

**Commonwealth of Massachusetts**  
Executive Office of Health and Human Services

**FINANCIAL HEALTH OF  
PROVIDERS IN THE  
MASSACHUSETTS HUMAN  
SERVICE SYSTEM**

**October 2007**

**DMA Health Strategies**



## OCTOBER 2007 PUBLISHING NOTE:

*EOHHS is publishing this report as part of an overall effort to bring administrative reform to the human service purchase-of-service system.*

*Efforts led by previous administrations sought to address certain areas of provider management. However, these failed to address questions regarding adequacy of provider reimbursement, associated stability of provider organizations, and the equity of pay received by direct care workers employed in these organizations.*

*This report will provide interested parties with fact-based, objective information to support continued public dialogue regarding the stability of the contracted provider system. As part of its commitment to a community-based system of care and to the thousands of direct care workers employed by these organizations, the Patrick Administration is working to develop policy responses and strategies that address the challenges discussed in this report.*

*As the Administration develops these strategies, input and participation will be sought from many individuals and organizations through listening sessions and focus groups. These sessions will be held in the Fall of 2007. For information regarding discussion events sponsored by EOHHS on this topic, please call Matthew Cornish, Policy Director for Purchase of Service, at 617-573-1658.*

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## Executive Summary

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The Executive Office of Health and Human Services (EOHHS) and its 14 agencies rely on a network of over 1,100 independent, largely non-profit providers to deliver a wide variety of human services to vulnerable populations. In fiscal year 2007, EOHHS and its agencies purchased over \$2.4 billion in services from this “Purchase of Service” (POS) system, which in turn delivered care and support to over one million Commonwealth residents. Services include homes for adults with chronic mental illness or cognitive/physical disabilities, public health, substance abuse treatment, juvenile justice, child welfare, family support programs, and a range of other social services.

The Commonwealth and the human services industry are decidedly inter-dependent. This inter-dependence dates to the 1960’s and 70’s, when Massachusetts was a leader in developing strategies to move individuals out of institutional settings and into less restrictive, more humane community settings. Over the last several decades, the choice to purchase these services reflects the Commonwealth’s determination that non-institutional community settings best serve clients of human services. Further, privately-operated community settings generally afford the Commonwealth and the public a higher degree of cost-effectiveness, program diversity and creativity than the state alone can otherwise obtain.

Total spending has risen from an estimated \$25 million (inflation adjusted) in 1974 to the current spending level of \$2.4 billion. Today, nearly half of the human service provider organizations that deliver care under Commonwealth contracts depend on Commonwealth sources for over 50% of their revenue. In short, the Commonwealth depends on these organizations to deliver high quality care, and, conversely, the financial stability of these organizations depends in large part on Commonwealth purchasing practices.

The Commonwealth also relies on this industry as a significant force within the larger Commonwealth economy. These organizations employ over 185,000 workers – over 3% of the state’s total workforce. This is comparable in size to the Commonwealth’s telecommunications industry. Economic census data indicate that the industry generated \$4.6B in revenue in 2003, and industry payroll exceeded \$2B. Worker spending contributes over \$112M to the Commonwealth in state and local taxes.<sup>i</sup>

Jobs available through the human service sector are dispersed throughout the Commonwealth. Unlike many commercial industries, they are often located precisely in the areas that are most in need of jobs. Moreover, many positions are suitable for individuals seeking entry level, relatively low-skill employment. These factors combine to make this industry critical to the overall Commonwealth economy, with particular relevance for communities that often lack viable employment opportunities.

Human service organizations, like for-profit businesses, must meet certain basic requirements in order to survive: they must have sufficient resources to cover their expenses, they must be solvent, and they must be capable of securing lines of credit. In addition, just like any business, healthy not-for-profit providers must end the year with a modest surplus, which they can re-invest into their organizations. Providers with the adequate resources to operate do not need to constantly manage crises and can devote their efforts to innovating, improving and, when appropriate, to expanding

services. Stable organizations better attract and retain high quality staff, which enhances continuity of care, service quality and administrative efficiency.

The Executive Office of Health and Human Services commissioned this study in an effort to bring objective, quantitative analysis to bear on anecdotal reports and collective observation that the overall financial stability of the POS provider sector is at risk. The purpose of this study was to assess the overall financial stability of these organizations and to determine whether trends in POS system investment and management have an impact on overall financial health.

## **Results of the Analysis**

This study confirmed that, in many areas, the financial health of human service providers in the Commonwealth is suffering, and Commonwealth policies have some association with financial health outcomes. The sample of approximately 615 providers at the core of this analysis shows sub par and at times precarious results on three important aspects of financial health: profitability, solvency, and liquidity. The majority of providers in the sample report deficits on Commonwealth activities each year, and even more, about 60%, show cumulative deficits on their Commonwealth activities since 1993. The surplus or deficit on Commonwealth revenue is one of the most statistically significant factors affecting providers' overall ability to break even or generate a surplus. Many providers operate under considerable constraints because of low cash balances, and inadequate or negative expendable net assets. Some smaller providers may not have access to lines of credit or qualify for mortgages, while a significant percentage of providers are heavily leveraged, with liabilities that exceed their net asset balance.

One possible explanation for annual and accrued deficits is the general practice by EOHHS departments to issue multi-year, usually level-funded contracts. In accordance with Operational Service Division (OSD) guidelines, agencies may renew contracts for up to eleven years. As a result, long periods often elapse with relatively few competitive re-procurements. While an eleven year contract may offer clients and state agencies the benefit of continuity and stability, in recent decades there has rarely been new funding available to adjust contract budgets at the time of annual budget negotiations. State agencies and providers must often modify program staffing and overall program budgets to fit within available resources when the general cost of doing business has risen.

Cost reimbursement contracts, which account for 16% of total program revenues, show a consistent negative relationship to financial health. Organizations are not allowed to make a surplus under this type of contract—as a result they are unable to build up a cushion to fall back on in harder times, or to invest in infrastructure or staff training. They also have little incentive to strive for efficiencies, since they will not enjoy any of the savings, nor to ensure a high level of service provision, since level of service provided does not directly affect their reimbursement. In addition, these organizations may face some real costs for which they are unable to receive reimbursement, such as principal payments and unanticipated expenses incurred after the deadline for contract amendments. These limitations can lead to program losses and reduce the providers' ability to build their net assets. This means they have fewer resources to support financial stability.

Certain provider characteristics are associated with better financial health, such as being in business for a longer period of time, and having larger total revenues. Providers able to generate more income from non-program sources such as investments, contributions and commercial revenue are associated with stronger financial results, since they can augment Commonwealth surpluses or offset

deficits. Not surprisingly, providers that establish adequate cash balances and liquid assets also fare better financially.

### **Next Steps**

Given the vital role that this industry and its workforce play, both as an economic contributor to the Commonwealth and as a partner in delivering care to vulnerable citizens, it is in the Commonwealth's interest to ensure that provider organizations are financially stable and that the industry's workforce is paid a fair living wage.

The challenges facing the Commonwealth and this sector did not develop overnight. They are the result of both historic under-financing and the piece-meal, organic evolution of Commonwealth public policy governing human service purchasing, reimbursement, and provider performance management.

The Executive Office of Health and Human Services is working on a package of reforms, due in January to the Executive Office of Administration and Finance (A&F). This study does not offer specific policy proposals at this time, but is intended to serve as a point of input and further discussion for EOHHS, A&F, and the provider community throughout the Fall of 2007.

## Acknowledgements

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### Provider Review Team

EOHHS asked a group of human service providers to contribute to the development of the analysis plan as a Review Team. The team suggested hypotheses for testing, reviewed findings, and assisted in overall interpretation of results. The members represented organizations from a range of sizes and program areas. The Review Team brought their real world experience to the project and contributed to the interpretations of complex statistical results throughout the process. EOHHS wishes to thank the following participants for their time and commitment to this project:

Ron Ardine	Key Program
Marty Berliner	Growthways
Nicolas Carballeira	Latin American Health Institute
Robert A. Marquart	Latin American Health Institute
Michael Milczarek	May Institute
John Moran	HMEA
Kevin Norton	CAB Health & Recovery
Robert Pomales	Latin American Health Institute
John Ron	United South End Settlements
Philip Shea	Community Counseling of Bristol County
Joe Tosches	Seven Hills Foundation

### DMA Health Strategies Analysis Team

EOHHS contracted with a team led by consulting firm DMA Health Strategies to conduct this analysis. A Massachusetts-based firm, DMA provides a range of professional services to federal, state and local health and human service organizations. These include strategic planning, change management, management consulting, and quality improvement. DMA Health Principals Wendy Holt and Richard H. Dougherty lead the project. In conducting this analysis, DMA collaborated with a team of professionals with additional expertise in non-profit accounting and management, human services procurement and contracting, economics, and database management.

