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NAVIGATING THE DYNAMIC CONVERGENCE OF TECHNOLOGY DISRUPTION AND GROWTH

Can Bright Day Home Healthcare embrace tech innovation for strategic advantage?

Bonti Burgess, owner of Bright Day Home Healthcare, sat in her office deeply contemplating the complaints she routinely heard about how long HomeTrak, Bright Day's CRM system, took to pull up client and caregiver schedules. With the glitches came a mandatory reboot of the server, disrupting the productivity of the entire staff. Burgess knew Bright Day's technology needed to be addressed, but as the agency owner her calendar was full, and the timing was never right to address a technology change. Besides, operational disruption meant time away from sales, clients, and caregivers, and Burgess had built the company's billable hours with the goal of selling the company. She'd been engaged in preliminary talks with three interested parties already. Burgess wondered whether there was value in upgrading the IT infrastructure at this juncture.

Last time she searched, there were 101 home health agencies listed on FloridaHealthFinder.gov in the Sarasota/Bradenton area and the competition was fierce. She had spoken to a competitor and asked for his recommendation on scheduling software. He was non-committal, stating he was required to use what the franchisor dictated. Second, Burgess considered her field staff. She called Pinyorat, a 30-something caregiver she knew worked for another agency with a mobile app. Pinyorat revealed she never used it because it took too long to log on. That was telling. Last, Burgess considered her clientele. Her clients ranged in age from 75 to 100; they rarely used email, let alone a computer. For them, patient care meant who was coming to assist them each day, and it had better be their favorite caregiver!

Technological advancements were slow to be adopted in the industry, Burgess realized. Some of her competitors were using paper schedules, some had advanced to telephony-based systems, others used cloud-based, and some had even progressed to utilization of mobile apps that featured real-time clock-ins and completed tasks. However, many caregivers lived without smart phones or data plans and the work force had a high turnover. Burgess felt technological improvements were critical for future growth but questioned whether her current on-site network server was sufficient for now.

There was a decision to be made and Burgess mulled over options that would change the trajectory of Bright Day. She needed a plan in place, but what was the most strategic direction? Were there dangers to sitting tight pending a possible agency sale? What about equipment and installation costs: could they be recouped in a company sale? Would staff have the skill set needed or would they leave? How relevant would an upgrade be to patient care; would it cause a loss of billable hours?

Burgess was sure there were more questions to be evaluated before a sound decision could be made.

Editor: Grandon Gill

U.S. Home Healthcare Industry

Home healthcare was a sector within the healthcare industry that brought medical and non-medical services to individuals wherever they reside, be it at home, independent living facilities, assisted living facilities, or until recently, even bedside at hospitals (Exhibit 1: Home Care Environments). Burgess's home healthcare agency focused on enhancing quality of life through assistance with activities of daily living (known as ADL's). Services were utilized to contribute to the continuity of care by bridging the gap between hospital stays and rehabilitation or utilized as an ongoing necessity for clients with chronic conditions (Exhibit 2: Patient-Centered Home Healthcare Conceptual Model). As of 2022, 16.5% of the U.S. population was 65 years & older, equating to a pool of 54 million potential consumers. The U.S. home healthcare market was valued at US$142.9 billion and expected massive growth at a compounded rate of 7.5%, with revenue forecast for US$253.5 billion in 2030 (Exhibit 3: U.S. Home Healthcare Market Size and Growth). The key drivers of industry growth were chronic diseases such Alzheimer's, COPD, diabetes, heart disease, Parkinson's, etc., as well as favorable reimbursement for home equipment.

Home healthcare was projected to grow at a breathtaking pace from 2021 to 2031. According to the US Bureau of Labor Statistics, employment in the sector would grow by 21%, adding 711,700 jobs each year on average over the decade. (Source: https://www.amnhealthcare.com/amn-insights/news/why-is-home-healthcare-growing-so-fast/) The U.S. market was highly fragmented, with a few large key players, such as Kindred Healthcare, Amedisys Inc., LHC Group, and Encompass Home Health & Hospice. Although market concentration by size varied by geographic location and market dynamics, the top 10 largest home health providers represented 26.6% of the national market share (Exhibit 4: Fragmented Market Concentration).

