



# HEALTH CARE INDUSTRY MARKET UPDATE

Home  
Health

June 28, 2002

Dear Friends of CMS:

As the regulators of over \$500 billion per year of Medicare, Medicaid, and S-CHIP funds, we believe it is incumbent on us to better understand the finances of our contractors, health providers, and other related businesses that provide services to the more than 70 million beneficiaries these programs serve. Health plans, hospitals, nursing homes, home health agencies, DME suppliers, medical device manufacturers, and pharmaceutical companies are just some of those whose finances are heavily reliant on these public programs.

I have always been surprised at how little Wall Street and Washington interact—and how companies often provide different financial information to each. I am a strong believer in adequate funding for our major partners in these programs, but I do not think they should be saying one thing to investors and another to regulators (as it is occasionally in their interest to do). If health plans or providers need help, we should have a thorough understanding of their real financial status to assess the true level of need.

Many investment banking firms conduct detailed analyses of major health providers, both for the equity investors in for-profit companies, and for the debt holders of for-profit and nonprofit entities. Health systems typically provide these investors with clear financial data. These data can be used by regulators and legislators to assess funding adequacy, or the need for regulatory reforms.

CMS' Office of Research, Development & Information (ORDI) has gathered research reports from the major investment firms, summarized their analyses, and condensed them into a short, and hopefully, understandable format. Our goal is to provide objective summary information that can be quickly used by CMS, HHS, Congress, and their staffs that oversee these programs. The primary person at CMS assigned to this task is Lambert van der Walde. Lambert previously worked for Salomon Smith Barney in New York and is experienced with corporate financial analysis and reviewing corporate research. Also on the team is Tatyana Daniels who has Wall Street experience as well. Tatyana will be leaving CMS this summer to attend Harvard Business School in the fall.

This, our fourth report, focuses on the home health care and home respiratory and infusion therapy industry sectors. In coming months, we will review the financial and market performance of device manufacturers, pharmaceutical companies, specialty hospitals, hospice providers, durable medical equipment manufacturers, and virtually every other major provider and supplier sector. Though I am proud of this effort, and believe it will add to understanding of the programs, we welcome comments on the content and format of this report. We want to make this as consumer friendly as possible for everyone who reads it. Please provide comments to Lambert van der Walde at [lvanderwalde@cms.hhs.gov](mailto:lvanderwalde@cms.hhs.gov).

Sincerely,

Tom Scully



# HEALTH CARE INDUSTRY MARKET UPDATE

Home  
Health

June 28, 2002

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Tatyana Daniels

## **Perspectives on Home Health Care**

Performance varies across the fragmented home health industry.

- ◆ **Small, local, and regional providers comprise the majority of the home care market.**
- ◆ **Home health agencies struggled post-BBA but are recovering under the new prospective payment system.**
- ◆ **The number of Medicare home health agencies has leveled-off in the last two years after three years of significant declines following the implementation of the interim payment system.**
- ◆ **Large publicly-traded respiratory therapy companies continue to perform well and are profitable.**
- ◆ **Home health agencies have difficulty attracting investors while large respiratory and infusion therapy providers have better access to capital.**
- ◆ **Wall Street believes that Medicare is a profitable payor for many publicly-traded providers in the home health industry.**

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# HOME HEALTH CARE INDUSTRY

Home health care spending in the U.S. was \$40 billion in 1999.

The home health care industry includes home health agencies and respiratory and infusion therapy services. According to J.P. Morgan, the overall home health care industry in the United States generates approximately \$40 billion in annual spending. The home health agency (HHA) segment, which accounts for roughly \$30 billion, is reimbursed by commercial and private payors, Medicare, and Medicaid. HHAs employ a variety of different professionals in the home, including skilled nurses, nursing aides, rehabilitation specialists (physical, speech, and occupational therapists), and medical social workers in the home. The remaining \$10 billion in annual expenditures can be further subdivided into home respiratory therapy, home infusion therapy, and durable medical equipment (DME).

**Figure 1: Home Health Care Industry—1999**

Home Health Care Industry (Dollars in Billions)	Market Size	Percent of Market
Home Health Agencies	\$ 30.0	75.0 %
Respiratory therapy	3.5	8.8 %
Infusion therapy	4.5	11.3 %
Durable medical equipment (DME)	2.0	5.0 %
Total Home Health Care Market	\$ 40.0	100.0 %

Source: J.P. Morgan, Lehman Brothers

## Industry Fragmentation

The home health care industry is highly fragmented. Several large for-profit companies exist but very few have dominant market presence. The bulk of the industry is made up of thousands of relatively small, regional and local providers, most of which are not highly capitalized. Due to their small size and independent nature, most home health care providers do not file public financial data. It is important to note that this report focuses on data that is readily and publicly available and therefore examines only a portion of the industry.

Small regional and local providers make up the majority of the home health care market.

## Home Health Agencies

HHAs range from facility-based agencies to small, publicly-traded and privately-held companies to visiting nurse associations and nurse registries. The largest publicly-traded company in this business is Gentiva Health Services (NASDAQ: GTIV), which attained \$730 million of its revenue from its home health business in 2001. This represents approximately 2-3% of the HHA market. According to SMG Marketing Group, in 2001, there were a few more for-profit home health agencies (52%) than nonprofit (48%). Independently owned HHAs represented 52% of the home health market, while chain-owned, government-owned, and church-owned HHAs represented 30%, 15%, and 3% of the market, respectively.

Nearly half of HHAs are nonprofit.

## Home Respiratory and Infusion Therapy Services

Although there are a few national providers, including Lincare Holdings (NASDAQ: LNCR) and Apria Healthcare Group (NYSE: AHG), small publicly-traded and privately-held operators control the majority of these markets. The home respiratory therapy market, which includes home oxygen equipment and respiratory therapy services, represents roughly \$3.5 billion in annual spending. The home respiratory therapy industry

is very fragmented—with more than 2,000 local providers comprising the majority of the market. Lincare and Apria each generate approximately 20% of the revenue in the home respiratory therapy industry, and American HomePatient (NASDAQ: AHOM) generates an additional 5%.

While many providers, such as Lincare, focus on the respiratory therapy market, others, such as Apria, target infusion therapy as well. The \$4.5 billion United States home infusion industry is also highly fragmented, and provides pharmacist services and related medical equipment and supplies. Combined, the three largest national providers control roughly 29% of this market.

# HOME HEALTH AGENCIES

## State of the Industry

### Medicare spending for HHAs skyrocketed in the 1990s.

Medicare spending for home health agency services grew by 480% from 1990 to 1997.

From 1990 to 1997, the provision of home health agency services was one of the fastest growing expenditures in Medicare. During this period, expenditures rose from \$3.7 billion to \$17.8 billion. The average annual number of visits per home nursing patient increased from 36 to 73 and home nursing patients increased from 57 to 109 per 1,000 beneficiaries.<sup>1</sup> The industry's growth reflected several factors including: (i) a cost-based payment system that provided few incentives for agencies to control the volume of services, (ii) the 1989 *Duggan v. Bowen* court case that expanded coverage criteria for the home health benefit, and (iii) many HHAs provided custodial long-term care services for a benefit designed to offer skilled care (and related services) for individuals with an illness or injury. Escalating costs and growing use of home health services provided a catalyst for legislative action.