The DMA Health Strategies Analysis Team included:

- Elizabeth Keating, CPA, visiting assistant professor at Boston College. Ms. Keating is a nationally-recognized researcher and consulting practitioner on economics of non-profit organizations.
- Nancy Kelly, CPA, of Nancy Kelly & Associates. Ms Kelly specializes in non-profit accounting and assists numerous POS providers in annual Uniform Financial Report completion. Ms. Kelly has also served as receiver and turnaround manager for troubled Massachusetts providers.
- Donald Shepard, PhD, Professor at Brandeis University. Dr. Shepard is the former Senior Economist at the Massachusetts Department of Public Health and currently specializes in health policy and health care research and analysis.
- Wu Zeng, MD. Dr. Zeng, former instructor in biostatistics in Shanghai, is completing his doctorate in health care policy at Brandeis University under the direction of Professor Shepard.
- Martin Brunswick. Mr. Brunswick is of the firm ProVentive, Inc., an information technology and consulting firm which assists health organizations in risk analysis and information analytics.

# FINANCIAL HEALTH OF PROVIDERS IN THE MASSACHUSETTS HUMAN SERVICE SYSTEM

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# INTRODUCTION

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## The Human Services Industry

The Executive Office of Health and Human Services (EOHHS) and its 14 agencies rely on 1,100 independent, largely non-profit, Purchase of Service (POS) providers to deliver a wide variety of human services to vulnerable populations. In fiscal year 2007, EOHHS and its agencies purchased over \$2.4 billion in services from these organizations, which in turn delivered care and support to over one million Commonwealth residents. The services EOHHS agencies purchase include 24-hour residential programs for adults and children, family preservation and support programs, various public health prevention and intervention programs, mental health services for adults and children, rehabilitation services for juveniles involved in the criminal justice system, domestic violence services, and a wide variety of other services.

Agencies procure and manage POS services in accordance with compliance, reporting and auditing regulations for human and social services under 808 CMR 1.00, and procurement regulations 801 CMR 21.00. These regulations dictate policies regarding multi-year contracting, offsetting revenues, and non-reimbursable costs. Regulations in 808 CMR 1.03 also impose restrictions on surplus revenue retention for non-profit providers, limiting the annual excess of revenue over program expenses to five percent of total Commonwealth revenue, and the cumulative surplus (starting in 1993) to 20% of the organization's prior year Commonwealth revenue.

The POS provider system is an important part of the state's economy. With over \$4.7 billion in total revenues, this provider system employs over 185,000 individuals.<sup>1</sup> Human service employees comprise over three percent of the total workforce of Massachusetts. The human service industry workforce increased by more than 18% from 1998 to 2003; in comparison, the state's overall workforce increased by only 1.7% during the same period.<sup>2</sup>

## Purpose of this Study

Unlike the MassHealth system, which is funded as a Federal entitlement program, POS services are funded as line items in the state budget and in many cases are delivered via multi-year contracts. Often multi-year contract obligations are level-funded throughout the life of the contract, despite annual increases in costs. With some exceptions, POS reimbursement rates generally are not based on an analysis of actual cost. Rather, a rate in the POS system is typically the maximum obligation of a contract divided by the number of units the provider agrees to deliver. Further, many contracts in the POS system are executed on a cost reimbursement basis, in which no rate exists. Under cost reimbursement contracts, agencies generally dictate exact inputs, and providers have limited incentive for efficiency or innovation.

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<sup>1</sup> FTE count and total revenues are calculated from fiscal year 2005 UFR's.

<sup>2</sup> The Massachusetts Council of Human Service Providers, *Help Wanted: The Future of the Human Services Workforce in Massachusetts*, April 2006.



The impact of these factors on providers can take many forms. General reports include the following themes:

- Staff salaries and fringe benefits do not appear to keep pace with increases in the overall cost of living;
- The relatively low wages that provider organizations are able to offer employees limit the level of experience and qualification for many direct care workers, and also lead to rapid staff turnover and increased replacement costs. Providers may also leave positions vacant in order to realize savings, which can have adverse quality and/or regulatory implications;
- Providers may defer routine costs such as facility maintenance, information systems, and other critical infrastructure investments.

Human service organizations, like for-profit businesses, must meet certain basic requirements in order to survive: they must have sufficient resources to cover their expenses, they must be solvent, and capable of securing lines of credit. Additionally, just like any business, healthy not-for-profit organizations should end the year with a modest surplus. Unlike for-profit businesses, for which this surplus is “profit” and accrues to owners or shareholders, the surplus of a non-profit becomes a net asset of the organization, and is available for the charitable mission of the organization as defined in its articles of incorporation and directed and overseen by its Board of Directors. Non-profit organizations may elect to keep such assets in liquid form to support operations and help in managing cash flow. If the organization has sufficient liquidity, it may re-invest net assets in the organization, such as by purchasing better computer systems or training staff. It may also elect to save such assets, investing them to generate additional income and provide a nest egg available to re-invest in the organization at a later time.

The Commonwealth has an interest in promoting the financial stability and health of its provider network because organizations with the adequate resources to operate do not need to constantly manage crises and can devote their efforts to innovating, improving and, when appropriate, to expanding services. Stable organizations better attract and retain high quality staff, which enhances continuity of care, service quality and administrative efficiency, and enables them to realize better return on their investment in staff training. A provider system on firm financial footing can achieve quality improvement goals which improve the care clients receive and reduce other costs to the Commonwealth.

The Executive Office of Health and Human Services commissioned this study in an effort to bring objective, quantitative analysis to bear on anecdotal reports and collective observation that the overall financial stability of the POS provider sector is at risk. The purpose of this study was to assess the overall financial stability of these organizations and to determine whether trends in POS system investment and management have an impact on overall financial health.

## **I. METHODOLOGY**

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### **A. Quantitative Data Sources**

#### **1. The Uniform Financial Report**

This analysis drew on Uniform Financial Report (UFR) submissions for state fiscal years 2003, 2004 and 2005. This is the most recent period for which databases of electronic submissions were complete. As required by the Executive Office of Administration and Finance, most POS providers submit financial statements and detailed program budgets annually via the UFR. Each organization has a Certified Public Accountant prepare the UFR and audit and authenticate the UFR financial statement of position, activities, and cash flow. The UFR also includes detailed schedules of summary and program specific revenues and expenses, which are not audited. The Commonwealth reviews annual UFR submissions to ensure that contract providers are qualified to do business with the Commonwealth, and, in some cases, to inform rate determination activities.

This study represents the first systematic effort by the Commonwealth to use UFR data to analyze the financial condition of its human services provider network and to determine any related impacts of Commonwealth policies.

#### **2. Other Data Sources**

Additional sources of data supplemented the UFR database:

- Census 2000. Census data were matched to provider information to identify program sites located in areas with high relative non-white population and areas below 200% of the federal poverty level.
- Massachusetts Minority/Women Business Enterprise Directory. This directory enabled the team to identify which providers are registered as minority-owned businesses.
- Massachusetts Management Accounting and Reporting System (MMARS). Data from the state-wide accounting system were used to identify providers with a high proportion of business in certain program areas (e.g. residential service providers).

### **B. The Analysis Sample**

Nearly all organizations that provide POS services are required to submit UFRs each year. However, many of these organizations are not representative of the general population of human service providers upon which the Commonwealth POS system depends. Therefore, the team removed the following categories of organizations from the sample:

- Hospitals, universities and foundations. These organizations were removed because their “core business” does not involve the provision of POS services. By default, their removal also excluded all organizations with total annual revenues exceeding \$200 million.
- Aging Services Access Points (ASAPs). ASAPs are the lead agencies for the Executive Office of Elder Affairs (EoEA). Their function is primarily to authorize and purchase services, rather than deliver services directly. They are also governed by different contracting and accounting rules and operate in different fiscal environments.

- Organizations with 40% or more of their total revenues from non-program sources. Non-program sources are defined as contributions, investments, or commercial fees. Organizations with 40% or more of revenue from these sources are substantially different from organizations reliant on program service fees, and hence were removed from the sample.
- Organizations with less than 5% of total revenues from POS human service sources. These providers were eliminated for similar reasons as hospitals, universities and foundations: because POS service delivery is not “core” to their function. POS human service sources are defined as revenues originating from the MM object class in the MMARS accounting system from all EOHHS agencies and the Department of Early Education and Care (EEC). “Human service sources” does not include the free care pool or Medicaid revenues.

The final sample for analysis consists of organizations that are representative of the providers upon which the Commonwealth depends for the delivery of care to vulnerable populations. The sample contains 1,846 observations representing an average of 615 providers each year and accounts for 87% of all POS revenues reported on the UFR’s. The data and findings discussed in this report are based on this sample of providers.