Home Healthcare Market Segmentation

The industry was divided into two main service segments: Medicare and Private Duty Home Health agencies. Each business model had separate state and Medicare licensure requirements. In the State of Florida, the Agency for Healthcare Administration (AHCA) licensed home healthcare providers bi-annually. The two segments are explored below and then broken down into private duty agency model sub-segments.

Medicare Agencies

Medicare was federal health insurance for people over 65 years of age and for certain younger people with disabilities. Medicare provided funding for home health services where the amount depended on the individual's plan. Medicare consisted of four parts: Part A (Hospital Insurance), Part B (Medical Insurance), Part C (Medicare Advantage), and Part D (Prescription Drug Coverage). Medicare Part C was private insurance that bundled and covered portions of Part A, Part B, and Part D.

Medicare Part A covered inpatient care in a hospital, skilled nursing facility care, nursing home care (inpatient care in a skilled nursing facility that's not custodial or long-term care), hospice care, and home health care. It only covered home health services as long as part-time or intermittent skilled services were

needed and as long as the healthcare recipient was "homebound," which meant the patient had trouble leaving their home without help (assistive devices such as a cane, wheelchair, walker, or crutches; special transportation; or help from another person) because of an illness, injury, or condition.

Covered home health services included medically necessary part-time or intermittent skilled nursing care, physical therapy, occupational therapy, speech-language pathology services, medical social services, part-time or intermittent home health aide care (only if skilled nursing care provided at the same time), and durable medical equipment. For clarification on Medicare home health, think skilled care paid for by Medicare.

Private Duty Agencies

There were four sub-segments under private duty agencies: Skilled Agencies (see Exhibit 5: Home Healthcare Market Segmentation for a list of skilled home healthcare services), Un-skilled Agencies, Nurse Registries and Companion Agencies. Below is a brief overview of their differences.

Skilled

Skilled agency providers employed Certified Nurse Assistants (CNAs), Home Health Aides (HHAs), Licensed Practical Nurses (LPNs), and Registered Nurses (RNs) to provide skilled and non-skilled home healthcare under a plan of care signed off by the client's primary care physician and under the supervision of an RN Director of Nursing. On-site supervisory visits were mandatory every 60 days for this business licensure. The focus of the care was to maintain the current status or baseline by providing assistance with ADL's as well as any skilled care required such as medication set-ups, wound care, IV, peg tube, catheter care, etc. ADLs consisted of bathing and showering, toileting and toilet hygiene, dressing, feeding, eating, and swallowing, functional mobility, personal device care, personal hygiene, and grooming. Social activities, errands and light housekeeping were also included in the plan of care. Depending on the year the agency was licensed, skilled agencies were typically accredited by one of the three national healthcare accreditation agencies. Burgess's home healthcare company, Bright Day, fell under the skilled agency licensure and had been accredited by The Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

Un-Skilled

An unskilled agency maintained an unskilled agency licensure and was unable to perform any services that required an LPN or RN licensure. This business model had to relinquish the client once they reached a level of care requiring skilled services. As in the skilled agency, unskilled agencies employed CNAs, HHAs and additionally, companions, to perform activities of daily living, social activities, errands, and light housekeeping.

Nurse Registries

By their licensure, nurse registries were unable to have employees (referred to as W-2'd caregivers). All CNAs and HHAs that worked for a nurse registry received 1099s at year end, and, as independent contractors, were not entitled to overtime. The client did not receive the benefit of supervisory oversight of an RN or free 60-day supervisory visits. It could be a positive for the client that they, and not the agency, controlled the schedule. The billing rate was discounted due to the absence of payroll taxes and workman's compensation premium pass through, and they paid no overtime. In recent years, there were some disagreements between the Department of Labor (a Federal Agency) and the Agency for Healthcare

Administration (a State Agency) regarding the legality of the nurse registry model but, as of the date of this case review, they had not been resolved.