### BBA reduced home health provider Medicare reimbursement.

The Balanced Budget Act of 1997 (BBA) significantly reduced Medicare reimbursement to HHAs and, in particular, to nursing care. In October 1997, as an interim step to establishing a prospective payment system (PPS), caps were applied to the cost-based system. This interim payment system (IPS) remained until October 2000 when the PPS was implemented.

### Some providers faced difficulty under IPS but are fairing better under PPS.

Providers are fairing better under PPS.

IPS incorporated much tighter per-visit cost limits than had previously been in place and subjected each HHA to an annual Medicare revenue cap. The Revenue cap was the product of an HHA-specific, per-beneficiary amount and the number of beneficiaries that the HHA served. Eligibility for the benefit was also modified to eliminate eligibility gained through venipuncture (inserting a needle into a patient's skin), thus eliminating access for many patients whose skilled care was limited to this need. In addition, under IPS, HHA payment caps were more restrictive for agencies that were established after 1994. Between the implementation of IPS at the beginning of fiscal year 1998 and the end of fiscal year 1999, total Medicare spending on home health fell by 52% and average visits per user fell by 40%. By contrast, under PPS, effective October 1, 2000, agencies are no longer paid per visit, but are paid prospective rates per 60 day episode with an unlimited number of total episodes.

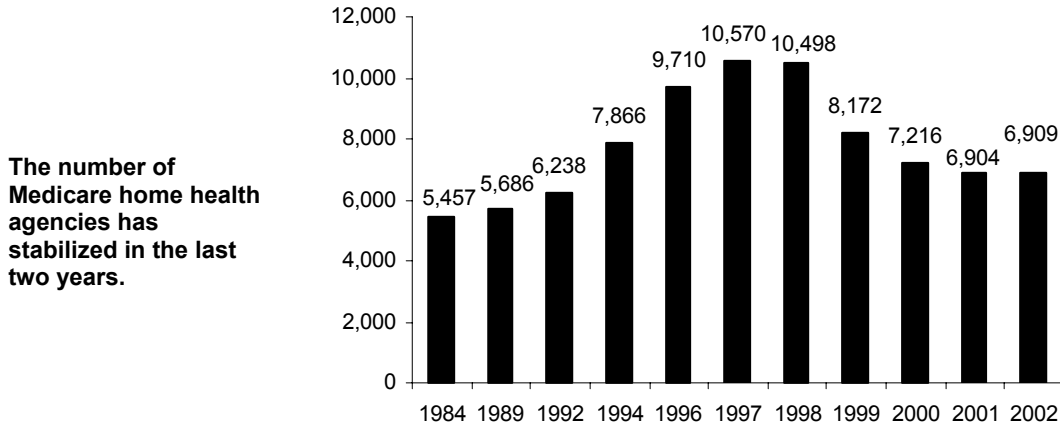
### HHA closings and consolidations have stabilized.

BBA-mandated reductions caused a decline in the number of home care agencies in the industry.

The HHA sector grew rapidly during much of the 1990s. As illustrated in Figure 2, the number of agencies peaked in 1997. BBA-mandated reductions caused a decline in the number of home care agencies in the industry. The decline was a result of both closures and mergers. Mergers became common under IPS because acquisition by an older agency often secured higher cost limits for newer (post-1994) entrants to the industry. The number of Medicare home health agencies has stabilized in the last two years after three years of significant declines following IPS implementation in October 1997. In addition to the mergers and closures, a CMS moratorium on new HHA openings halted growth.

<sup>1</sup> Source: GAO Report, Medicare Home Health Care, May 2002.

**Figure 2: Medicare Providers: Number of Home Health Agencies**



Source: CMS  
Note: Calendar Year

Notwithstanding the impact of the BBA on the HHA sector, SMG Marketing Group stated in 2001 that the outlook for HHAs is positive:

“The prognosis for the home healthcare industry is not grim. There are several signals that there will be continued growth in the homecare industry. It appears that closings in the home healthcare industry have stabilized in the past year following two years of accelerated closings. Remaining agencies have learned to adapt to the new payment by streamlining operations and effectively managing costs.”

## Case Study: Almost Family, Inc.

A good example of a company's ability to adapt to changing payment systems is Almost Family, Inc., which provides adult day care and also operates home health agencies. The company announced on September 14, 2001 that its Board of Directors reversed its previously adopted plan to dispose of its HHA operations. The initial decision to divest the HHA business was because it was not a viable business under IPS. Given the significant external and internal changes that have taken place with regard to the future prospects of the company's HHA segment, the board's reversal indicates that retaining the business was the best option available to maximize shareholder value.

### In November 1999, Almost Family significantly reduced its private insurance/managed care business and redesigned its operating structure to lower operating costs.

This included closing three of the company's eleven HHAs and implementing new information systems, productivity standards and labor reductions in the remaining agencies over the second half of 2000 and the first half of 2001. The following table shows the change in operating results during the fiscal year ended March 31, 2001 in periods of PPS reimbursement and cost reimbursement.

### Almost Family HHA Operating Results – Cost Reimbursement vs. PPS

	Cost Reimbursement Six Months Ended September 30, 2000		Prospective Payment System Six Months Ended March 31, 2001	
	Amount	% Revenues	Amount	% Revenues
Net Revenues	\$ 12,230,450	100.0 %	\$ 13,543,764	100.0 %
Expenses:				
Cost of Services	11,393,651	93.2 %	10,610,861	78.3 %
General & Administrative	1,411,467	11.5 %	1,260,820	9.3 %
Uncollectible Accounts	267,362	2.2 %	249,298	1.8 %
<b>EBITDA</b>	<b>\$(842,030)</b>	<b>(6.9)%</b>	<b>\$ 1,422,785</b>	<b>10.5 %</b>
Depreciation & Amortization (D&A)	298,060	2.4 %	366,000	2.7 %
EBIT	\$(1,140,090)	(9.3)%	\$ 1,056,785	7.8 %

Source: Company Annual Report, December 31, 2001

Notes: EBITDA, or earnings before interest, taxes, depreciation, and amortization. EBITDA is especially important to lenders as it tells investors how much cash the business is generating from operations and is available to pay financing costs (interest).

The company did not provide net income figures for the Home Nursing Segment.

The consolidated net income margin for the twelve months ended March 31, 2001 was 2%.

### Success under PPS

Almost Family attributed its improved financial performance under PPS to both its operational restructurings to prepare for operation under PPS and to higher PPS reimbursement rates. As shown in the table above, the visiting nurse operations incurred net losses in the first six months of the fiscal year ended March 31, 2001 operating under the old cost-based reimbursement system. In the second six months, under PPS, the company earned a higher rate of reimbursement and incurred lower operating costs on its visiting nurse operations than were earned and incurred respectively in the first half. Costs of services, primarily labor and related costs, were reduced by almost 7%. Approximately 83% of the company's visiting nurse segment revenues are generated from the Medicare program. Further, the company cited that it increased the Medicare component of its business and reduced its insurance and managed care business.



## Industry Overview

### Revenue Sources

Home health agencies generate revenue from multiple (and variable) product lines. These revenues come from both public and private payors. Private funds come from commercial insurers and patients. Public funds come from Medicare, Medicaid, and other government programs. The total U.S. HHA expenditures for 2000 are listed in Figure 3 below. Public funding represents 52% of the industry, while private funding represents 48%. The commercial insurance industry pays for 24% of the nation's HHA expenditures. Medicare is the largest single payor of HHA services, paying for 28% of national expenditures in 2000. Medicaid represents approximately 19% of national spending.