### **C. Quantitative Methods**

Preliminary analysis examined trends over the three year period from FY2003 to FY2005. This phase was followed by a combination of univariate and multiple regression analyses. Each phase informed the other in an iterative, exploratory process. Quantitative methods included:

- Generation of summary statistics, such as frequency, mean and standard deviations, for categorical and quantitative variables, including organization age, size, funding source and share, state contract type, and others;
- Calculation of correlation coefficients to demonstrate the strength of relationships between pairs of quantitative variables;
- Comparison of measures of financial structure and condition by provider size category through Analysis of Variance (ANOVA) testing;
- Regression analyses using two dependent variables to represent providers’ overall financial condition: the ratio of net income to total revenue, and the proportion of net assets to total assets.

### **D. Supplemental Qualitative Methods**

In order to inform and guide the hypotheses and quantitative analysis, the team gathered information and sought feedback from the following sources:

- A Provider Review Team consisting of representatives from 11 POS provider organizations representing a range of sizes and geographic areas. The Team met four times over the course of the study to contribute to the development of the analysis plan, suggest hypotheses for testing, and review and assist in interpreting the findings;
- Interviews with EOHHS staff members; structured interviews with contract management staff from large EOHHS agencies and from the Operational Services Division (OSD). These

interviews focused on the aspects of contracting most likely to be related to the financial condition of POS providers.

## **II. PROVIDER CHARACTERISTICS**

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The approximately 615 POS provider organizations in the sample are a diverse group. In order to understand basic characteristics of the group, the analysis team ran an initial set of quantitative analyses to understand general trends in the size, age, and sources of revenue.

### **A. Organization Status and Age**

The vast majority, 96%, of provider organizations in the sample are corporations. Ninety percent of providers are tax exempt (non-profit) under section 501c(3) of the Federal Revenue Code. On average, the 10% of organizations that are for-profit entities tend to be smaller organizations; all but three of 59 for-profit organizations had \$10 million or less in annual revenues. These organizations do not factor as major players within the POS provider population.

Most organizations, 60%, in the sample were incorporated in the 1970s and 1980s, a time when Massachusetts initiated ongoing efforts to deliver public services to individuals and families in community settings, moving away from state operated institutional settings. Only one percent of organizations in the sample were incorporated after 2000. This indicates that, overall, the partnership between POS organizations and the Commonwealth is long-standing and inter-dependent.

### **B. Organization Size**

This study divided the sample of organizations into four size categories of total revenue. Both EOHHS and the Provider Review Team advised in the development of these categories, which mark the most meaningful distinctions in overall organization structure and function.

- Very Small: less than \$2 million in revenues
- Small: \$2 million to \$10 million
- Medium: \$10 million to \$20 million
- Large: over \$20 million

Providers advised that, as organizations grow from one category to the next, they require more sophisticated levels of organizational infrastructure and achieve greater program capacities.

As shown in Table 1, nearly half, 46%, of POS spending is concentrated on 50 “large” providers with an excess of \$20M in annual revenues. As a group, these providers receive 53% of their annual revenues from the POS system. The concentration of total POS system spending on these providers and the significance of this revenue within the providers’ overall portfolio confirms the high degree of inter-dependence between these providers and the Commonwealth.

Conversely, just seven percent of POS revenue is dispersed across a large number, 257, of “very small” providers. As a group, these organizations are most dependent on POS revenue, which comprises 61% of their portfolio.

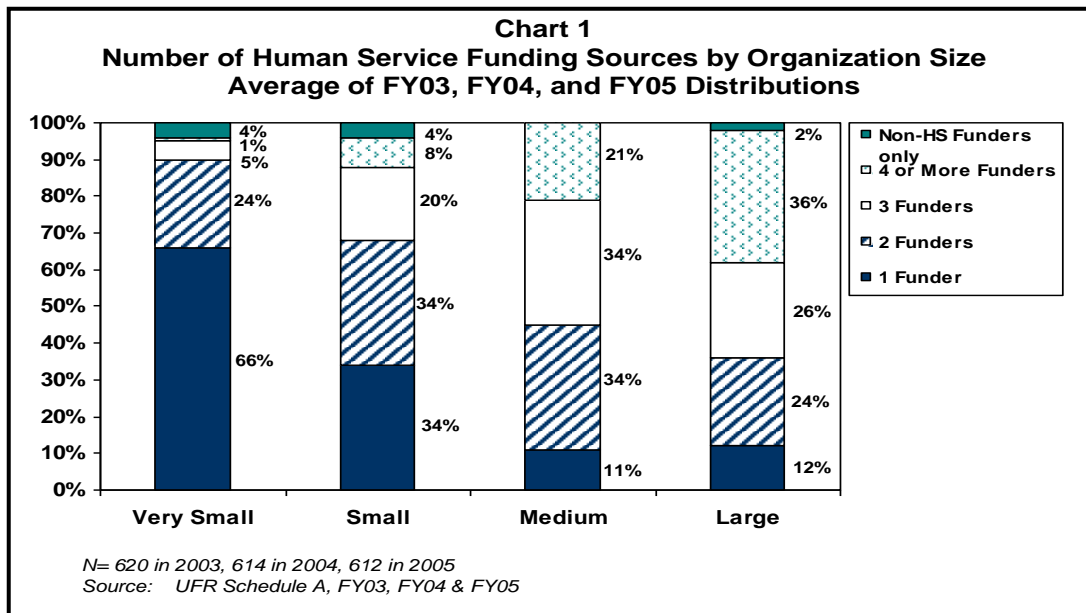
<b>Size Category</b>	<b>Revenue Threshold</b>	<b>N</b>	<b>Total Revenue</b>	<b>POS Revenue</b>	<b>% of Total POS Spending on Group</b>	<b>POS as % of Total Provider Portfolio</b>
Very Small	<\$2M	257	\$246,840,905	\$150,125,071	7%	61%
Small	\$2-\$10 M	234	\$1,172,715,534	\$614,004,183	27%	52%
Medium	\$10-20 M	74	\$1,073,988,820	\$470,830,446	20%	44%
Large	>\$20 M	50	\$2,021,535,789	\$1,064,344,835	46%	53%
<b>Total</b>		<b>615</b>	<b>\$4,515,081,049</b>	<b>\$2,299,304,536</b>	<b>100%</b>	<b>51%</b>

## C. Revenue Sources

### 1. Human Service Revenue Sources

The analysis confirmed that, like many organizations, the non-profit providers in the sample have a complex and varied funding profile. They receive revenues from the following sources: EOHHS agencies, EEC, the Department of Education, MassHealth (Medicaid), Medicare, Federal grants, philanthropic donations, and a variety of other sources.

Although the general revenue profile for organizations in the sample is diverse, the vast majority – over 70% – of organizations receive revenue from only one or two human service sources, (defined as EOHHS agencies, Early Education and Care, Special Education, and third party revenues). Overall, 43% of providers have only one human service funding source, 30% have two, 16% have three, and eight percent have four or more. Very small and small providers were most likely to have only one or two funding sources. As shown in Chart 1, a full 90% of providers in the “very small” category receive their funding from either one or two sources. Medium and large providers were likely to have two or more sources.



Beyond looking at the basic number of human service revenue sources by size category, the team examined trends in dominant revenue source. A revenue source was defined as “dominant” for an organization when it received at least 40% of its total revenue from a single purchasing agency. As depicted in Table 2, 68% of very small providers have a predominant funding source, while less than 40% of large providers do. The Department of Mental Retardation (DMR) and EEC are predominant funders for the largest numbers of providers. Third party sources, the Department of Social Services (DSS), and the Department of Public Health (DPH) were the next most frequent predominant funding sources. The majority of DMR providers are small providers, while the majority of EEC providers are very small organizations.