Companion Agencies

As their name suggests, companion agencies employed companions to provide companionship, errands, and light housekeeping. Companion services was synonymous with "no hands-on care." That is, a companion could not perform any non-skilled or skilled service requiring them to touch the client. Caregivers in this field were typically older CNAs, HHAs, or nurses who wished to continue working with the elderly but had not kept up their licenses/CEU's and who wished to avoid any workplace lifting. Clients hiring a companion were typically elderly individuals living alone, who could no longer drive, and needed socialization, laundry, and meal preparation.

Bright Day Home Healthcare

Bright Day operated in the skilled agency segment of private duty home healthcare. The company's name was derived from its purpose: Burgess sought a brighter day for employees, clients, and herself. She had opened the doors 11 years prior looking to improve the quality and integrity of home health care in Sarasota and to establish a working environment where the caregivers felt valued. The company name itself was intended to evoke a cheerful atmosphere and sense of well-being (Exhibits 6 & 7: Bright Day Brochure).

The Business of Long-Term Care

Although the 16.5% of the U.S. population was 65 or older in 2022, in Sarasota County, Florida it was 37.7% (Source: https://www.census.gov/quickfacts/fact/table/sarasotacountyflorida/PST045222). In the neighboring county, Manatee, the population figures reflected 28.9% age 65 and older. Both Sarasota and Manatee county had much higher percentages of people in this age bracket than the overall U.S. population. A third of the population living in Sarasota and Manatee counties combined were aged 65 or older, reflecting 279K potential customers. Given 70% of Americans over 65 expected to use some form of long-term care services, it wasn't hard to see that there was a need for private duty services in the area (Exhibit 8: Home Care Utilization).

Bright Day's key competitive advantage was quality. The company values were simple: offer excellent, responsive, and customized home health care. The company motto was "caring isn't something that we've learned; it is who we are." And although FloridaHealthFinder.gov showed 101 competitors in the area, there were only a handful of privately owned skilled private duty agencies that Bright Day competed with. The competitors that were well-known high-end agencies and that were not franchises included: All Stat Home Health, Help at Home, Nursing Styles, Right Accord, Take Care of Sarasota, and Youthful Aging. When broken down into segments, franchised private duty agencies, agencies run by independent living facilities, rehabs, and hospitals, in short, big corporations were excluded, the result was 6 total Bright Day competitors in Sarasota County, not 101. And these 6 agencies competed fiercely for the 24/7 clientele requiring round-the-clock care because each 24/7 client generated 168 billable hours per week equating to $300,000 in revenue per year.

Revenues

Genworth was a long-term care insurance company that tracked hourly visit rates through an annual survey and internal claims analysis. Under Genworth's Cost of Care Trends & Insights website data was the following statement: "In 2021, the 18th year of the survey, the United States continued to grapple with the COVID-19 pandemic and the national median costs associated with all long-term care service providers increased compared to 2020 data." (Source: https://www.genworth.com/aging-and-you/finances/cost-of-care/cost-of-care-trends-and-insights.html.) Bright Day Home Healthcare felt the impact of the COVID-19 pressures and had increased its prices to compete with the rising cost of labor associated with the pandemic. While the Genworth study reflected a median national hourly cost of $27 per hour for the CNA level of care (Exhibit 9: Cost of Care Trends), the Sarasota/ Manatee market was much higher at $32/hour. Bright Day Home Healthcare made its money by charging $35/hour for the CNA/HHA level of care and paying a median rate of $17/hour, which was competitive for private duty in the area (see Exhibit 10: Bright Day Private Duty Rate Schedule 2022 and Exhibit 11: Competitive Caregiver Pay Rates in Sarasota, FL). The company also had an alternate billing and pay rate system based on visits, which was standard for the industry. Visits were defined as short blocks of service times billed and paid by the visit, no matter how much actual time was spent on task by the caregiver.

Home health agencies' monetary gains were based on several factors. Three factors influenced the revenue: number of clients, average billable hour rate versus pay rate, and average number of hours provided each week per client. In home health one could not calculate how profitable the business was by number of active clients. The reason was that one client receiving 24/7 care would be billed at $5,880 per week (or more if they had caregivers at overtime) and one client receiving a 2-HR visit from 8am-10am 3x per week Monday-Wednesday-Saturday would be billed at $216 per week. As was evident, the two clients did not equate in terms of revenue.