Medicare and Medicaid pay a combined 47% of U.S. HHA expenditures.

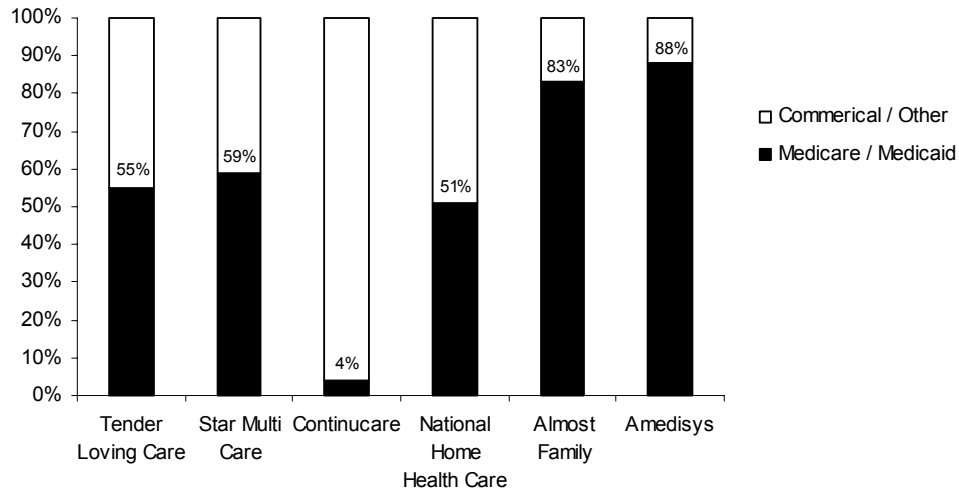
**Figure 3: Payor Segmentation—HHA Industry**

Home Health Agency Payors (Dollars in Billions, Calendar Year 2000)	Funds Expended	Percent of Total
Private Health Insurance	\$ 7.6	23.5 %
Out-of-Pocket & Other Private	7.9	24.4 %
<b>Total Private Funds</b>	<b>\$ 15.5</b>	<b>47.8 %</b>
Medicare (Federal)	\$ 9.2	28.4 %
Medicaid (Federal and State)	6.0	18.5 %
Other Public	1.7	5.2 %
<b>Total Public Funds</b>	<b>\$ 16.9</b>	<b>52.2 %</b>
<b>Total Public &amp; Private Funds</b>	<b>\$ 32.4</b>	<b>100.0 %</b>

Source: CMS, Office of the Actuary, National Health Statistics Group

Note: Freestanding facilities only.

**Figure 4: Payor Segmentation—Publicly-traded HHA Companies**



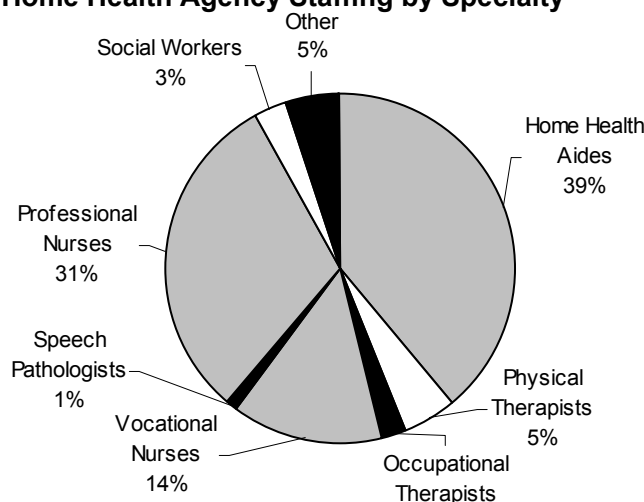
Payor mix varies among the publicly-traded HHA companies.

Source: Company filings

### Costs

Home nursing is considered by many to be a cost-effective alternative to extended hospitalizations or lengthy nursing facility stays. Because the service is rendered in the patient's home, some of the large capital costs associated with facility-based care are avoided. HHA costs are primarily labor-oriented. The table below shows that nursing (professional and vocational) comprises 45% of HHA staffing.

**Figure 5: Home Health Agency Staffing by Specialty**



Source: SMG Marketing Group, 2001

**The nursing shortage continues to be a concern to investors and providers alike.**

Wall Street analysts are concerned that in certain areas of the United States, the industry is experiencing a shortage of nursing staff. The Bureau of Labor Statistics forecasts an 82% increase in demand for key home health care personnel for the period of 1998 to 2008. According to the SMG Marketing Group:

“Home health agencies have a growing need for qualified health care staff and employees...[the] home health care industry may be hit hard by the reported nursing shortage. Professional nurses comprise 31% of the home health staffing force. Healthcare organizations are forced to recruit nurses from overseas, and offer more competitive salaries and signing bonuses.”

According to Deborah Lawson of Salomon Smith Barney, the existing nationwide shortage of registered nurses is being exacerbated by several factors: fewer nurses are in training programs and those who are, are more likely to be in non-baccalaureate degree programs (meaning they are less skilled), the existing nursing population is aging (the average age of a registered nurse in 2000 was 45), and vacancy and turnover rates are also on the rise.

In interviews with the Office of the Inspector General, hospital discharge planners most commonly attributed the home health staff shortages to the effect of IPS.<sup>2</sup>

### **Cost of Information Technology**

Information technology needs are increasing for HHAs as a result of legislation and changes to reimbursement. Industry participants are concerned about how they are going to fund these needs.

**HIPAA standards are expected to improve the efficiency and effectiveness of the nation's health care system.**

The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA, Title II) require the Department of Health and Human Services to establish national standards for electronic health care transactions and national identifiers for providers, health plans, and employers. It also addresses the security and privacy of individually identifiable health information. Adopting these standards will improve the efficiency and effectiveness of the nation's health care system

<sup>2</sup> Source: Office of the Inspector General, “Access to Home Health Care After Hospital Discharge, 2001”

by encouraging the widespread use of electronic data interchange in health care. Electronic processing of transactions is expected to significantly reduce labor and error-related costs. The initial investment in information technology will be a significant cost to many HHAs.

Under cost reimbursement, it was significantly easier for small operators to manage their operations without sophisticated technology. The implementation of PPS may lead HHAs to seek more sophisticated information technology platforms to manage larger operations and more complex decision making demands. There is already some indication that agencies are beginning to use telemedicine devices to effectively manage services.

In addition, the challenge inherent in moving from a per-visit cost reimbursement payment system to a single payment per episode requires optimization of clinical practices and efficient management of resources. Home care staff will need to be utilized efficiently to maximize cost effectiveness.

## **Industry Performance**

One measure of industry performance is financial and can be understood by examining a company's ability to generate sufficient revenues to cover expenses. To the extent a company earns more revenue than it needs to cover expenses, it generates a profit. Profit expressed as a percent of revenue is called profit margin. Profitability within the HHA industry varies and profit margins are difficult to gauge. Unlike publicly-traded companies, the majority of this market is composed of small, local operators who are not required to report financial data.