Predominant Funding Source	Very Small	Small	Medium	Large	Total Number
Dept. of Mental Retardation	32%	52%	11%	5%	97
Dept. of Early Education and Care	60%	30%	6%	5%	87
Dept. of Social Services	64%	18%	3%	15%	33
Dept. of Public Health	73%	24%	3%	0%	33
Dept. of Mental Health	35%	45%	15%	5%	20
Mass. Rehab. Commission	74%	26%	0%	0%	19
Dept. of Transitional Assistance	71%	29%	0%	0%	14
Exec. Office of Elder Affairs**	50%	50%	0%	0%	4
Veterans Services	100%	0%	0%	0%	4
Dept. of Youth Services	50%	0%	50%	0%	2
Mass. Commission for the Blind	100%	0%	0%	0%	1
Mass. Commission for the Deaf/ Hard of Hearing	100%	0%	0%	0%	1
Other Funding Sources					
Third Party (Includes Medicaid revenue)	8%	59%	26%	8%	39
Special Education	20%	33%	40%	7%	15

<b>Predominant Funding Source</b>	<b>Very Small</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>	<b>Total Number</b>
Total Number with a predominant funding source	174	138	38	19	369
Providers with a predominant funding source as a percent of all providers in size category	68%	59%	51%	38%	60%
<i>* Predominant = greater than 40% of total revenues      ** Sample excludes Aging Service Access Point Agencies</i>					

## 2. Other Revenue Sources

### *Charitable Support*

Based on anecdotal reports from the field, the team expected that most providers would rely to some degree on contributed revenue financed through fundraising. After the exclusion of providers whose combined revenues from contributions, investments, and commercial activities exceeded 40% of their total revenues, fundraising accounts for only four percent of total provider revenues in the remaining sample. Charitable support was a more significant source of funding for very small providers than for all others.

Unfortunately, variability in provider reporting of fundraising expenses and in-kind donations prevented robust analysis of fundraising efficiency or providers' reliance on in-kind donations. Regardless, the results of the analysis appear to indicate that POS providers as a group do not, or are not able to tap charitable funding as a major source of revenue.

### *Endowments*

In general, organizations invest principal from endowments and do not use it to support operations, but the income earned on endowment investments is available for the organization's unrestricted use. The availability of this investment income can be a critical source of funding for infrastructure, administrative, or emergency spending.

Only 16% of providers, an average of 98 providers in each of the three fiscal years, report endowment assets on their UFRs. On average, the endowments represented 16% of the total assets of these organizations. The table below illustrates endowment results by provider size. As shown, 36% of large organizations have endowments, but the share of total assets represented by endowment assets is likely to be lower than for organizations in other size categories. Conversely, while only eight percent of very small organizations report endowments, this revenue comprises nearly a third of their revenue portfolio.

	<b>Providers With Endowments</b>		<b>Endowment as % of Total Revenues</b>
	<b>Avg. Number</b>	<b>% of All Providers</b>	
<b>Very Small</b>	19	8%	26%
<b>Small</b>	41	18%	20%
<b>Medium</b>	20	27%	7%
<b>Large</b>	18	36%	15%
<b>Total</b>	98	100%	15%

The team examined whether and how these provider characteristics influence the overall financial condition of organizations. Size distinctions were particularly relevant in the overall assessment of financial condition and informed much of the subsequent analysis, as discussed later on.

In many cases (e.g. fundraising efficiency or endowment revenue), however, the data were insufficient to support robust analysis on the relevance to overall financial condition.

### III. CURRENT FINANCIAL CONDITION OF THE PROVIDER NETWORK

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Assessment of financial condition relied on standard measures of profitability, solvency, and liquidity, three important aspects of financial health. In most cases, the analysis stratified results by provider size and by year. The team averaged results across the three years to show the number of providers in each category. This study defines profitability, solvency, and liquidity as follows:

***Profitability:*** how well an organization met its annual expenditures and whether it contributed to or drew from net assets.

***Solvency:*** the extent to which an organization's resources can meet its obligations.

***Liquidity:*** an organization's ability to meet its short-term needs for cash to fund its operations.

Analysis of UFR data enabled the team to assess the stability of the POS sector according to these measures, using a range of generally-accepted accounting measures.

#### A. Provider Profitability

The concept of “profitability” in regards to charitable non-profit organizations requires explanation. In a for-profit organization, annual surplus is “profit” and, depending on management decisions, can be used to pay shareholders or owners, or can be retained as shareholders' equity and invested in corporate assets. In a non-profit organization, annual surpluses are carried on the organization's balance sheet as an asset, and their use is restricted to re-investment in program infrastructure or to use for other charitable purposes consistent with their stated mission. Just as in any business, some level of surplus is necessary for ongoing stability, to provide liquidity and to ensure the availability of resources to cover infrastructure investment needs or unplanned expenses.

Under 808 CMR 1.03 (7), POS provider organizations are limited in the amount of surplus they can retain each year on Commonwealth revenue. Among other specifications, this regulation allows providers to retain an annual surplus of up to five percent on these revenues; they owe any amount in excess of this to the Commonwealth.

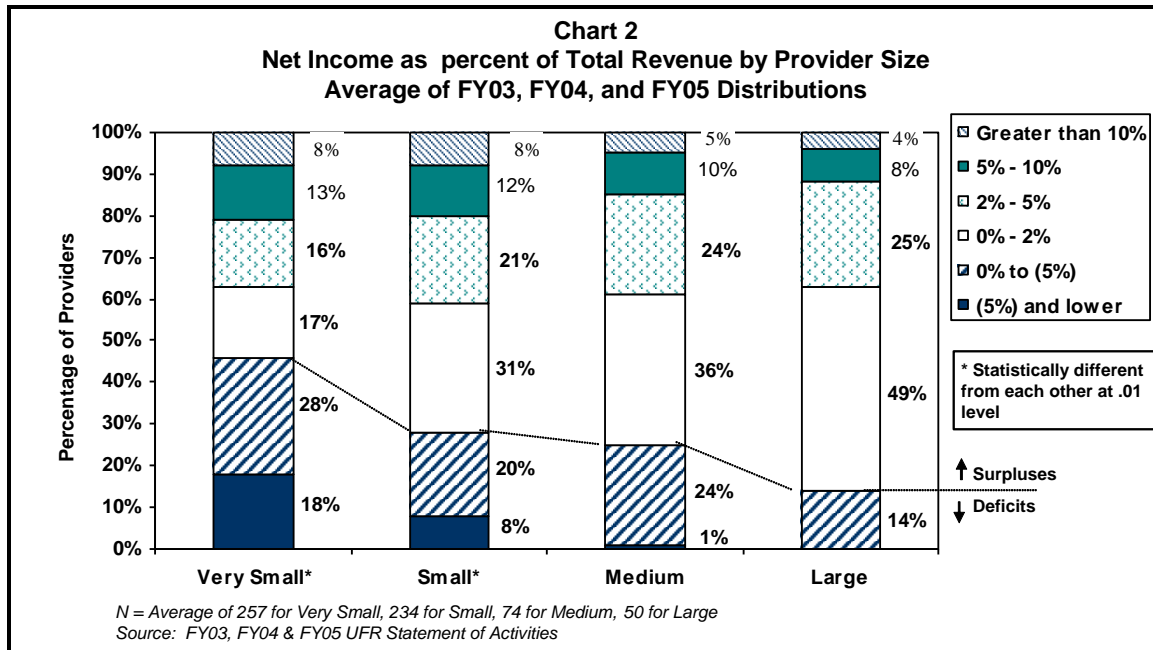
The results below show, however, that few POS organizations are accruing any level of surplus and, in fact, a substantial number run deficits each year.



## 1. One-Third of Providers Experience Organization-Wide Deficits Each Year

*Profitability is measured by net income (annual deficit or surplus) as a percent of total revenues. An organization can operate for several years with annual losses if it has operated profitably in the past or can borrow. This practice is not sustainable over the long term.*

The analysis shows that, on average, one-third of providers experience annual deficits. As the chart below indicates, smaller providers are more likely than larger providers to experience deficits.

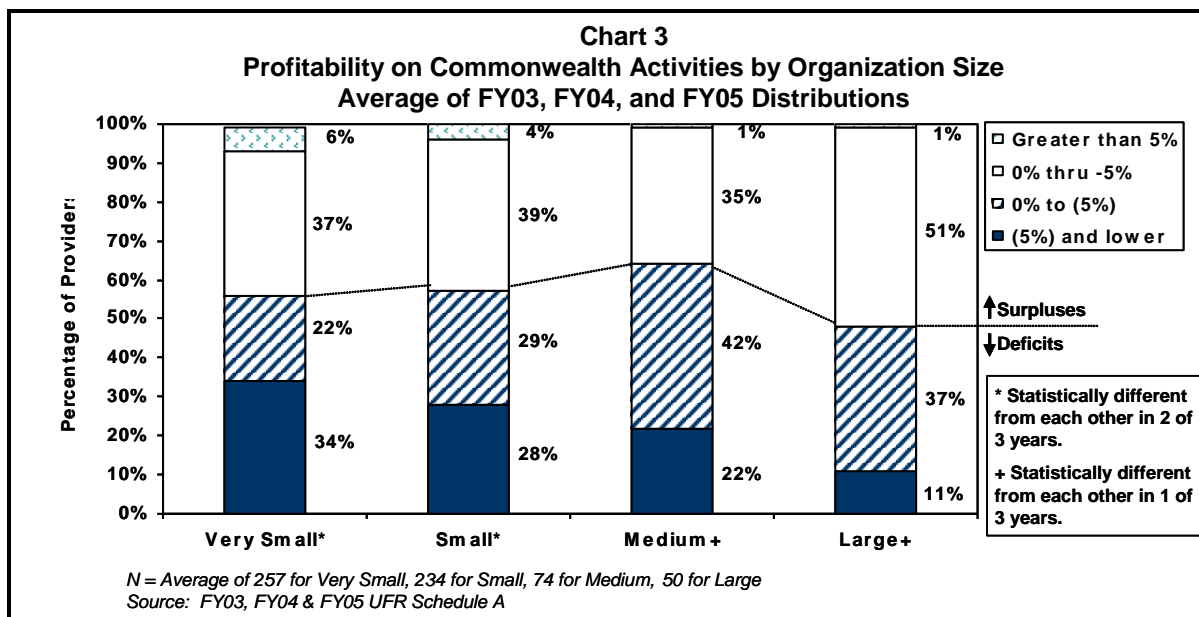


Although not depicted here, our analysis found that profitability improved slightly between FY2003 and FY2005, but not sufficiently to significantly reduce the portion of organizations that operate at a deficit.

