

INTEROFFICE MEMORANDUM

TO: WYATT MATAS & ASSOCIATES' PARTNERS AND CLIENTS
FROM: ECONOMIC ANALYSIS TEAM
SUBJECT: SHORTAGE OF NURSING STAFF AND THE AFFECTS ON VALUATIONS.
DATE: 2/05/07
CC: IF APPROVED BY PARTNER—OK FOR RELEASE TO PUBLIC

Our research team has recently investigated the home healthcare nursing shortage's impact on our client companies' valuations. We have prepared a brief overview of the shortage of nurses and the impact on the valuation of an agency, as well as the effect on the industry as a whole. Given the substantial impact of this issues on the industry, we felt it necessary to release our initial findings.

Key Findings:

- The home healthcare industry could face a shortage of almost 40% in available nurses. This translates into a potential missed growth opportunity in the industry by as much as \$12 billion due to the shortage of available providers and the lost opportunity to serve potential patients
- For every 25 referrals missed, Medicare lose up to \$50,000 in value.
- Industry wide, the shortage in nurses could cause the industry to lose over \$4 billion in potential market value. That is the equivalent to the combined market capitalization of the top 5 largest home care companies.

BACKGROUND

With the drive from hospitals to reduce patients' length of stays and thirty day readmits, skilled home healthcare services are becoming a critical piece of the overall health care delivery system. There are over 8,500 Medicare-certified home health agencies throughout the United States, and there continues to be an ever-present shortage of nurses and other health care providers. Many agencies are wondering how the scarcity of available employees will restrict the growth and value of their agencies as well as the rest of the home healthcare industry. Research shows that demand could exceed the available nursing supply by as much as 40%, costing the home healthcare industry more than \$12 billion in lost revenue, which results in a loss of over \$4 billion in market value, in addition to thousands of underserved patients by the year 2020. The ripple effect felt by hospitals is an increase in length of stay and 30-day readmissions for patients who need home health care post-discharge.

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In addition to a sharp increase in the number of nurses needed, the actual number of total nurses working in 2020 is projected to be less than the number working today. This is a daunting statistic when considering that the projected demand for home healthcare alone will increase by 210,000 by 2020, and there are only about 160,000 nurses working in the industry. These projections are attributed to an aging population, the drive to push more care into the home, and medical technology advances that make outpatient care an affordable alternative to expensive hospital treatment. The home health industry will have to find a way differentiate itself from other healthcare sectors in order to attract and retain nurses.

State	Supply	Demand	Excess or shortage	Percent shortage
2000	1,889,243	1,999,950	-110,707	-6%
2005	2,012,444	2,161,831	-149,387	-7%
2007	2,039,772	2,232,516	-192,774	-9%
2010	2,069,369	2,344,584	-275,215	-12%
2015	2,055,491	2,562,554	-507,063	-20%
2020	2,001,998	2,810,414	-808,416	-29%

There are three main questions that must be answered when dealing with such an extreme deficiency in available employees in any one sector. First, why is there such a shortage? Second, what impact will this have on the industry? Third, what can be done to change the trends?.

http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/27/b5/42.pdf

REASONS FOR THE SHORTAGE

The projected shortage weighs heavily on the fact that in 2011, the baby boomer generation will start turning 65, ready for retirement – and in some cases, extra healthcare. By 2030, the elderly population will make up 20% of the entire population, up from 12% today. Though the baby boomer generation accounts for a substantial hiccup in terms of supply and demand within the next decade, it should not be overlooked that even without the baby boomers there would still be a considerable shortage in adequate health care providers.

Not only is the number of people requiring healthcare increasing, the number of retiring nurses will increase as well. By 2010 over 40% of the nursing workforce will be over 50¹. With a lack of resources to teach aspiring nurses, as well as job dissatisfaction among working nurses according to a report by the United States General Accounting Office (USGAO), there seem to be many obstacles for HHA's looking to expand.

For registered nurses, the *American Association of Colleges of Nursing* reports that while there is no shortage in interest when it comes to nursing careers, there is an extreme shortage in faculty and classroom space for entry-level baccalaureate and graduate nursing programs. This shortage caused 32,617 *qualified* applicants wishing to study nursing to be turned away in 2005². This has put a cap on the number of people that can even pursue a degree to becoming an RN, without even factoring in graduation rates and post graduation employment rates.

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Dissatisfaction is a huge factor for both hospitals and nursing homes, and to a lesser extent, home healthcare agencies. Nurses are overworked, and according to USGAO, inadequate staffing, heavy workloads, lack of sufficient support staff, increased overtime, and adequacy of wages has caused many nurses to leave their profession. This creates a conflict for agencies that have few staff members but many clients. If they overwork their nurses, they risk burning them out and losing them altogether.