One measure of profitability, earnings before interest, taxes, depreciation, and amortization, or EBITDA, is especially important to lenders as it tells them how much cash the business is generating from operations and is available to pay financing costs (interest). Figure 6 below indicates that the median EBITDA margin, and hence, operating profitability, has improved for the publicly-traded HHA companies. The median EBITDA margin for a small sample of publicly-traded HHA companies for 2001 is approximately 2%. This figure reflects revenue derived from Medicare, Medicaid, and private payors. This margin is lower than that estimated by Andy May of Jefferies & Company for the Medicare component of an HHA business. He suggests a good proxy of an almost pure Medicare HHA company is Amedisys. It is a company focused on providing home agency care that received 88% of its revenues from Medicare in 2001. Amedisys was able to achieve a 10% EBITDA margin that year. Many HHA companies, however, are not able to obtain these margins in their Medicare or non-Medicare lines of business.

According to Andy May of Jefferies & Company, under PPS, "Medicare is the best business in home care." He believes that even though Medicare beneficiaries are typically a more costly and more difficult population to treat than managed care beneficiaries, the Medicare business is more profitable than managed care. He estimates that a well-run home health agency with \$100 million in revenues can deliver good quality care and still earn a 10% EBITDA<sup>3</sup> margin on its Medicare business.

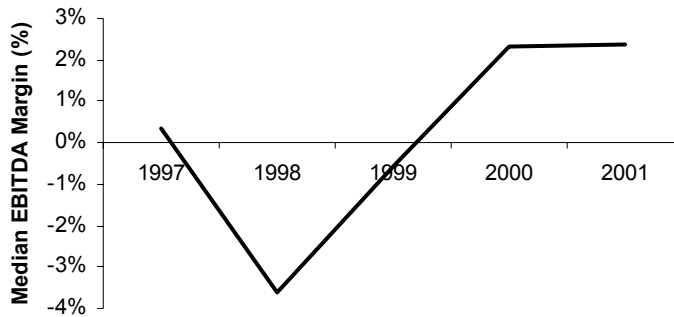
**The 2001 median EBITDA for publicly traded HHA companies is 2%.**

**"Medicare is the best business in home care."**

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<sup>3</sup> EBITDA is earnings before interest, taxes, depreciation, and amortization. This tells investors how much cash the business is generating from operations and is available to pay financing costs.

**Figure 6: Median EBITDA Margin for Publicly-Traded HHAs**



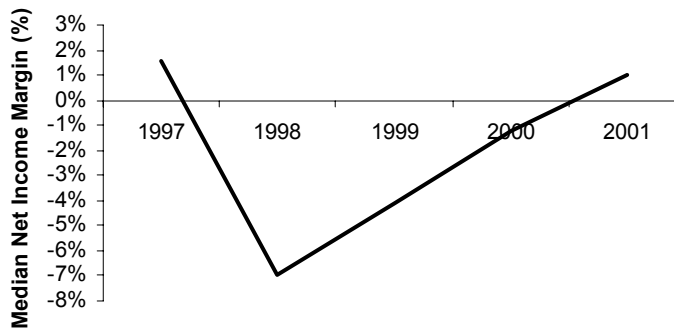
Source: Bloomberg, Securities and Exchange Commission 10-K Filings, Company reports, and Lehman Brothers. Companies included: Gentiva, Amedisys, Almost Family, National Home Health Care, New York Health Care, Tender Loving Care Health Services, Continucare, and Star Multi Care Services. Note: Gentiva results adjusted on a pro forma basis to reflect the sale of its specialty pharmaceutical business.

It is also important to note that there were many bankruptcies in this sector, and that the combined market capitalization of these very small companies is only \$418 million. Gentiva dominates, representing 54% of the combined value of the sector.

**Many HHA companies have negative net income margins.**

Another important performance metric is net income margin, which is calculated by dividing the net income by net revenues, and is expressed as a percent of revenue. Net income is the revenue that remains after all operating expenses and non-operating expenses (such as interest, taxes, depreciation, and amortization) have been accounted for. This is the total profit or “bottom line.” It is the amount that the business can reinvest in itself, and, in the case of a for-profit company, may distribute to shareholders. The graph below shows that the median net income margin has improved for the publicly-traded HHAs, but many of these companies have negative margins.

**Figure 7: Median Net Income Margin for Publicly-Traded HHAs**



Source: Bloomberg, Securities and Exchange Commission 10-K Filings, Company reports, and Lehman Brothers. Companies included: Gentiva, Amedisys, Almost Family, National Home Health Care, New York Health Care, Tender Loving Care Health Services, Continucare, and Star Multi Care Services. Note: Represents reported net income with the exception of Gentiva’s results which are adjusted on a pro forma basis to reflect the sale of its specialty pharmaceutical business.

### **Access to Capital**

**Access to capital is a key indication of how an industry is performing.** Without access to external sources of funds, a business is limited to only the net income it generates to fund its operations and invest in new equipment, facilities, or technology. The ability to

access capital is critical for a company to build its market-share and remain financially viable.

**Little public information is available regarding the HHA sector’s access to capital.**

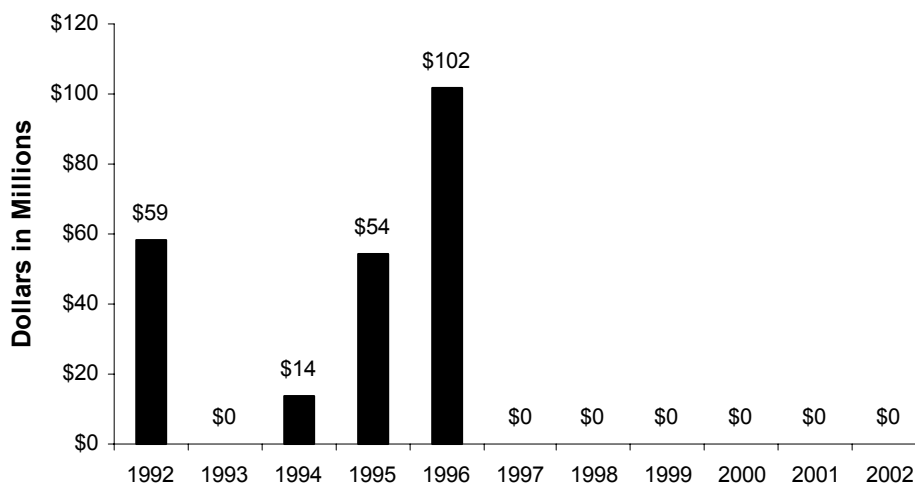
From what is available, it is clear that the sector has limited access to the public capital markets. Small publicly-traded HHA companies are not particularly attractive to investors because their equity value is too small to provide the liquidity investors need. Both equity and debt investors perceive the home health sector as risky because it does not have a proven track record of success and is subject to regulatory reimbursement risk. Many small HHA companies went bankrupt in the 1990s and other publicly-traded companies that remain have only recently become profitable. As a result, Wall Street gives these companies very low market valuations.

**Access to capital for the small publicly-traded HHAs is limited.**

**Wall Street gives most HHA companies low valuations.**

Figure 8 below illustrates the industry’s limited access to the equity capital markets. The industry was able to raise only \$228 million over the past ten years from equity investors. Notably, these companies have not accessed the public equity capital markets since 1996.