Private duty home health agencies were paid in three ways; self-pay, third party service (Veteran's Affairs Benefits, Workman's Comp claims, etc.), and through long-term care insurance company policy benefits.

People - Caregivers

Although ZipRecruiter cited $20/hour as the average hourly CNA pay rate for the Sarasota area (Exhibit 12: CNA Average Hourly Pay Rates), this higher rate reflected facility and hospital CNA hourly pay levels. Caregivers often chose private duty work over the higher paying hospital and nursing home positions because of the client to caregiver one-to-one ratio. In a nursing home, CNAs were responsible for as many as 12 patients or more at a time, the work was exhausting, and routine lifting of patients often contributed to chronic back strain. In private duty home health positions, the employee dictated to the employer which shifts they were available for, which could be 7a –3p/ 3 – 11p/ 11p -7a or short visit time spans in the mornings or evenings. This meant employees would accept shifts that fit in with their personal lives and the lives of their families, as opposed to hospitals' and facilities' pre-slotted shift times.

As stated above, a pro for caregivers working in private duty home health was shift flexibility. However, CNAs who were inflexible with their schedule sometimes found that the agency had no client that needed them for the time frame they wanted. Often caregivers did not consider that there must be a client demand for the shift that they wanted to work. In this labor-intensive industry, caregiver shift choice led to

competitiveness between agencies whereby caregivers worked and manipulated multiple agencies to find the client schedule that best met their work requirement needs.

Another pro for caregivers taking a lower pay and working for home health instead of hospitals and rehabs revolved around the nature of the work which could include luxurious working environments, time spent on errands & outings, leisurely down-time, low technical knowledge requirements, and a lack of colleagues or supervisors looking over their shoulders. Also found in the industry were those CNAs who used night shift work to get some sleep, which was not condoned and would get them fired if discovered.

People - Clients

The weekly cost of private duty home healthcare could balloon to as much as $6,000 or more, leading to a yearly price tag of over $300,000 per year. Competition was fierce for the level of customers that could afford 24/7 care in Sarasota and Manatee counties, which included the exclusive areas of Siesta and Longboat Key. More than revenue, 24/7 clients equated to 168 billable hours per week and provided a level of stability for caregiver shifts. Four of these clients per year equated to $1million in revenue, and the amount of time and attention spent on a stable 24/7 client schedule versus short-term shifts was small in comparison. Not surprisingly, competitors worked to steal these prized customers in key ways: by way of the client's favorite caregiver(s), through referral sources, and by way of relationships with Care Managers. The switching costs were low for both client and caregiver and clients would typically move agencies if they had an advocate (spouse, son, daughter, care manager), they were upset over scheduling issues, or if their favorite caregivers were willing to move agencies with them. Bright Day was no exception to the rule and Burgess sometimes picked up 24/7 clients (and caregivers) by hiring the client's favorite CNAs, working with the Care Manager, and ensuring quality of care over and above the agency that lost the case.

Bright Day delivered relationship-based health care, accredited skilled nursing, care management and long-term care insurance claims management, its core competencies. The emphasis was on exceptional customer service through responsive and customized home health care, and the key nursing staff and management team went above and beyond to make a client happy. But making the client happy (and client in this sense of the word sometimes meant the spouse, son or daughter, sibling, etc., or anyone else involved in the care) did not equate to distinctive technical capabilities as in other industries. The client was typically in the age range of 75 – 100 years old and wanted to make sure their favorite CNA or nurse would be coming to assist them. Not one client that Burgess ever knew would be willing to receive this information by logging onto an app or website. They wanted to be catered to, and wanted the information to come to them, in whatever format the agency could/would provide. This usually meant caregivers delivering paper schedules or the scheduling department emailing them out.