## 2. Fifty-six Percent of Providers Report Deficits on Commonwealth Activities Each Year

*Profitability of Commonwealth activities is based on the organization's reported surplus revenue retention calculation in its Uniform Financial Report (UFR). This calculation focuses on operating losses or gains solely on Commonwealth revenue and associated activities.*

While one third of providers run an overall organization deficit each year, operating results on Commonwealth earnings are worse. Fifty-six percent of providers have deficits on their Commonwealth activities. Very small and small providers are close to the overall average, while almost two-thirds of medium providers and almost half of large providers experience deficits on their Commonwealth activities.



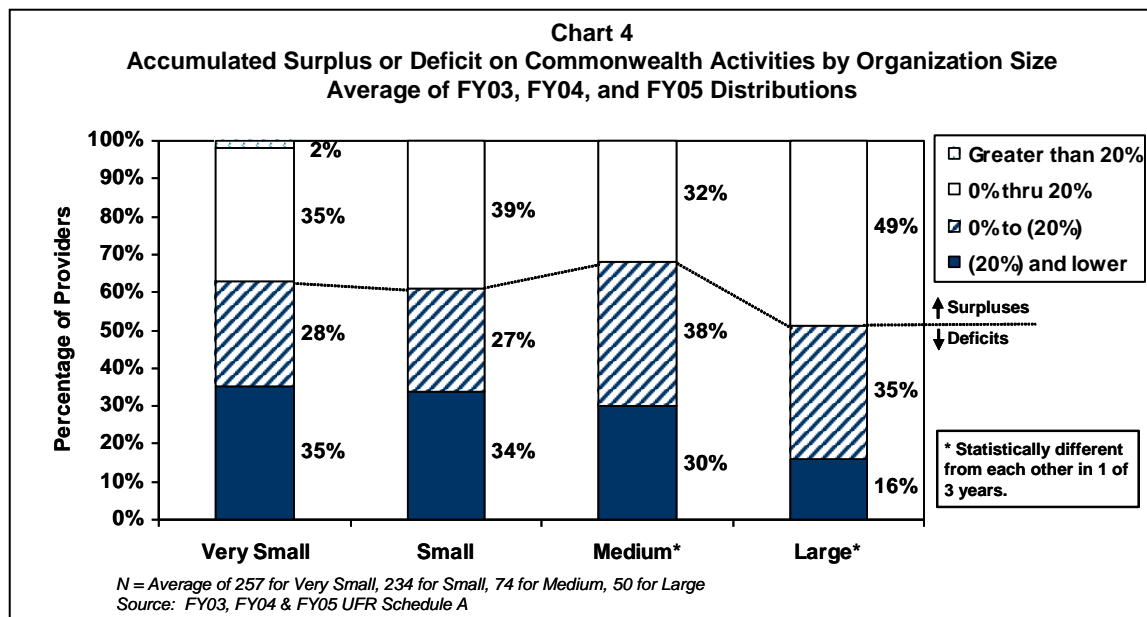
### 3. About 60% of Providers have Cumulative Deficits on their Commonwealth Activities since 1993

*Accumulated surplus or deficit is determined by adding the current year's surplus or deficit to the accumulated net surplus or deficit for prior years. The team calculated accumulated surplus or deficit as a percentage of the provider's current year total Commonwealth revenues rather than the previous year's Commonwealth revenue as calculated on the UFR due to possible reporting errors.*

About 60% of all providers have accumulated deficits on their Commonwealth activities. A higher percentage, about 68%, of medium providers accumulates deficits. For about 30% of providers, deficits account for more than 20% of their current year's Commonwealth revenues. Large providers do better on average, but half still have accumulated deficits.

These figures show that losing money on Commonwealth activities is a longstanding problem, and the years in the sample show only slightly better results than past periods. The consistent loss of money on Commonwealth operations by more than half of the industry threatens the stability of the system.

One possible explanation for annual and accrued deficits is the general practice by EOHHS agencies to engage in multi-year, largely level-funded contracts. In accordance with OSD guidelines, agencies may renew contracts for up to eleven years. As a result, long periods often elapse with relatively few competitive re-procurements. While an eleven year contract may offer clients and state agencies the benefit of continuity and stability, funding levels for these contracts tend to remain relatively constant from year to year. Although a new budget is negotiated annually, both agencies and providers report that in recent decades there has rarely been new funding for existing contract accounts.



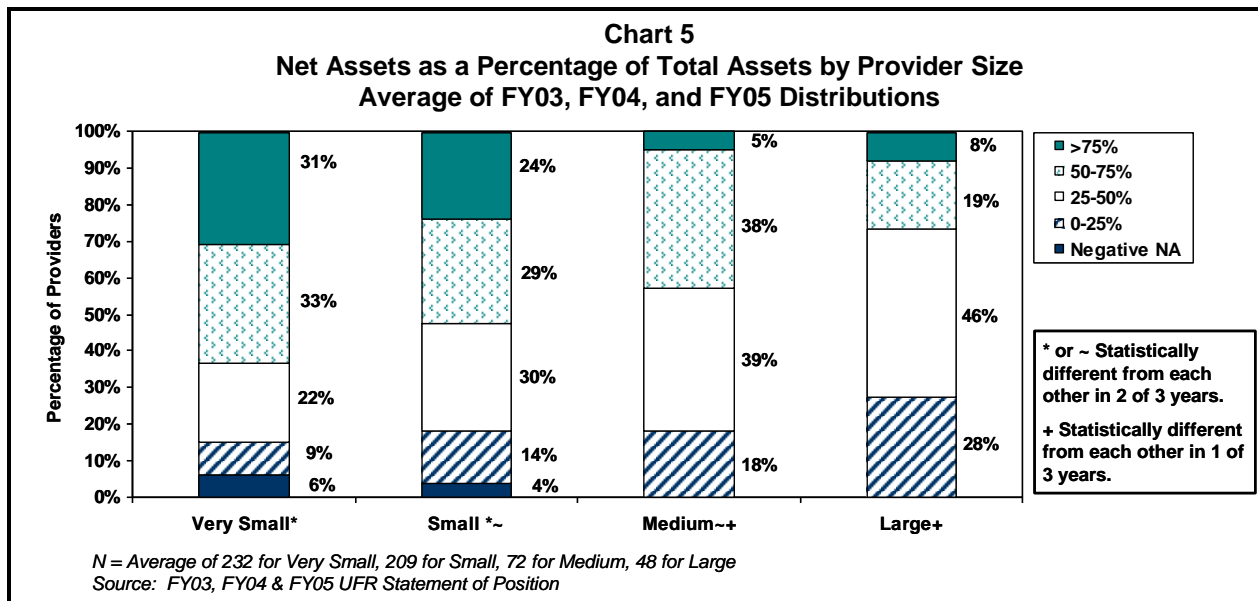
Unfortunately, it was not possible to construct a variable that would allow statistical testing of the relationship between level-funded multi-year contracts and financial stability. Nevertheless, it is a reality that, lacking new funds but faced with the requirement to serve the same number of clients, state agencies and providers must often modify program staffing and other components to adjust program budgets to fit within available resources when the general cost of doing business for providers has risen.

## B. Provider Solvency

### 1. Almost Half of Providers have Liabilities in Excess of Net Assets and Four Percent Have Negative Net Assets

*Net assets are the excess of an organization's assets over its liabilities. Comparing net assets to total assets indicates the degree to which an organization has free assets (net assets) available to cover its liabilities.*

The study showed that, on average over the three years, 46% of providers in the sample had liabilities that exceeded their net assets. Approximately four percent of providers, mostly very small or small organizations, actually had negative net assets.