**Figure 8: Annual HHA Public Equity Issuance**



Source: Jefferies Securities and Thompson Financial

**HHA companies are also typically too small to access the public debt markets.**

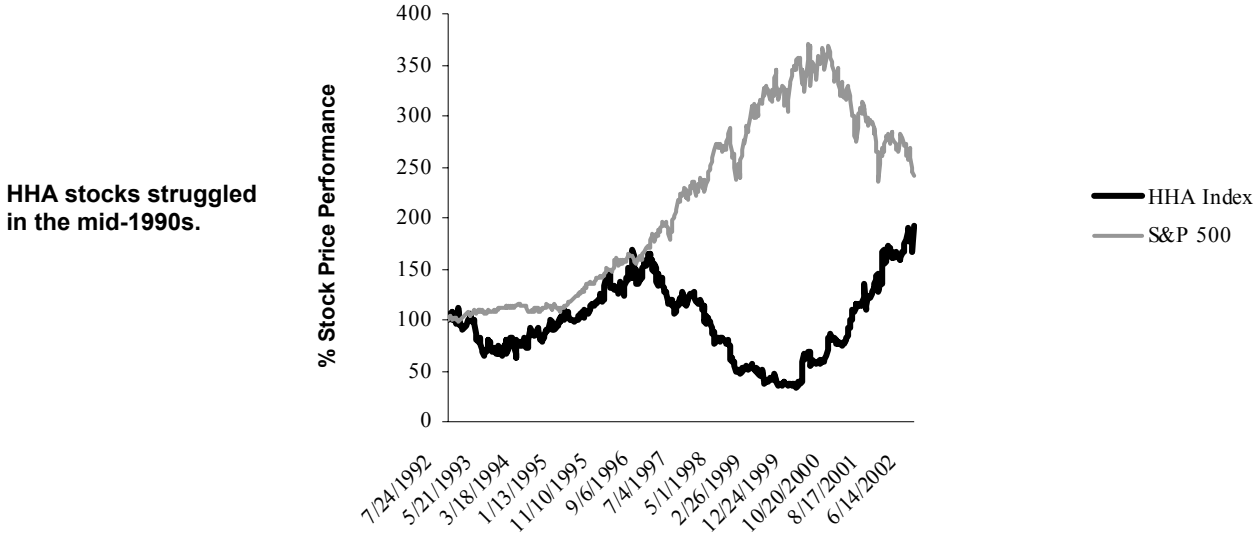
In order to create investor demand, a bond offering would generally need to be \$100 million. This would simply over-leverage these small firms because this much debt would exceed the cash these companies can generate to repay the debt.

Jefferies believes that only Gentiva, the largest publicly-traded HHA company in the industry, has good access to capital. It was able to recently secure a borrowing capacity of \$55 million through a credit facility. Some small HHA companies have been able to sell their equity shares privately at a 10-15% discount to the public market price (Amedisys), and others receive funding through bank loans (Almost Family). Still others rely on receivables funding, where a financing company advances the home health company cash against a percentage of its Medicare accounts receivable assets. This allows companies to use its Medicare accounts receivable as collateral in order raise capital. This type of financing is expensive, often with 10-14% effective interest rates. Jefferies believes that until these small HHA companies have a proven track record and achieve critical mass, their ability to access more attractive financing options is limited.

## Stock Market Performance

The stock market performance of the publicly-traded HHAs significantly underperformed relative to the S&P 500 Index during the mid-1990s. (Figure 9) In the last two years, however, this sector has rebounded and outperformed the S&P, indicating an improvement in investor sentiment. (Figure 10)

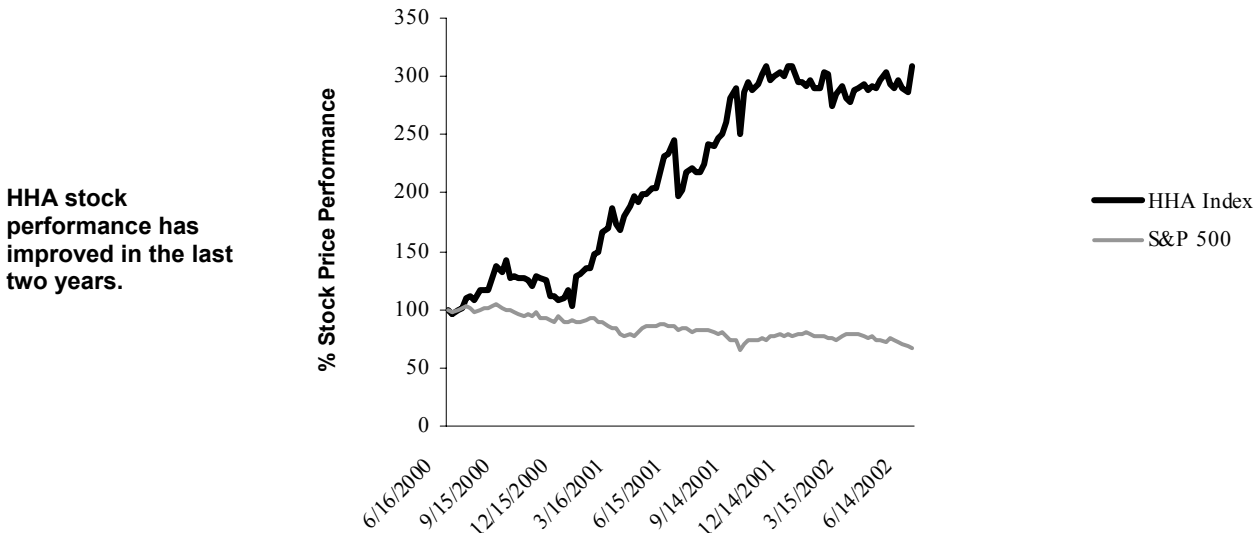
**Figure 9: Stock Market Performance for Publicly-Traded HHAs—Last Ten Years**



Source: Bloomberg

Companies included: Gentiva, Amedisys, Almost Family, National Home Health Care, New York Health Care, Continucare, and Star Multi Care Services. Results are equally weighted.

**Figure 10: Stock Market Performance for Publicly-Traded HHAs—Last Two Years**



Source: Bloomberg

Companies included: Gentiva, Amedisys, Almost Family, National Home Health Care, New York Health Care, Continucare, and Star Multi Care Services. Results are equally weighted.

# HOME RESPIRATORY AND INFUSION THERAPY SERVICES

## State of the Industry

**The BBA negatively impacted the home respiratory and infusion therapy services market, but to a lesser extent than the HHAs, and with a quicker recovery.** The Balanced Budget Act of 1997 (BBA) reduced the fee schedule for home oxygen by 25% effective January 1, 1998 and by an additional 5% effective January 1, 1999. Congress also mandated a peer review evaluation of the impact of the reductions on access to and quality of home oxygen services for Medicare beneficiaries throughout the United States. This review concluded that, “In response to the [BBA] reduction in fee schedule for home oxygen services, a proportion of home oxygen suppliers introduced a range of cost-cutting measures. However, there was little evidence that these service reductions adversely affected patient access to services or the quality of care provided.”<sup>4</sup>