Technology Disruption

Home Health Technology

Technological advancements were slow to be adopted in the private duty home healthcare segment. There were many reasons for this. Most home health agencies were run by nurses, RNs or LPNs and the primary strength of nurses is their interpersonal skills rather than their technological proficiency. This would also be true of the field staff CNAs, HHAs, LPNs and RNs. Even so, franchises and corporate-run agencies

were significantly disrupting the home health industry by introducing innovative solutions that improved communication, streamlined operations, and empowered both clients and healthcare providers. Large Medicare agencies, typically run at a centralized corporate location, played a transformative role in the home health industry, revolutionizing how healthcare services were delivered and managed, enhancing skilled patient care, improving communication, increasing efficiency, and enabling better coordination among healthcare providers. They still had a long way to go, however, and the smaller private duty agencies (the segment Bright Day belonged to) were reluctant to change.

Bright Day's IT Infrastructure

Burgess opened her Agency in 2011 with the most advanced Dell Power Edge rack server available at the time, complete with redundant hard drives, back-up, and anti-virus software. She had a Netgear ProSafe VPN firewall and multiple Dell workstations installed and implemented a failover system. To complete her IT infrastructure, she brought in a new Konica Minolta bizhub network printer with scanning, printing, copying and collating capability. HomeTrak Companion was implemented as the company Customer Resource Manager (CRM) system. HomeTrak integrated with QuickBooks and utilized telephony. Telephony was a digital communication tool used to capture clock-in & clock-out times utilizing the phone, sending the resultant information to, in this specific example, the scheduling software that then recorded the caregiver on or off shift, and precisely at what time they arrived and departed. When the agency opened, most of Burgess's competitors were not yet using telephony, making it a competitive advantage in knowing when caregivers showed up on shift. Burgess's reasoning for selecting the system with telephony capability centered around the fact that the last thing she wanted to hear from a client was, "no one showed up" or "they were 15 minutes late and I'm not paying for it". Strategically it was much better to get ahead of a no-call, no-show and billing/pay issues for exact time worked.

The Disruption

At issue, the Dell Power Edge server memory had reached maximum capacity, it was well past its warranty, and since HomeTrak Companion ran on its own SQL platform on the Dell Power Edge server, scheduling was disrupted, the core function of the CRM software. There were 11 years of customer data and schedules on the server, as well as client charts and HR (Human Resources) files, and complaints came daily as to the system glitches. Burgess knew that there was a danger of the server going down permanently and she was not that confident about her back-ups. She didn't have the time to test them as frequently as she should. Additionally, Bright Day had experienced a ransomware attack in the past and Burgess felt the server was never quite the same after the files had been cleaned off. She suspected some files were still affected. The company needed a new Dell Power Edge server, the cost of which would range from $10,000 - $15,000 including installation and data migration.

Due Diligence

As can be seen by the scribbles in Exhibits 13, 14 & 15, Burgess looked at and compared other optional software packages and their capabilities, scheduled online demos, and reached out to competitors. Right at Home and McKenney Home Care, both local home healthcare agencies, used Clear Care (now named Wellsky Personal Care Software) she knew, and this was the most obvious choice if Bright Day were to transition to new software. There had been consolidation in the home care software industry and Wellsky now owned and supported Bright Day's current CRM software, HomeTrak Companion. The relationship already existed, and the "look" and "feel" of Clear Care was like HomeTrak.

Software Options

Clear Care (Wellsky Personal Care Software) was a cloud-based platform that offered Electronic Visit Verification (EVV) and Telephony. They boasted self-help modules for training, could only import demographics during the installation, but significantly no other data, charged a base of $180/month plus $15 per active home health client and required a 2-Year contract. Clear Care had a mobile app but no COVID-19 screening capability (then in high demand in home healthcare) and many features were still in the works such as DocuSign and client portal shared documents. Having 20 active clients per month in the database meant a monthly invoice of $330 and the cost just went up from there. Although she knew the program interfaced with Bright Day's financial software, QuickBooks, Burgess felt Clear Care was somewhat overpriced for the value received. Notably, Wellsky had tried to force the migration on her the previous year, and she was significantly irritated over their business practices.

