Federal Tax Issues for Colleges and Universities*.

Reporting mandates, standardized data, and comparative analysis

Because institutions of higher education receive federal money for research and student financial aid, the Office of Management and Budget and the US Department of Education have regulatory reporting requirements and dictate the informational content. Preparers and users of such regulatory reporting can find valuable resource publications and information in NACUBO's subscription services.

All institutions that participate in the federal financial assistance program authorized by Title IV of the Higher Education Act of 1965 (as amended) are mandated to annually complete the Integrated Post-secondary Data Set (IPEDS) Finance Survey. IPEDS is administered electronically by the NCES under the US Department of Education and includes an interactive *Peer Analysis System* site beneficial for comparative analysis. The finance section of the IPEDS survey

requires that higher education institutions adhere to definitions in NACUBO's *Financial Accounting and Reporting Manual* or *Accounting Advisory Reports* regarding standards specifically referenced for tuition, discounts and allowances, grants, contracts, appropriations, and expenses by functional classifications. The annual consistency of reported information enhances the value of tool sets developed by NCES for analysis over time by peer institutions, the government, and other stakeholders.

In Table 3, illustrations are provided on how comparative financial analysis is possible given the standard expenditure classifications adopted by higher education. In this example, using data provided on July 7, 2006, by the Kentucky Council on Postsecondary Education (Jonathan.Pruitt@ky.gov) and from the National Center for Educational Statistics Web site,¹² expenses of two different size universities are compared to all US 4-year institutions using IPEDS available data. The functional expense classifications (shown in Table 3) are especially noteworthy because they promote consistency between public institutions that follow Governmental Accounting Standards Board standards and independent (private) institutions that follow Financial Accounting Standards Board standards. The categories specifically address the mission, complexity, and operating environment of higher education, and allow for quantitative financial ratio analysis to examine issues such as whether spending is aligned with organizational mission (an indicator of interest for accreditation purposes), the extent that expenditures are consistent with strategic

TABLE 3 • Higher education uniform functional classification expenditure comparisons (in thousands)

Uniform functional expense classification	University of Kentucky* (RU/VH) [†]		Northern Kentucky University* (master's level) [‡]		All US 4-year public institutions [§]	
	expenses, \$	%	expenses, \$	%	expenses, \$	%
Instruction	234,410	18	47,728	34	40,734,164	25
Research	211,044	16	790	1	20,349,447	13
Public service	170,484	13	4,675	3	8,098,718	5
Academic support	65,804	5	13,373	10	10,426,561	6
Student services	18,280	1	8,410	6	5,829,127	4
Institutional support (administration)	47,960	4	13,413	10	11,290,116	7
Physical plant operation and management	44,518	3	9,461	7	16,746,365	10
Scholarships	72,197	5	24,480	18	5,111,076	3
Other auxiliary enterprises and other expenses	118,857	9	16,495	12	25,927,719	16
Hospitals	338,294	26			16,959,790	11
Total expenses	1,321,848	100	138,855	100	161,473,081	100

*Kentucky Council on Postsecondary Education-FD2A Actual Fiscal year 2003–2004. Consolidated Current Funds Expenditures and Transfers by Functional and Natural Object.
[†] Carnegie classification for research university (very high research activity).
[‡] Carnegie classification for master's university (larger programs).
[§] Fiscal year 2004 Expenses of All US Title IV 4-Year Public Institutions using GASB standards. NCES Table 4 available at: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006155>. Accessed July 3, 2006.¹²

goals, and to determine the impact of administrative expenditures.

Institution classifications

Another feature that promotes industrywide benchmarking and peer analysis between institutions is the Carnegie Classifications of Institutions of Higher Education. This framework, first established in 1970 by The Carnegie Foundation for the Advancement of Teaching, groups higher education institutions on the basis of factors such as the amount of research funding acquired, level of degrees awarded, and a variety of other special focus areas. In Table 3, comparisons are made between two universities with different Carnegie classifications. While this comparison is provided for purposes of illustrating how the expense classification percentages may vary depending on the Carnegie classification, it also highlights the benefits of being able to benchmark with peer institutions of similar classification. As an illustration, note in Table 3 that the expense percentage for research at the University of Kentucky, a large research institution, is 16% compared to only 1% at Northern Kentucky University, a master’s-level institution.

Workforce credentialing

A highly regarded credentialing initiative targeted exclusively to the college and university business workforce is the College Business Management Institute. Located at the University of Kentucky, the program was implemented 54 years ago as a rigorous course of study in college and university business and financial man-

agement. Courses are tailored exclusively to finance and business practitioners and focus on business, finance, and accounting topics.