IMPACT ON THE INDUSTRY

The shortage of healthcare providers will impact every healthcare segment in the US and beyond. For example, hospitals will see an increase in length of stay for the patients who need home health care, at a cost of around \$100 per patient per day. In addition, without the necessary post-discharge support, patients are more likely to be readmitted within 30

¹(2001, July). Nursing workforce: Emerging nurse shortages due to multiple factors. *Report to the Chairman, Subcommittee on Health, Committee on Ways and Means, House of Representatives*, Retrieved October, 2006, from <http://www.gao.gov/archive/2001/d01944.pdf>

² (2005, December 12). With Enrollments Rising for the 5th Consecutive Year, U.S. Nursing Schools Turn Away More Than 30,000 Qualified Applications in 2005. Retrieved October 13, 2006, from American Association of Colleges of Nursing Web site: <http://www.aacn.nche.edu/Media/NewsReleases/2005/enr105.htm>

days under the same diagnosis, resulting in denied reimbursement ranging from \$5,000 to \$10,000 per patient.

Specifically, home healthcare will be impacted in two ways:

1. The shortage of nurses and other health care providers will stunt the overall growth of the industry.
2. Industry valuations could suffer because limited staff results in lost referrals and increased wages, resulting in reduced gross margins

After analyzing the skilled home healthcare industry's visits per patient statistics and potential demand over the next 15 years, it is apparent that the industry could face a shortfall of almost 40% in available nurses. This translates into a potential reduction in growth in the industry by as much as \$12 billion due to the shortage of available providers and the lost opportunity to serve potential patients. Wyatt Matas & Associates estimates that the industry capacity to meet demand will be exceeded within the next three to five years.

To combat these shortfalls, agencies are sure to increase wages and benefits to attract quality nurses. This means gross margins will decrease and filter down to a lower bottom line. The ultimate impact on net income is difficult to determine; however based on analysis of per visit rates, current average pay rates, and current market conditions, for every dollar in revenue missed because of lack of staff, a Medicare agency loses sixty cents in market valuation. In other words, for every 25 referrals missed, Medicare lose up to \$50,000 in value. Industry wide, the shortage in nurses could cause the industry to lose over \$4 billion in potential market value. That is the equivalent to the combined market capitalization of the top 5 largest home care companies.

The loss in value can already be seen in the impact of valuations of home health care agencies in rural areas. While rural agencies have the benefit of a 3-5% "rural add-on" fee, valuations have been depressed because of lower than average operating profits due to higher unit labor cost of field staff. Of the selected rural markets Wyatt Matas & Associates surveyed in Virginia, Pennsylvania, Ohio, Indiana and Michigan, some agencies were turning away 25%-50% of all referrals due to unavailable staff to serve those patients. The industry can expect these dynamics to present themselves in urban areas as the demand for staff becomes more pronounced.

An industry with low to flat growth rate and falling operating margins will find few new buyers interested in acquiring companies in that industry. This will cause an imbalance of more sellers than buyers in the market and thus cause an even further downward pressure on valuations. While the home healthcare industry currently enjoys healthy valuations because of strong operating profits, support for higher valuations have mainly been caused by a more buyers than sellers in the market.

An ancillary effect of a shortage of nurses in the home healthcare is the impact on hospitals. While hospitals will have their own nurse shortages to worry about, they will also be limited in their ability to lower the length of stays for patients because their will not be capacity in their local home healthcare market. This also suggest that their will be an increase their number of 30-day readmits. Most hospitals can rarely afford increase in cost on already then margins.

CHANGING THE TRENDS

While discussions with home care associations and other industry leaders revealed no clear overreaching industry strategy to attract more nurses to the industry, some indicated that the general caring nature of nurses will continue to attract them to the industry without demand for more pay and benefits. However, this is counterintuitive to most supply and demand laws, and contradicted by evidence from the teaching profession, where teachers are underpaid and in short supply. Concern from agency owners was more pronounced than that of industry leaders and many are preparing to implement an aggressive recruiting strategy for 2007. (See side bar.)

As the industry has come together in recent years to have a positive impact and influence on reimbursement and congressional issues pertinent to home health care, they will have to do the same to develop a concerted effort to attract more health care field staff to the industry. Some of those efforts might include:

1. Encouraging the nursing schools to add a more significant home nursing classes to their curriculum.
2. Creating a national campaign directed at nurses that demonstrates the flexibility offered by home health care.

Develop improved protocols to improve clinical outcomes of tele-health programs, encouraging higher acceptance.

The list can certainly be expanded, but must begin with acknowledgement at the national level that something must be done now - before other industries find alternatives to fill the gaps of home health care treatment.

Wyatt Matas & Associates anticipates that there will be an increase number of sellers in the market that have become frustrated with their lack of growth due to competition for staff. Early indication for the merger and acquisition market in the home health care industry for 2007 suggest that valuations will remain healthy; however, those agencies that start to experience staffing shortfalls could receive lower valuations if their labor costs begin to rise. Agencies considering selling in the future will need to monitor operating profits and market time to assure they receive the maximum value for their company.

Agencies that set themselves apart to recruit and retain field staff will become the most valuable agencies and receive the highest market premium at the time of the sell of their company. Companies can invest in technology, marketing, and patient referrals, however if they do not have the staff supply to meet demand, they will essentially stunt the growth of their company, and could potentially lose money. ***In the end, those who hath staff, wins.***

Wyatt Matas & Associates is a healthcare investment banking firm that specializes in merger and acquisition management, capital acquisition and financial consulting services.

Sector Specialties:

Home healthcare, hospice, infusion therapy, medical equipment manufacturing, long-term care facilities, health systems.

Our Take on Mergers & Acquisitions?
Relationships, Relationships, Relationships.