CareSmartz360 was an option (Exhibit 16: CareSmartz360 Cost Structure). The monthly per active client cost was significantly lower, however they charged for texting alerts which would add to the cost. One Pro was the software integrated with QuickBooks online and desktop, which was surprising since Burgess's due diligence had found that the QuickBooks online platform was mostly avoided by the home care software vendors she spoke with. The biggest problem with CareSmartz360 was it could not produce form CMS 485, and this form was used by Bright Day's nursing department to produce the client care plans. Hand typing this form would be going backwards, not forwards.

There were other software options that allowed the on-site network to be decommissioned. Axxess Home Care integrated with Paychex and ADP for their payroll function, not QuickBooks. Alaya Care was a minimum of $750 per month. Generations had no insurance claims management piece. Burgess explored MatrixCare by Soneto software further and noted its core functions aligned with the company requirements (Exhibit 17: MatrixCare Core Functions). It had the CMS 485 form, EVV, telephony and text alerts (Exhibit 18: MatrixCare Add-On Modules). The mobile app utilized GPS for real-time caregiver clock-ins & clock-outs and Burgess could set the within-range parameters to catch the clock-in time cheaters. There was no charge for telephony and text alerts, and both EVV & telephony could be used, depending on caregiver preference. MatrixCare claimed a referral source management and client portal. The financial integration was not as strong as Clear Care, but that could be managed. MatrixCare was priced mid-range, and Bright Day could actually expect a savings of around $150 per month over HomeTrak. Burgess felt the transition to EVV, and a mobile app would be a challenge from the perspective of her scheduling staff and field staff, but it would be a move forward towards company modernization.

A Bright Day Perspective: Challenges Faced

On My Mind

In thinking about Bright Day's operations, Burgess's mind went back to a blog she had posted that had captured the humanity of home healthcare, along with some of the struggles:

"Lately I have been thinking what about the field of home healthcare makes me happy. I mean if I was going to be real with you most of the work is stressful. And I had another client pass away recently, so what is good about that? Most would say nothing.

In thinking about recent events, I would say it's the human spirit you find in home healthcare that makes me happy. What I think about is the will, the empathy, the compassion and yes, even some humor in our work we can find when a person is in the latest stages of life. It's the will of a person who finally allows herself to be cared for because she has been so independent up until now and just couldn't accept help before. It's the generous nature of nurses who go above and beyond to make sure she is comfortable, even interrupting their lives to do so. The compassion of the CNA who sits by the bedside comforting, holding their hand, and telling them that everything is going to be all right and that they are ok. It's the CNA that agrees to stay and wait with the family and the Hospice nurse showing concern for everybody's welfare. It's the staff expressing the juxtaposition of grief and humor in a situation where one would not expect to find humor, because as we all know, laughter is the most effective medicine to get us through the toughest moments. And without fail all of this always happening in the middle of the night or early morning. That's humanity. That's the answer. Working with compassionate people who care about people facing the struggles of everyday life and experiencing tough moments. It's the human spirit in home healthcare that makes me happy to be a part of it. Humanness clearly outshines the stress. That's what's on my mind." (Source: Burgess, B. (2019). *On My Mind - The Human Spirit in Home Health | LinkedIn.* Retrieved 31/08/23 from https://www.linkedin.com/pulse/my-mind-human-spirit-home-health-bonti-burgess/?trackingId=t%2F%2FqPpF1TMyiaijBjOoKNA%3D%3D.)

The challenges embodied in this blog did not address technology or network infrastructure, nor did it deal with matters of operational efficiency such as you would find in many other businesses.

People – System – Process

From Burgess's perspective, the biggest obstacles to modernizing Bright Day's IT infrastructure were its people. The scheduling manager was a loyal employee and had been with the company since its founding. Although she complained constantly about HomeTrak, she was not technologically savvy, and refused to use some of the features within HomeTrak that would assist her in client-caregiver schedule matching. Burgess knew this key office staff person would likely have to be replaced if Bright Day incorporated software with EVV capability and mobile apps. The nursing department was on board for a change, especially as it related to a COVID-19 screening feature, but policy and procedures would have to be revised and/or created to accommodate EVV and electronic plan of care task capture. For these nurses, it was mandatory to learn the system and then teach the field staff under their supervision that was the obstacle.