Primary Observations

Hospitals, schools and school systems, and colleges and universities have robust systems of accountability that promote financial transparency. Over the decades, financial and business management principles have been applied to these fields where such practices are embraced as tools to facilitate accountability, quality improvement, and evidence-based decision making. Mainstreaming the application of these concepts in public health is a critical step to advancing public health finance.

System partners share five exemplary practices that demonstrate their value for financial transparency. These are (1) uniform classifications for expenses and revenues, (2) infrastructures for electronic data reporting, (3) standardized systemwide financial analysis practices, (4) extensive reporting of financial results, and (5) professional associations for the workforce. Implementation of these frameworks has been driven by private sector market forces that demand accountability, whereas in others it has evolved as a result of statutory mandates and stakeholder demands for information.

If public health finance is to advance, these practices must be espoused by the profession. Two basic questions that should be answered when debating a financial transparency system in public health are (1) what

routinely needs to be known about financing of the public health system and (2) what information is needed to answer these questions? Insights into these questions would facilitate framework designs that are compatible with achieving desired levels of research and analysis as well as improvements in system performance.

● Recommendations

Using the illustrations of best practices in this study, the following recommendations are offered as a guide to developing a blueprint for increasing financial transparency in public health.

Uniform expense and revenue classifications

Consensus is needed on a classification framework to measure financial performance in public health. Three potential frameworks are the 3 core functions, 10 essential public health services, and the 6 public health mission categories. Until recently earmarked for deletion because of limitations with measuring progress, Healthy People 2010 included an objective for agencies to categorize data by the 10 essential services. Also, the National Public Health Performance Standards Program already utilizes the 10 essential services categories to score system performance. A benefit for aligning performance and financial data is the ability to simultaneously monitor results achieved as a result of resource allocation decisions.¹³ However, a 1997 Lewin Group report observed that the 10 essential services might not be a practical framework for the collection of all data given, among other things, the “high level of subjective decision making.”^{14(p29)} The utility of the public health mission categories has been demonstrated by the National Association of State Budget Officers incorporating some of these into a larger list of variables to compile a survey of State Health Expenditures. Another categorization option is categorical program classifications consistent with revenue streams that could be aggregated by information systems into higher-level classifications.

Illustrations of relevant financial performance ratios that could be calculated depending on the functional classifications selected are presented in Table 4. At the very least, benefits provided by the ratios include (1) examinations of alignment of expenditures with mission, goals, performance, and areas targeted for quality improvement, (2) benchmarking with peer agencies, (3) frameworks for financial standards of practice and financial accountability measures, (4) establishment of financial accreditation standards, and (5) ability to satisfy and minimize political scrutiny by articulating spending patterns to policymakers in a public health framework.

TABLE 4 ● Potential classification frameworks and related financial ratios

Classification	Ratio framework by functional expenses classifications	
	Formula	Description
Core functions	<i>Assessment</i> expenses divided by total expenses	Percentage of agency funds spent on <i>assessment</i>
Public health mission	<i>Prevent epidemics</i> expenses divided by total expenses	Percentage of agency funds spent on <i>preventing epidemics</i>
Essential public health services	<i>Monitor health status</i> expenses divided by total expenses	Percentage of agency funds spent on <i>monitoring health status</i>

Electronic reporting of standard data

Knowledge accrues from data. The three system partners in this study all have statutory mandates to report financial data to oversight organizations through electronic systems and to agencies such as the US Census Bureau. Community health centers also report financial data using an electronic Uniform Data System¹⁵ to satisfy legislative reporting mandates. While public health debates *if* data should be collected, Shi et al¹⁶ use the Uniform Data System for valuable analysis where evidence can be used to support decision making. Given 21st century technology, a similar infrastructure should be developed for public health and consideration could be given to utilizing US Census Bureau existing surveys and other data collection efforts as well.

Standard financial analysis practices

This study provided illustrations for financial indicators based on functional classifications (Tables 3 and 4) and measures of fiscal and operational efficiencies (Table 1). The portfolio of ratios can be expanded to include indicators based on revenue streams and standard expense object categories (Table 5). These practices should be mainstreamed throughout all public health agencies, and considerations should be given to different indicators needed for state and local agencies.

Public health chart of accounts

Research is needed to determine the feasibility of a uniform public health chart of accounts. Public health agencies are part of governmental structures that vary significantly across the nation. States and county jurisdictions have different accounting systems and technologies that may pose significant challenges to standardization, but a study is warranted.