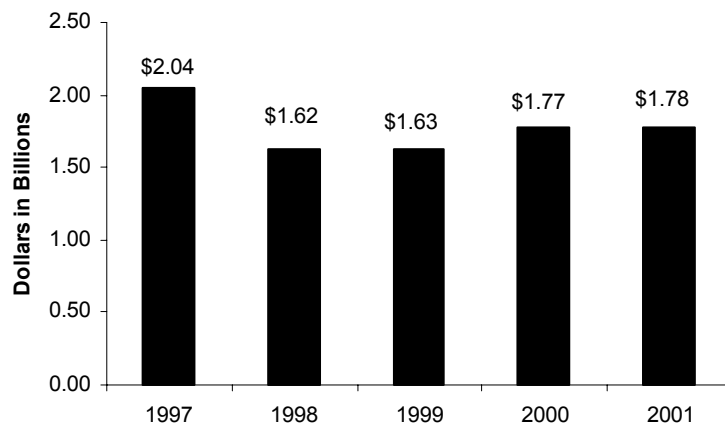
**BBA froze updates to Medicare respiratory therapy updates.**

In addition, the BBA froze the fee schedule updates for home oxygen for five years, from 1998 through 2002. The Balanced Budget Refinement Act of 1999 (BBRA) later provided for temporary (one time) updates of 0.3% in 2001 and 0.6% in 2002. These updates do not carry over into future years. The Benefits Improvements and Protection Act of 2000 (BIPA) provided for a 3.7% update for other DME sectors for 2001 in lieu of BBRA’s 0.3% update; however, this provision specifically excluded oxygen, which received the 0.3% increase for 2001. The statute provides no increases in payment for oxygen and oxygen equipment beyond 2002.

According to A.J. Rice of Merrill Lynch, reimbursement changes flowing from the implementation of BBA, “...adversely impacted Lincare’s 1998 revenues by \$73.2 million, or 16.5% from 1997 levels, and an additional \$19.3 million in 1999.” Matt Ripperger of J.P. Morgan estimates that Apria’s revenues fell by \$57 million in 1998 and \$10 million in 1999 as a result of the mandated reductions in spending.”

**Medicare spending for oxygen is rising following the BBA of 1997.** The graph below shows that spending for oxygen has stabilized in 2001 after increasing by 9% from 1999 to 2000 and decreasing by 21% from 1997 to 1998.

**Figure 11: Medicare Spending on Oxygen Following BBA**



Source: CMS

<sup>4</sup> Source: California Medical Review Inc. Report on Peer Review Evaluation of Home Oxygen Equipment, September 30, 2000

**Three economic factors drive the industry.**

The economic drivers are: demographics, patients' increasing desire to stay at home versus going to facilities, and the search for the lowest cost alternative. Home care utilization is expected to benefit from the aging of the population. The U.S. Census Bureau projects that the number of Americans over 65 years old will double over the next twenty years from 35 million today to roughly 70 million in 2020. In addition, Merrill Lynch believes that long-term demand should be aided by individuals' desire to receive as many health services as possible in the home. "The continued search for the lowest cost alternative for patient care delivery bodes well for the home respiratory market. The average daily rate of reimbursement for a home-based respiratory therapy patient compares favorably with comparable treatment in institutional settings."



## **Home Respiratory and Infusion Therapy Services**

### **Home Respiratory Therapy**

Home respiratory therapy is the delivery of oxygen therapy, respiratory medications, and sleep disorder products to patients with conditions such as chronic obstructive pulmonary disease (COPD), asthma, lung cancer, and sleep apnea. COPD, which includes both emphysema and chronic bronchitis, is characterized by obstructed air flow. Chronic bronchitis is the inflammation and eventual scarring of the lining of the bronchial tubes. Emphysema is a chronic disease that causes irreversible lung damage because the walls between the air sacs within the lungs lose their ability to stretch and recoil. Sleep apnea is the temporary suspension of breathing occurring repeatedly during sleep that often affects overweight people or those with an obstruction in the breathing tract, an abnormally small throat opening, or a neurological disorder.

### **The U.S. spent \$30.4 billion on COPD in 2000. Smoking causes 80-90% of COPD cases.**

According to the American Lung Association, COPD is the fourth leading cause of death in America, which is responsible for roughly 110,000 deaths annually. The leading cause of COPD is smoking, which causes 80-90% of COPD cases. A smoker is 10 times more likely to die from COPD than a nonsmoker. According to the National Heart Lung and Blood Institute, annual health care expenditures in 2000 related to COPD were approximately \$30.4 billion, \$14.7 billion of which are direct costs and \$15.7 billion of which are indirect. CMS estimates that Medicare expenditures for COPD for FY 2002 will be \$6.6 billion.

Home respiratory therapy services typically include:

- (1) Oxygen systems that consist of oxygen concentrators, liquid oxygen systems, and high pressure oxygen cylinders. Oxygen concentrators are stationary units that extract oxygen from ordinary air to provide a continuous flow of oxygen. Liquid oxygen systems are portable, thermally insulated containers of liquid oxygen.
- (2) Home ventilators that sustain a patient's respiratory function mechanically when a patient can no longer breathe normally.
- (3) Sleep apnea equipment used for continuous positive airway pressure therapy that forces air through respiratory passageways during sleep for patients with sleep apnea.
- (4) Nebulizers that deliver aerosol medication to patients to treat asthma, COPD, cystic fibrosis, and neurologically related respiratory problems.
- (5) Respiratory medications (such as albuterol sulfate, a bronchodilator) and related services.

In addition, respiratory therapy providers employ respiratory therapists to oversee and monitor the delivery of care. These services include instructing patients about the proper use of equipment, monitoring equipment, and the delivery of medication.

### **Home Infusion Therapy**

Standard, orally-ingested medication does not effectively treat conditions such as cancer, gastrointestinal (GI) diseases, congestive heart failure and immune disorders. Physicians prescribe infusion therapy for these ailments. Home infusion therapies include the intravenous administration of life-sustaining nutrients, chemotherapy, which is the intravenous administration of medications to patients with various types of cancer, and the infusion of antibiotics directly into the patient's bloodstream. The therapy includes pharmacist services, and related medical equipment and supplies and involves the administration to patients in the home setting.

## Wall Street's View

**Wall Street analysts believe that within the respiratory and infusion therapy services industry, the respiratory therapy business holds the most promise for investors.**

A.J. Rice of Merrill Lynch estimates that the domestic home respiratory therapy market is growing at a rate of 7-8% annually. Rice believes that growth in the respiratory market is being driven by, "...the aging of the population, which in turn is increasing the number of persons afflicted with COPD....In addition, home-based treatment is growing because it is the low cost alternative to receiving care in an institutional setting."

**These analysts also believe that profitability is strong for Lincare and Apria, the two largest companies in the respiratory and infusion therapy services market.**

Credit Suisse First Boston believes that, "Apria ranks among the largest and most profitable providers of home health care services." In the case of Lincare, A.J. Rice concurs, "Even after the Medicare reimbursement cuts, Lincare generates one of the highest margins in healthcare services." He believes that Lincare is able to achieve relatively high levels of profitability because it:

- (1) Targets spending and investment more at the branch level, while maintaining a relatively lean corporate overhead.
- (2) Offers a relatively high service level supported by a base of roughly one thousand licensed respiratory therapists. This supports improved clinical outcomes that encourage referrals and above average same-store growth over the longer term.
- (3) Makes an effort to standardize its billing and other systems. The company has been successful at consolidating "mom and pop" agencies and gaining operating leverage via implementation of these systems.
- (4) Has historically invested in cost-saving equipment. For example, the company has a much higher investment in liquid oxygen than do many of its competitors. Although liquid oxygen requires a higher up front capital cost, the resulting decrease in delivery costs makes it an attractive investment. Liquid oxygen requires monthly refills as opposed to the weekly refills required with traditional oxygen.