Field staff training and usage of a mobile app was a huge hurdle since shifts were continually ongoing and it was not possible to get everyone in the same room at the same time. Management would have to create alternate procedures and methods for those caregivers that did not have smart phones or who were unable to utilize the new system for reasons associated with technological skill, or who simply chose not to use it. Burgess had already established that one of her caregivers, Pinyorat, simply ignored directives and refused to use the mobile app at the second agency where she worked. Paper time sheets and completed care notes would still have to be kept for errors in clock-ins and missing completed tasks. And then there were those caregivers, and Burgess could name them, who clocked-in before they arrived on shift thinking they were beating the system and recording an earlier arrival time or avoiding a late clock-in time. GPS was used in the mobile apps and Burgess could set parameters to show the caregiver was not in the building or at the client front door when they clocked-in, and scheduling would have to deal with the resultant inaccuracies reflected within the schedule.

Finally, customer facing usage would need to be considered. Some efficiencies could be created regarding

how clients got their schedules. However, care must be taken that HIPAA (Health Insurance Portability and Accountability Act) regulations were met and only those individuals' given permission for the client personal health information (PHI) were allowed into the client portal, or Bright Day could be sued. Additionally, some clients were already annoyed having to allow caregivers to use their phone for the HomeTrak telephony system, what would be their perception on having to sign the caregivers phone at the end of shift clock-out? What about those clients unable to sign? How relevant would an upgrade be to client care, if it was relevant at all?

The Decision

Replace the Network Server

One option to fix the aging network would be to replace the Dell Power Edge server with a new one and replace associated other network equipment with it, including a new firewall and back-up system. An updated server and increased memory would alleviate the HomeTrak software glitches and scheduling disruptions. This would leave the current CRM and telephony utilized for real-time clock-ins in place. The benefits of this option included consistency in operations and little risk of staff turnover. The cons: a considerable expenditure for a small home health agency at an estimated $10,000-$15,000, outsourced IT support partners and ongoing maintenance, backups, and anti-virus subscriptions. Operationally this was the least disruptive option, but the most expensive.

Upgrade with Current Software Provider

The second option would be to choose ClearCare (Wellsky Personal Care Software) and transition Bright Day to its current provider's web-based operating platform, resulting in a minimal learning curve and familiarity of the software for office staff. Telephony as a clock-in/clock out process could be kept. Choosing this option would allow the server to be decommissioned and save on equipment & software costs but it would require a change in how and where the corporate files & charts were stored, a migration of data, and updated workstations running on Office365. Priced out, five refurbished workstations could be purchased & installed for approximately $5,000, significantly less than the cost of replacing the network server. An additional plus to this option was off-site storage of data which satisfied emergency preparedness purposes and required no need for backup hardware and software.

Modernize CRM Software and Process

A third option would be to scrap the software and network and move to a new cloud-based platform, operationally overhauling the company to include scheduling, paperless tasks, long-term care insurance notes, referrals, communication, risk management, billing, and client portal. As in the previous option, a decision to go in this direction would also eliminate the need for the network server to be replaced and include the $5,000 cost associated with updated workstations. It would mean migrating data, running parallel operations for 30-60 days, hours of training time and a possible turnover of key office staff, namely the long-time scheduler. Policies and procedures would need to be written or revised. The mobile app would need to be downloaded on each of the caregiver's smartphones, and then they would need to be taught how to use it. Since turnover in home healthcare was high, it was not feasible to provide all field staff smart phones and data plans, so those employees without would need to be accommodated in the form of policies and procedures specific to lack of communication equipment. Finally, clients would need to be informed of new field staff task requirements and communication options now available to them, and customer perception was exceedingly important in the transition.

Do Nothing

It was possible Bright Day would be sold. Preliminary talks had already taken place. Replacing, upgrading, modernizing, the decision to go with one of these strategies all came with costs and benefits. But in building billable hours, was the time and expense needed to change Bright Day's IT infrastructure worth it? Technology for the private duty home healthcare market segment had only a nominal impact on care coordination and continuity of care. Doing nothing was an option, particularly since there was no guarantee that the money invested could be recovered in the terms of the sale. There was however a risk of the server failing, the overall impact of which would be functionally debilitating.