TABLE 5 ● Sample of potential standard public health financial ratios

Ratio frameworks by financial performance, revenue, or expense objects		
Financial indicator	Formula	Description
Operating (surplus) margin	Current year surplus divided by total revenues	Indicates the percentage of revenues not used for expenses (significantly impacted by the program financial risk ratio)
Program financial risk	Total program expenditures divided by total revenues dedicated specifically for that program	Measures the degree that program-specific revenues cover, exceed, or are below program expenses (impacts operating margin)
Tax revenue percentage	Tax revenues divided by total revenues	Identifies the percentage of revenues received from taxes
Fee revenue percentage	Fee revenues divided by total revenues	An indication of how much reliance the organization has on fees as a revenue source
Medicaid revenue percentage	Medicaid revenue divided by total revenues	Quantifies the reliance on Medicaid as a revenue stream
Federal revenues percentage	Federal revenues divided by total revenues	Identifies the reliance on federal funding
State revenue percentage	State revenues divided by total revenues	Identifies the reliance on state funding
Revenues per capita	Total revenue divided by jurisdiction population	A measure of revenues for each person in the jurisdiction
Expenses per capita	Total expenses divided by jurisdiction population	A measure of expenses for each person in the jurisdiction
Salary expense percentage	Salary expenses divided by total expenses	Measures the percentage of agency resources spent on salaries
Administration expense percentage	Administration expenses divided by total expenses	Identifies the impact of agency administrative structures

National reports by an authorized institution

The *National Public Health Program Reporting System* was eliminated in 1995.¹⁷ Currently, no agency is assigned responsibility for comprehensive accounting, reporting, and analysis of public health funding. While some organizations such as the Trust for America’s Health⁴ have made considerable progress with gaining access to public health financial data, a standardized national report produced and disseminated by a lead organization is needed if transparency is to be accomplished.

Tax levy research

Every school district in America reports the amount of revenue received from jurisdiction tax levies. In public health, there is no dataset that documents the dedicated jurisdiction taxes for essential public health services. A report issued by one state showed that 87 counties with authority to levy property taxes to fund public health services had rates that varied from \$0.02 to \$0.49 per \$100 of the assessed property valuation in the county.¹⁸ That same report revealed that counties with authority to levy taxes on average received higher percentages of state funding than the other 27 counties in the state that had no local taxing authority. Conversely, some states have no counties with dedicated taxes to fund public health. This would be incomprehensible for other community services such as fire, police, or schools. Studies should be undertaken to describe taxing policies to finance the delivery of public health services.

Finance officers associations

Financial transparency is accomplished when the workforce has the capacity to carry out this function. The financial management workforce must have access to continuous education specific to the industries in which they serve. Recognizing the value of this function within public health appears to lag behind system partners. In addition to the finance associations already mentioned in this study, the Medical Group Management Association was organized in 1926 and the Human Services Finance Officers Association began annual meetings in 1948. Education for this segment of the workforce is challenging as well. In the development of this analysis, either finance course syllabi or course descriptions were downloaded from schools of public health master of public health program Web sites (*n* = 37). The syllabi and course descriptions were reviewed to determine the extent that course content included the application of finance and financial management concepts to the practice of public health. The examination of these documents available on university Web sites revealed that 60 percent of the master of public health programs reviewed had finance course descriptions focused primarily on the healthcare delivery system and not on the practice of public health. Further analysis of this observation is warranted. Consideration should also be given to associations at the local, regional, and national levels, with membership targeted specifically to business and finance professionals, for credentialing and routine structured dialogue for this segment of the workforce. The Florida Association of County Health

Department Business Administrators is a leader in this area and could serve as a model.¹⁹

Guiding coalition

Currently missing from public health is an organized coalition of stakeholders with a common interest of actively implementing transparency in public health. Absent Congressional mandates or sustained voluntary movements from within, external stakeholders may have to assume the leadership role to push for transparency.

Summary

There are healthcare and educational institutions in jurisdictions across America that are very similar to the network of public health agencies. Unlike public health, though, these professions have demonstrated their value for financial transparency. This study has found that foundations such as the W. K. Kellogg Foundation and The Carnegie Foundation for the Advancement of Teaching have an established history of funding initiatives to promote financial accountability. In addition to funding this study, The Robert Wood Johnson Foundation has also been a leader in advancing public health systems research and public health finance as fields of study. But, as government resources dwindle, can public health turn to new philanthropic funding sources for financial support absent these measures of accountability? Is there an incentive for new philanthropic giving if public health financial practices have not embraced concepts of transparency and lag behind system partners with organizing the finance workforce by 80 years or more?

If a desired result in public health is new funding models such as private/public partnerships to support programs and services,²⁰ attitudes regarding financial practices in public health must change. New practices that incorporate transparency as a market-driven incentive to compete for donor investments must be embraced. Integrity implies an alignment of behavior with desired results. Much education is provided by public health regarding the negative impacts of risky behaviors. Jeopardizing system sustainability because of a lack of financial transparency could be the riskiest public health behavior with consequences that could negatively impact us all.

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