J.P. Morgan's Matthew Ripperger believes that the economics of respiratory companies are attractive, "...the home respiratory therapy market provides some of the highest returns on capital in the health care services industry currently."

**Wall Street believes that the large companies in the respiratory and infusion therapy services market will continue to strategically acquire local operators.** In the respiratory and infusion therapy businesses, operating efficiencies are achieved through economies of scale. J.P. Morgan's Matt Ripperger believes that:

"The competitive environment for home [respiratory and infusion therapy] equipment providers remains extremely fragmented, with much of the market controlled by smaller local and regional operators. Because of the increased billing complexity, limited access to capital, and recent government reimbursement cuts, many smaller operators are interested in selling to larger, better capitalized operators....We expect acquisitions to remain an integral part of both Apria's and Lincare's growth over the next three to five years."

**Profitability is strong for large respiratory and infusion companies.**

**"Even after the Medicare reimbursement cuts, Lincare generates one of the highest margins in healthcare services."**

**Wall Street analysts forecast further consolidation.**

Credit Suisse First Boston agrees with the forecast for further consolidation:

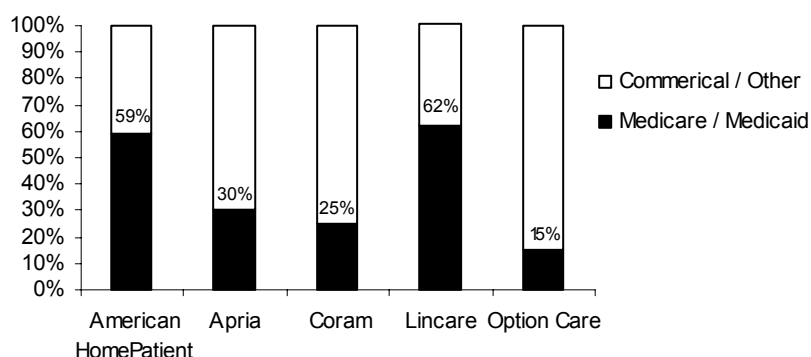
“In the last decade and a half, particularly the mid-1990s, many of the main players began an aggressive period of consolidation. While consolidation trends by nature are not generally negative, we note that today only two companies successfully managed the growing pains of the 1990s to remain as profitable entities, i.e., Apria and Lincare.”

## Industry Overview

### Revenue Sources

Figure 12 depicts the payor mix for five publicly-traded companies in the respiratory therapy business. Lincare derives the largest percentage of its revenue from government payors (62% in 2001) and Option Care derives the lowest percentage (15% in 2001). Respiratory equipment is generally leased to the patient, and the provider of services receives a monthly fixed fee from the payor for providing the product and related services. For Medicare, the monthly oxygen payment ranges from \$195.64 to \$230.17 per patient. Similarly, private pay rates are somewhere in the \$200-\$250 range.

**Figure 12: Payor Segmentation—Respiratory and Infusion Therapy Services Industry**



Source: J.P. Morgan and Company filings

### Costs

Within the respiratory therapy business, the largest operating cost is labor. Labor costs include the cost of respiratory therapists and pharmacists as well as staff for customer service, selling, and distribution. Lincare and Apria estimate that these labor costs, which are directly variable with revenue growth patterns, account for 60-70% of operating costs. Since these companies lease respiratory equipment to patients, they also have acquisition costs associated with the respiratory equipment. Capital expenditures include the purchase of liquid oxygen equipment, portable oxygen tanks, and oxygen concentrators.

In addition to oxygen therapy, a respiratory therapy company provides respiratory medications used with equipment such as a nebulizer. Generally, one-half of the patients who are receiving oxygen treatment also receive respiratory medications. Medicare’s reimbursement allowance is based on 95% of the average wholesale price (AWP) for the drug (of this, the Medicare payment is 80% and the beneficiary co-payment is 20%). Providers often purchase these drugs from the manufacturer or wholesaler at prices significantly below the reimbursement price. One Wall Street analyst believes that managed care companies pay approximately 25% less for these drugs than Medicare does.

The home infusion therapy business, which involves the administration of chemotherapy and other intravenous and injectable medications to patients in the home, is a lower margin business than the respiratory business. For the infusion therapy business, the cost of the products/drugs are the largest operating expense at roughly 40-42% of revenue. The second largest operating cost is the labor, which includes the pharmacist, the nurse who administers the home infusion therapy treatment, and the delivery person. Home infusion therapy is a significantly smaller percentage of Medicare spending than home respiratory therapy. In addition, the Medicare component of the home infusion therapy business is significantly less profitable than the home respiratory Medicare business.

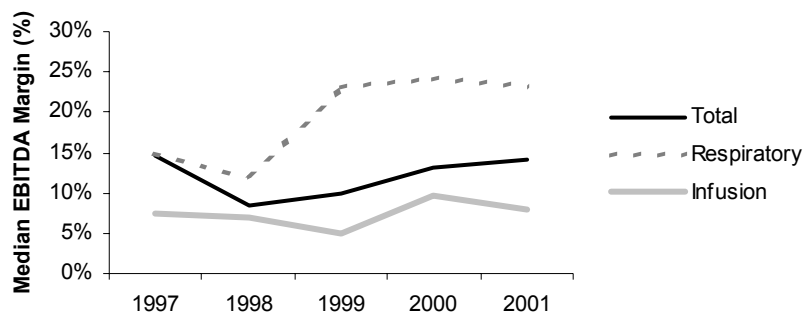
## Industry Performance

**Profitability varies and is difficult to gauge because the majority of the industry is composed of small, local operators.** The respiratory therapy industry is very fragmented—more than 2,000 local providers make up the majority of the market. Lincare and Apria each generate approximately 20% of the revenue in the home respiratory therapy industry, and American HomePatient generates an additional 5%. Rotech Healthcare, a respiratory therapy company, has recently become a stand-alone entity after emerging from bankruptcy and spinning-off from its parent company, Integrated Health Services. Like the home respiratory industry, home infusion therapy is a highly fragmented business. The three largest national providers combined control roughly 29% of the total market.

More than 2,000 local providers make up the majority of the home respiratory market.

Figure 13 depicts the median EBITDA margin for the publicly traded companies in this sector: Lincare, Apria, American HomePatient, Coram Healthcare, and Option Care. The graph demonstrates that the median EBITDA margin, and hence, operating profitability, is currently approximately 14% for the publicly-traded respiratory and infusion therapy services companies (the *average* EBITDA margin is 19%). The graph also illustrates that the respiratory business has significantly higher margins than the infusion business, and that the total sector's EBITDA margin is improving.

**Figure 13: Median EBITDA Margin for Publicly-Traded Respiratory and Infusion Therapy Services Companies**

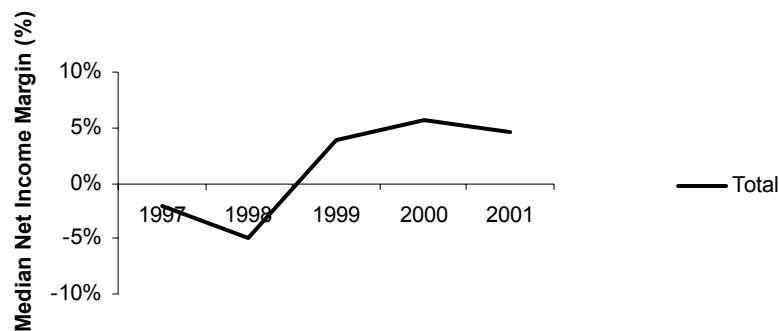


Source: Bloomberg, Securities and Exchange Commission 10-K Filings, Company reports and Wall Street Research. Companies included: Lincare, Apria, Option Care, American HomePatient, and Coram Healthcare.