Unlike our other measures, smaller providers had higher percentages of net assets than larger providers. However, for some small providers, their larger net assets balances may reflect less of an ability to obtain loans and purchase property with mortgage financing, something larger organizations with collateral can accomplish more easily. The finding that over a third of very small providers and 14% of small providers carry no financial debt supports this hypothesis. In contrast, 96% of medium and large providers had loans.

While providers can prudently use loans to provide working capital and purchase property, a significant percentage of providers are highly leveraged, with total liabilities that exceed their net assets. Given the level of inter-dependence between the Commonwealth and the larger providers, the finding that almost 30% of large providers have liabilities three times larger than their net assets is a point of concern.

**2. Only 22% of Providers have Expendable Net Assets Equivalent to the Recommended Level of Three Months of Expenses. Fourteen Percent of Providers have Zero or Negative Expendable Net Assets.**

*Expendable Net Assets is a ratio of net assets minus plant and equipment assets to annual expense. This indicates the resources that are readily available to support operations. For many organizations, a considerable share of their net assets is in the form of property or equipment. As such, they are not easily converted into liquid assets which can support the organization's financial needs. Looking at expendable assets provides insight into operational solvency.*

Results of the analysis of expendable net assets indicate that Massachusetts human service providers operate under very tight financial constraints. The analysis showed that this was particularly true for very small and small organizations that were more likely to have negative or no expendable net assets, and also more likely to have expendable net assets exceeding the three month standard. In contrast, 80-90% of medium and large organizations had between one and three months of expendable net assets.

## C. Provider Liquidity

### 1. Almost Half of Providers do not Generate Sufficient Cash to Pay for Operations

*Cash from operations is the cash generated in a year due to the day-to-day activities of an organization or from its investments. It does not include cash generated or spent on financing activities. Free cash flow compares cash generated from operations to total annual revenues.*

An organization can survive for several years without generating sufficient cash for operations by foregoing investments, liquidating assets, or borrowing, but this pattern is not sustainable over the long term. Limited cash for operations, whether it is a consistent or an episodic problem, may mean that providers cannot pay their bills promptly, may incur costs for lines of credit, and, at worst, fail to pay payroll on time. Unexpected delays in receipt of income can put an organization with limited cash into a crisis situation.

Having nearly half of POS providers in this situation presents considerable risk not only to the clients of the Commonwealth, but also to the workforce employed by these organizations.

### 2. Sixty Percent of Providers Have Less than One Month of Cash on Hand at Year-End

*Cash on hand is measured as year-end cash assets divided by an average day of expenses. Industry standards indicate that a non-profit should have cash sufficient to pay for three months of expenses.*

Very few providers meet the standard non-profit threshold of three months in cash. One-third of POS providers have less than 15 days' cash, and another quarter have only three to four weeks of cash at the ends of their fiscal years. Medium and large providers have the lowest cash balances, with over 40% having 15 days or less of cash on hand.

The days in cash measure is a snap-shot in time. The Provider Review Team indicated that this result may be artificially depressed, since most UFRs are filed at the end of the Commonwealth fiscal year (June 30), when many state contracts have been expended. However, further analysis on the relatively small sample of providers with different reporting periods indicated that inadequate cash balances are present across all UFR filing periods, regardless of whether the reporting year coincided with the Commonwealth fiscal year.

These results, in particular the significantly poor results for days in cash for medium and large providers, are yet another point of concern.

### 3. One-Third of Providers Have Over 45 Days of Unpaid Receivables

*Average day's sales in receivables are an indication of timeliness of payment to the organization. It is calculated as net accounts receivable for program services divided by an average day's program service fee revenues. Accounting standards call for businesses to have 45 days or less of receivables.*

Two-thirds of providers achieve the business standard of 45 days or less of receivables, with the largest organizations doing best at 87%. Most of the remaining providers have between 45 and 90 days of receivables. However, three percent of providers, mostly small, have between 90 and 135 days of program service fees in receivables.

This measure can be an indicator of an organization's timeliness in billing and revenue collection. However, given that the Commonwealth is the primary source of revenue for most providers, these results may indicate more about Commonwealth payment practices than an organization's effectiveness in billing. Timeliness of payment is another matter that merits the Commonwealth's attention.

#### **D. Summary of Current Financial Condition**

All these factors combine to produce a picture of a provider community that is in unstable financial condition. Although providers should not be expected to accrue unreasonable surpluses on taxpayer dollars, the lack of a fund balance – and degree of deficit spending – indicate that the Commonwealth may not be covering the cost of the services it purchases. Though the percentage of providers that suffered deficits dropped between FY2003 and FY2005, sustained deficits over the three years have further reduced providers' ability to invest in basic operational capacity required for ongoing stability.

Providers with negative net income draw down on what limited net assets they do have in order to fund current operations. Four percent are in a perilous situation of having negative net assets – owing more than they own. A substantial number of providers have negative expendable net assets, not having enough assets in a sufficiently liquid form to actively support their operating expenses.

Daily operations of provider organizations are more likely to use, i.e. consume, cash than to generate it, meaning that they must rely on unrestricted contributions and loans to meet their need for operating cash. Many providers have 15 days or less of cash on hand. Slow collections may contribute to cash shortages and the need to borrow for the 30% to 40% of providers whose receivables exceed 45 days of expenses.

These operating conditions challenge provider management and cannot be sustained indefinitely. Some possible methods that providers may employ to cope with financial difficulties are:

- Reallocating funds from vacant staff positions;
- Relying on staff turnover to keep salary levels from increasing;
- Changing a staff position from salaried with benefits to consultant without benefits;
- Requiring that employees pay more for reduced benefits;
- Generating more income from other sources such as client fees, Section 8, food stamps, etc.;
- Changing staffing patterns to use less costly personnel;
- Padding unit rate contract budgets to allow for a small (up to five percent) surplus;
- Increasing reliance on fundraising; and
- Expanding the organization; which is difficult in an environment of highly constrained funding.

Based on the findings above about the nature and condition of Massachusetts human service providers, the team developed an analytic model in order to identify factors significantly associated with key aspects of provider financial condition.

## IV. FACTORS CONTRIBUTING TO PROVIDER FINANCIAL CONDITION

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### A. Overview of Analytic Model

What is the cause of providers' financial instability demonstrated by this analysis? The team used a variety of analytic methods and tools in an attempt to identify the causes of poor financial condition. In many cases, direct causal relationships are unclear and difficult to identify. The analysis does, however, point to several pivotal factors that appear related to strong or poor financial stability.

The analysis focuses on two measures of overall financial condition: net income as a percent of total revenues, and net assets as a percent of total assets. These two measures are the best overall measures of financial health. Because the analysis found that surplus or deficit on Commonwealth activities was a highly significant factor associated with net income, the team also developed a model to identify the factors associated with making a Commonwealth surplus or experiencing a Commonwealth deficit.

#### 1. Potential Factors and Hypotheses Tested

A literature review on non-profit and human services financial operations, discussions with EOHHS staff and members of the Provider Review Team, and a review of the Commonwealth's policies for human services contracting were the sources for identifying factors hypothesized to influence provider financial condition. These factors included provider characteristics such as structure, management and financial resilience; community and environmental characteristics, and aspects of state human services policy. The team analyzed a provider's surplus or deficit on Commonwealth revenue as both a factor contributing to financial health as well as an indicator or outcome of financial health. Table 4 outlines the specific variables included in the final regression model. Factors that the analysis determined were statistically significant are marked with a "✓".

#### **Statistical Significance**

The analysis relies on univariate statistics as well as multi-variable regressions to understand the significant contributing factors to financial health. In the following discussion of findings, regression results are assessed by the following levels of statistical significance.

- Highly significant factors have a probability ( $p$ ) of less than one percent that results are due to chance alone.
- Significant factors have a  $p$  of greater than one but less than five percent.
- Near significant factors have a  $p$  of greater than five percent but less than 10%.

The coefficient values are important for the statistically significant variables, as they identify the direction and relative impact of the significant relationship.

<b>Major Category</b>	<b>Factor</b>	<b>Hypothesis</b>
<b>Commonwealth Results</b>	✓ Surplus or Deficit on Commonwealth Revenue	Since providers receive, on average, 45 to 60% of their revenue from POS, their financial results on Commonwealth revenue is likely to affect the organization's overall financial status.
<b>Provider Characteristics:</b> Structure	<ul style="list-style-type: none"> <li>✓ Org. Size: Total Revenues</li> <li>- Org. Size: Total Assets</li> <li>✓ Org. Age</li> <li>✓ Revenue Source</li> <li>- Revenue Concentration</li> </ul>	Larger organizations and those with more experience are likely to have more resources that support sound finances. The type and number of funding sources and concentration of revenues can have varying results on financial health.
<b>Provider Characteristics:</b> Management Characteristics	<ul style="list-style-type: none"> <li>✓ Administrative expenses</li> <li>✓ Staff compensation percentage</li> <li>- Fundraising efficiency</li> </ul>	The effectiveness of provider management is likely to be related to financial condition.
<b>Provider Characteristics:</b> Financial Resilience	<ul style="list-style-type: none"> <li>✓ Cash percentage of assets</li> <li>✓ Expendable net assets</li> <li>✓ Investment ratio</li> <li>✓ Surplus or deficit on Commonwealth revenue</li> </ul>	A provider's cash and other assets are important factors in supporting financial and overall operations.
<b>Community Characteristics</b>	<ul style="list-style-type: none"> <li>- Percentage of population Hispanic and non-white</li> <li>✓ Percentage of population under 200% of the federal poverty level.</li> </ul>	Organizations serving minority and/or poor communities may incur higher costs or may not be able to rely on the same level of community support to fund programs as organizations serving wealthier communities.
<b>State Policy Variables</b>	✓ Contract/rate setting method.	Cost-reimbursement, unit rate, class rate, and special education rate contracts are likely to have differing effects on provider financial health due to variation in reimbursement policies, frequency of rate adjustments, and inflation factors.
	✓ POS Revenue Source & Share	Varying purchasing practices and policies across agencies may result in differing effects on provider financial health.
	- Residential compared to other services	Residential providers were identified as an example of a subset of services that may result in different financial condition outcomes.

## **B. Findings from Analysis of Contributing Factors**

### **1. Surplus or Deficit on Commonwealth Activities**

**Hypothesis:** Since providers in the sample receive, on average, 45 to 60% of their revenue from POS, their financial results on Commonwealth revenue is likely to affect the organization's overall financial status.

#### ***Commonwealth Results are Critical to the Industry's Financial Condition***

The analysis found that a provider's surplus or deficit on Commonwealth revenue is one of the most statistically significant factors affecting their overall ability to break even or generate a surplus. Providers that experience deficits on their Commonwealth business, over half of the providers in the analysis sample, face lower overall surpluses or increased deficits as a result. In statistical terms, the coefficient for this variable is high, at +.25. This means that a provider with a Commonwealth



deficit that is just one percentage point greater than another provider who is otherwise identical, is likely to have a net income to total revenue rate that is a full 0.25 percentage points lower.

The Commonwealth is the primary purchaser of human services, but the high level of deficits on Commonwealth activity indicates that its rates generally do not fully cover the costs of services. Additionally, level funding of multi-year contracts makes it more difficult for providers to cover costs in an economy of rising prices.

## 2. Provider Characteristics

### a. Structure

**Hypothesis:** Larger organizations and those with more experience are likely to have more resources that support sound finances. The type and number of funding sources and concentration of revenues can have varying results on financial health.

#### *Organizations that are Larger and Older Tend to have Better Financial Health*

The results for the effects of provider structural characteristics are strong and consistent with expectations. Large providers are more likely than smaller providers to generate overall surpluses as well as surpluses on their Commonwealth business. Despite many significant associations between size and the independent variables, when the analysis takes other factors included in the regression into account, medium and large providers are actually associated with lower net income. This suggests that other factors associated with size are driving the differences in financial health, rather than the size of the organization itself.

Consistent with the stated hypothesis, providers that have been in business longer are more likely than younger organizations to have larger net assets as a percentage of total assets.

#### *Income from Non-Program Sources Augments Commonwealth Surpluses and Offsets Deficits*

Revenue shares from total non-program sources are highly significantly associated with higher net income rates. Non-program revenues include contributions, commercial revenues, and investments. Providers able to raise larger shares of income from these non-restricted sources are associated with higher net income rates. A one percentage point increase in non-program sources is associated with a 0.24 percentage point increase in net income for a small organization.

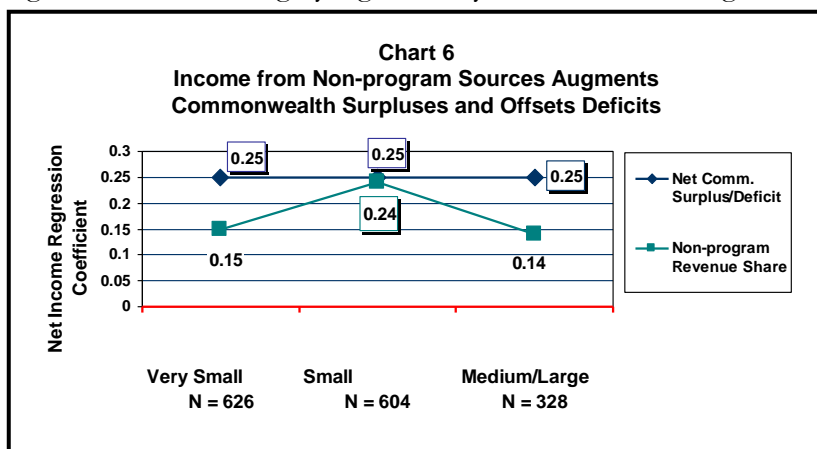


Chart 3 shows how the coefficients on non-program revenue and Commonwealth results compare. Coefficients that are highly statistically significant (i.e.,  $p < 0.01$ ) are enclosed in rectangular boxes. Unboxed coefficients are statistically significant at the level of  $p < 0.05$ . The chart indicates that small

providers are more sensitive to changes in share of non-program revenues than very small and larger providers. Providers that generate contributions and commercial and investment revenue subsidize Commonwealth programs. Providers less able to generate such revenues are in the most difficult financial condition.

## **b. Management Characteristics**

**Hypothesis:** The effectiveness of provider management is likely to be related to financial condition.

### ***Certain Provider Management Characteristics have Significant Associations with Net Income, but Causality is Difficult to Determine***

Administrative expense rates and the share of total personnel expenses for employees (as opposed to contract or temporary help) are associated with higher net income and net assets. However, causality for these factors is difficult to determine. It is not clear whether higher administrative rates contribute to achieving better financial results, or whether providers with more financial assets can afford to invest in more administrative resources. Since direct care staffing is both the biggest expense for human service providers and has the biggest impact on service quality, disentangling the direction of causality between employee-related expenses and financial condition may be important in setting policies that support high quality care.

Variability in organizations' reporting of fundraising expenses and in-kind donations prevented robust analysis of any effects of fundraising on overall financial health. However, as noted above, about 18% of POS providers in the sample did not report any fundraising revenue. Additional data would be needed in order to evaluate the implications of this finding.

## **c. Financial Resilience**

**Hypothesis:** A provider's cash and other assets are important factors in supporting financial and overall operations.

Since the calculation of Commonwealth surplus or deficit is sensitive to the choice of allocation method, the analysis included allocation method as a control variable. In comparison to other allocation methods, the simple allocation method is associated with bigger Commonwealth deficits for providers with deficits, and with lower net income for small providers. Providers who are less financially sophisticated may be more likely to utilize this method. The method itself can also make it more difficult to get fully reimbursed for administrative expenses by the Commonwealth.

### ***Adequate Cash Balances and Liquid Assets Are Key to Supporting Provider Operations***

Indicators of an organization's financial resilience, such as cash assets and investment assets as a percentage of total assets, are positively associated with stronger financial condition. These results, while predictable, highlight the importance of adequate cash balances and accumulated unrestricted assets to provide liquidity to support provider operations and as an indicator of effective financial management.

### 3. Community Characteristics

**Hypothesis:** Organizations serving minority and/or poor communities may incur higher costs or may not be able to rely on the same level of community support to fund programs as organizations serving wealthier communities.

#### ***Organizations Serving Poorer Communities Tend to Incur Higher Deficits***

The analysis matched zip code-level census data to the zip codes of each of a provider's program locations to generate the average percentages of the populations classified as non-white, and Hispanic, and whose income fell below 200% of the federal poverty level. The team then weighted these figures by the percentage of total program revenues. This method assumes that 1) programs are primarily serving the community in which they are located and 2) program sites outside Massachusetts have population mixes similar to provider program sites within Massachusetts. There were fewer significant associations with the non-white and Hispanic percentage of the population than with the percentage of population in poverty, so the regressions only included the stronger variable. Serving poorer communities is highly significantly associated with lower net income for small providers and nearly significant for medium and large providers. The poverty measure also reaches near significance in association with lower net assets.

These data do not indicate why small providers serving poorer communities are likely to incur higher deficits. Tougher case mixes, higher expenses, more variability in expenses, and a reduced ability to generate contributions are possible causes. The significance of the association for small providers highlights the vulnerability of providers between \$2 million and \$10 million in size.