These companies have a wide range of profitability. In 2001, EBITDA margins varied between 6% and 40% for the sector. Credit Suisse First Boston believes that, “Of the major industry players, only Apria and Lincare are in sound financial condition.” Rotech Healthcare has recently become a stand-alone entity after emerging from bankruptcy and spinning-off from its parent company, Integrated Health Services. American HomePatient fell in default of its debt covenants in 2001 and Coram Healthcare filed for bankruptcy.

Another important performance metric is net income margin. Figure 14 illustrates that the median net income margin has stabilized for the publicly traded companies. The data represents continuing operations and adjusts for one time charges whenever publicly available.

**Figure 14: Median Net Income Margin for Publicly-Traded Respiratory and Infusion Therapy Services Companies**



Source: Bloomberg, Securities and Exchange Commission 10-K Filings, Company reports and Wall Street Research.  
 Companies included: Lincare, Apria, Option Care, American HomePatient, and Coram Healthcare  
 Note: Represents reported net income.

It is important to note that profitability varies dramatically for this sector. In 2001, net income margins varied from the low negative single digits to positive 17%.

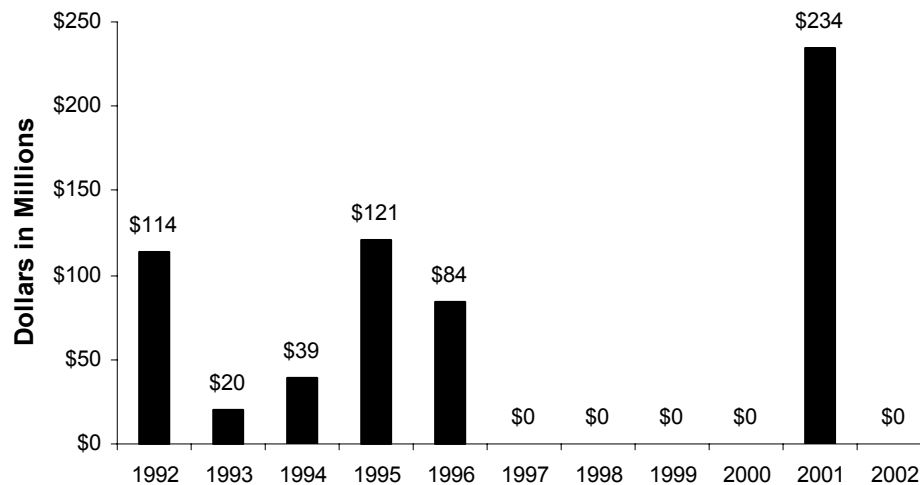
## Access to Capital

Wall Street analysts believe that the large respiratory therapy companies generate enough cash from operations to fund their growth and capital needs. This is largely due to the relatively low capital intensity of this sector as well as the strong operating performance of these companies. As such, the respiratory therapy companies do not have a great need to access the capital markets.

Analysts also believe that if a large respiratory therapy company did seek to access the public capital markets, it would be able to do so. An example of this is Rotech Healthcare. Rotech provides respiratory therapy and has recently become a stand-alone entity after emerging from bankruptcy and spinning-off from its parent company, Integrated Health Services. Despite its emergence from bankruptcy, Rotech was able to raise \$300 million in capital through the public debt capital markets in March.

In addition, the respiratory and infusion therapy services sector has better access to equity capital than the HHA component of the industry. The respiratory and infusion therapy services sector has raised \$612 million over the past decade in the public equity markets, which is three times the issuance of the HHA industry. The graph below details the yearly distribution of the sector's equity issuance. Although equity issuance clearly surged in 2001 with public offerings by Apria and Option Care, home respiratory and infusion therapy services companies did not access the equity capital markets between 1997 and 2000.

Figure 15: Home Respiratory and Infusion Therapy Services Annual Public Equity Issuance

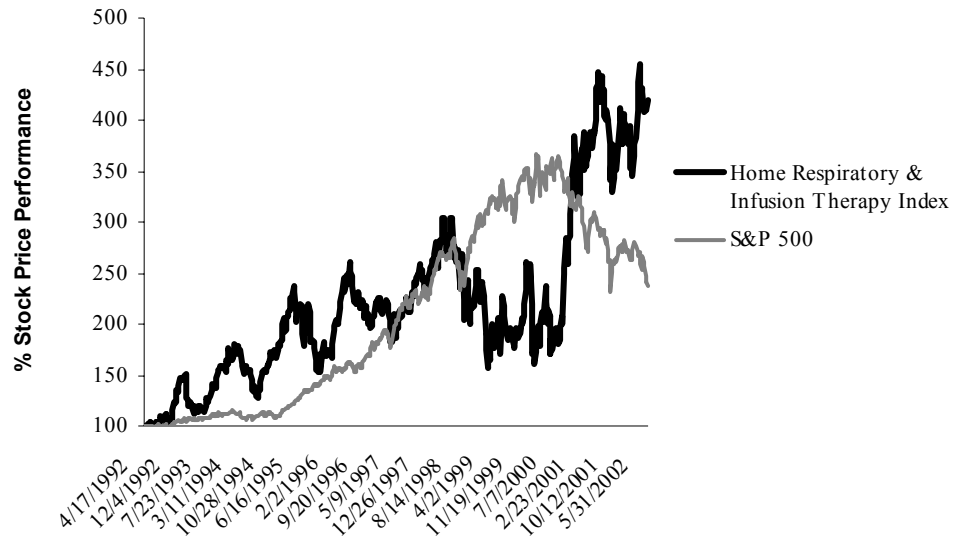


Source: Jefferies Securities and Thompson Financial

## Stock Market Performance

Improving stock market performance in respiratory and infusion therapy services reflects investors' favorable expectations of future cash flows as well as a consensus of Wall Street analysts' strong earnings expectations for the sector. On average, the stock market performance of the publicly-traded respiratory and infusion therapy services companies has improved during the past year and a half, following two years of underperformance relative to the S&P 500 Index. These two years coincide with the reductions in Medicare spending under BBA.

**Figure 16: Stock Market Performance for the Publicly-Traded Respiratory and Infusion Therapy Services Companies**



Source: Bloomberg

Note: Index includes: Lincare, Apria, Option Care, American HomePatient, and Coram Healthcare. Results are equally weighted.

## SUMMARY

- The home health agency (HHA) industry struggled after the Balanced Budget Act (BBA) under the interim payment system (IPS). The new prospective payment system (PPS), however, appears to be a great improvement and has encouraged providers to streamline operations and efficiently deliver services.
- HHA companies continue to have difficulty raising capital primarily due to their small size. Wall Street analysts suggest that investors will be more inclined to provide capital once government payment policy provides more stability and predictability.
- Large respiratory and infusion therapy services companies demonstrate strong operational and financial performance and are able to attract investors' capital. These companies are actively consolidating the industry and are likely to continue acquiring smaller providers.
- Overall, large home health providers benefit from the efficiencies achieved from their economies of scale. Smaller companies struggle in today's rapidly changing market.

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