### 4. State Policy: Contract/ Rate Setting Method

**Hypothesis:** Cost-reimbursement, unit rate, class rate, and special education rate contracts are likely to have different effects on provider financial health due to the variation in reimbursement policies, frequency of rate adjustments, and inflation factors under these different contract types.

#### ***Cost Reimbursement Contracts Show a Consistent Negative Relationship to Financial Health***

Cost reimbursement contracts account for 16% of total program revenues. Compared to the effects of revenue shares for all other rate types, including class rate contracts (four percent of total program revenues); non-negotiated unit rate contracts (11%); "rate not specified" (17%); and accommodation rates (three percent), the share of revenues a provider gets from cost-reimbursement contracts is associated with lower net income rates for all size groups, with the largest effect among very small providers. However, with a coefficient of 0.04, this factor does not have as much of an impact as Commonwealth results or non-program revenues. Share of cost reimbursement revenues is also significantly associated with reduced likelihood of generating a surplus on Commonwealth activities, and has a near significant association with lower net assets, suggesting that cost reimbursement contracts can affect not only annual results, but accumulation of assets over time.

### ***Other Contract Types Are Not Consistently Associated with Financial Health***

Analysis of other contract types resulted in inconsistent conclusions about their effects on financial health.

- Unit rate contracts, which account for 39% of program revenues, are associated with slightly higher net income for very small organizations, but not with any other measures of financial conditions for other size organizations.
- Special Education contracts are associated with lower likelihood of generating a surplus on Commonwealth activity, but with higher net assets and net income for some size categories. Special Education rates are set annually by OSD and typically include cost inflation factors.

Despite generally consistent rules for billing, provider participation in ready payments, and for whether a contract is allowed to generate a surplus, there is considerable variation in rates even within contract types, due to decentralized and individualized budget negotiation processes that many purchasing agencies employ for both cost reimbursement and unit rate contracts. Differences in the size of contracts and in their reporting requirements can also affect providers' costs for administering them. The degree of variation within the same contract type likely accounts for the limited significance of these variables. In addition, this degree of variation increases administrative demands on both the state and providers.

## **5. State Policy: Revenue Source & Share**

***Hypothesis:*** Varying purchasing practices and policies across agencies and revenue sources may result in differing effects on provider financial health.

### ***Medicare Revenue is Associated with Higher Net Income for Larger Organizations; the Effect of Other Third Party Sources is Unclear***

Medicare shares are highly significantly associated with higher net income for medium and large organizations, with a large coefficient of 0.64. There is some evidence that the effects of this revenue source increase with organization size. (Very few small organizations report Medicare income.) In contrast, the share of Medicare revenue is also significantly associated with reduced likelihood of generating a Commonwealth surplus of one percent or more. The seemingly conflicting findings may indicate that the type of Commonwealth services associated with Medicare funded services are not as profitable as other services.

Third party revenue sources other than Medicare are not associated with net income rates. Private third party revenue levels are associated with increased net assets. Medicaid including Massachusetts Behavioral Health Partnership (MBHP) has a near significant association with lower net assets for medium and large organizations.

A potential skewing factor in third party billing is the method for accounting for uncollectible accounts. These are considered bad debt and cannot be directly allocated to the program with which they are associated. Instead, they are reported as non-reimbursable general and administrative expenses. This method affects the calculation of Commonwealth results and tends to overstate income for programs with third party revenue and to overstate expenses for other programs.

The Commonwealth is not responsible for administering Medicare, but does contract with providers who bill Medicare. However, most of them likely also bill other third parties, making it imperative for the Commonwealth to better understand the other third party sources. Providers sometimes total all third party revenues to report in a single category on the UFR, making it difficult to analyze the unique effects of different third party sources. Improving reporting in this area would better guide the Commonwealth in managing Medicaid, the third party source it does administer, and provide a better understanding of its providers who bill other third parties.

### ***Revenue Share from Different EOHHS Departments may be Associated with Financial Results***

The analysis showed evidence that the varying purchasing practices and policies of some Commonwealth human service agencies may be more beneficial or detrimental to providers' financial health, though more research will be necessary to assess the overall validity of these findings and to tease out any potential reasons behind them. An organization's share of revenue from the Department of Transitional Assistance (DTA) is associated with stronger financial results, as measured by net assets and likelihood of generating a Commonwealth surplus. Analysis of providers with predominant state agency revenue sources, defined as those receiving 40% or more of their revenue from a single state agency source, also showed that provider organizations whose funding derives principally from DMR and DTA are the least likely to have deficits. The regression analysis indicated that EEC revenue was associated with lower net income for very small providers and with lower net assets for all providers.

The regression analysis included variables for share of revenue from the largest EOHHS agencies: DMR, DSS, the Department of Mental Health (DMH), DPH, and the Department of Youth Services (DYS), as well as from EoEA and EEC. The analysis excluded EoEA ASAPs from the sample, but retained their subcontractors. In addition, to explore the effect of DSS revenues coming through lead agencies, the analysis included an estimate of DSS subcontract revenues as a variable. Table 5 shows the coefficients for variables that were significant in different regression models, with positive associations in black and negative in red.

Aside from the findings for DTA and EEC, the significance of state agency revenue sources is fairly limited and their coefficients are relatively small, making it difficult to discern clear cut state agency influences. In addition, there are a number of instances where the association of some agencies with net income and net assets is confounded by an opposite relationship with Commonwealth results. Along similar lines, the analysis of predominant state agency revenue sources showed no statistically significant difference in the distribution of net income rates between providers with and without a predominant funder.

These results do show that very small agencies are more likely than larger agencies to have a significant association with share of state agency revenue. The vulnerability of this group of providers warrants learning more about how state agency funding share and other aspects of Commonwealth policy disproportionately affect them, so as to develop appropriate remedies.

Table 5 Significant Regression Coefficients For State Agency Revenue Share by Dependent Variables, State Agency and Provider Size									
State Agency Revenue Share	Net Income				Net Assets				Likelihood of a Commonwealth Surplus
	All sizes	VS	S	M/L	All sizes	VS	S	M/L	All Sizes
DTA								1.545*	0.027*
DYS		0.013*	-0.055*	-0.055*		-0.320*			
DMR					-0.170				0.017*
DSS	-0.037*				-1.08				0.022*
DSS Subcontracts		-0.421*							
DMH	-0.030*				-0.235*				0.023*
DPH					-0.242*				
EoEA				-0.107*	-0.178*				0.031*
EEC		-0.062*			-0.203*				

Legend: **\*** = significant .01<p<.05  
**Highlight** = highly significant p <.01

## 6. State Policy: Residential Services

*Hypothesis:* Given similar cost drivers and the use of unit rate reimbursement practices, EOHHS identified Residential providers as one possible example of a subset of services that may result in different financial condition outcomes.

### *The Financial Health of Residential Providers Does Not Appear to Differ Significantly from that of Other Human Service Providers*

The analysis focused on the effects of share of total revenues from group home services, share from children’s residential services, and share from shelter services. Significant associations were small and often inconsistent, presenting little evidence overall that residential providers are different from the industry as a whole. As with contract type, variation within residential service types may prevent analysis from showing significant relationships.

## V. CONCLUSION

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The Massachusetts human services industry fills a vital role in the Commonwealth's economy by providing critical services to its citizens, and by acting as a major employer. The analysis of the current financial condition of this sector demonstrates that the industry is at risk. A very high percentage of providers have deficits on their overall operations, with deficits on the business they do with the Commonwealth identified as the most significant cause. Many operate under considerable constraints because of low cash balances, and inadequate or negative expendable net assets. Some smaller providers may not have access to lines of credit or qualify for mortgages, while a significant percentage of providers are heavily leveraged, with liabilities that exceed their net asset balance.

This analysis has demonstrated the relatively poor financial condition of many human service providers. As the primary purchaser of human services, the Commonwealth has a vested interest in understanding how its policies and contracting practices may contribute to these problems.

The Commonwealth's investment in these provider organizations reflects the determination that recipients of care are best served in non-institutional community settings. Further, privately-operated community settings generally afford the Commonwealth and the public a higher degree of cost-effectiveness, and programmatic flexibility than the Commonwealth can obtain alone.

While EOHHS did not commission this report to solicit recommendations for specific policy reforms, the analysis contained herein calls for a policy agenda necessary to stabilize the human service industry. Without such an agenda, the Commonwealth and taxpayers may cease to benefit from the contributions of these organizations and the workforce they employ.

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<sup>i</sup> Figures summarized from The Future of the Human Services Workforce in Massachusetts. Donahue Institute, University of Massachusetts. 2006.