Burgess thought about this "do nothing option." She could sell the company without upgrading the IT infrastructure at all. Or could she? It all depended on the future of the business and who was occupying the space for the sale. If she sold the company intangibles, the customer accounts and caregiver list, to a franchise, then yes, the do-nothing option made sense since the franchise had their own IT infrastructure dictated to them by the franchisor. However, if she sold the company in its entirety to a private equity group or another privately owned agency that wanted to expand into the Sarasota area, then all the assets would be sold as a whole and Burgess could recoup the investment in equipment, time, and infrastructure in the terms of the sale. Lastly, Burgess thought about the fact that negotiations for a sale had broken down in the past. If no sale occurred, Burgess would still have to choose one of the other options of replacing, upgrading, or modernizing since the Dell Power Edge server would not run indefinitely.

Summary

As the owner of Bright Day Home Healthcare, Burgess had a strategic decision to make. Business operations were constantly disrupted by the company's aging network equipment. As Burgess mulled over her options, she knew that whatever path was taken would impact the operational direction of the company and its people. The decision would also reflect the outlook and likelihood of a sale of Bright Day Home Healthcare. Should the IT infrastructure and CRM system disruptions be put on the back burner with a risk of a server failure? Or should Bright Day forge ahead with technological improvements and take a step towards modernizing its operations even under the possibility of a company sale?

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Acknowledgements

Biographies

Aydee Adames-Polanco graduated from St. Francis College in New York with a degree in accounting. Aydee is pursuing an Executive Master of Business Administration degree at the University of South Florida. She has 18 years of professional experience in assurance activities in both the second and third line of risk management. She is serving as the vice president of Compliance Assurance at Raymond James Financial.

Bonti Marie Burgess graduated from the University of California - Davis with a degree in political science and minor in history. She is pursuing an Executive Master of Business Administration at the University of South Florida. As an entrepreneur, Burgess licensed, accredited, and operated Bright Day Home Healthcare, a skilled private duty home health agency in Sarasota County. In 2022 she sold the million-dollar business for a profit.

Gary Fournier graduated with honors from American Military University with a degree in Homeland Security. Gary is currently pursuing an Executive Master of Business Administration at the University of South Florida. He has over 15 years of work experience as a civilian and military professional. He is currently a Global Account Manager at a technology company.

Jason Smith graduated from Campbell University with a bachelor's degree in psychology. Jason is currently pursuing his Executive Master of Business Administration degree at the University of South Florida. Jason has 20 years' experience in the Healthcare industry and currently works at Dispatch Health as a Market Manager. Jason has been living in the Tampa Bay area since 2016.

Exhibit 1: Home Care Environments

FAQs

Where is long-term care provided?

Long-term care does not necessarily mean a nursing home. You can receive long-term care in a variety of settings, including:

- **Adult day care center**, where care is provided during the day for adults usually in a public group setting.
- **Assisted living facility**, a residential arrangement that may provide personalized care and health services. Residents may need help with activities of daily living like bathing and dressing. This type also may be called custodial care, domiciliary care, intermediate care, personal care, residential health care, sheltered care or supported care facilities.
- **Hospice care**, provided to relieve pain and manage the symptoms associated with a terminal illness and any related conditions. Hospice care may be provided by an agency that specializes in relieving pain, managing symptoms and supporting dying persons and their families.
- **Nursing home**, a licensed facility providing around-the-clock room and board, nursing care and personal services. Nursing homes also may offer medical care, therapy and other health-related services.

- **Your home**, where you can receive services and supplies without having to leave. Common options are home health care, adult day care, hospice care and respite care.

Source: https://www.bankerslife.com/long-term-care-insurance/

Exhibit 2: Patient-Centered Home Healthcare Conceptual Model

Source: https://www. cmics.org/cmhn/Content/images/PCMH-house.jpg

Exhibit 3: U.S. Home Healthcare Market Size and Growth

Source: https://www.grandviewresearch.com/industry-analysis/us-home-healthcare-market-report
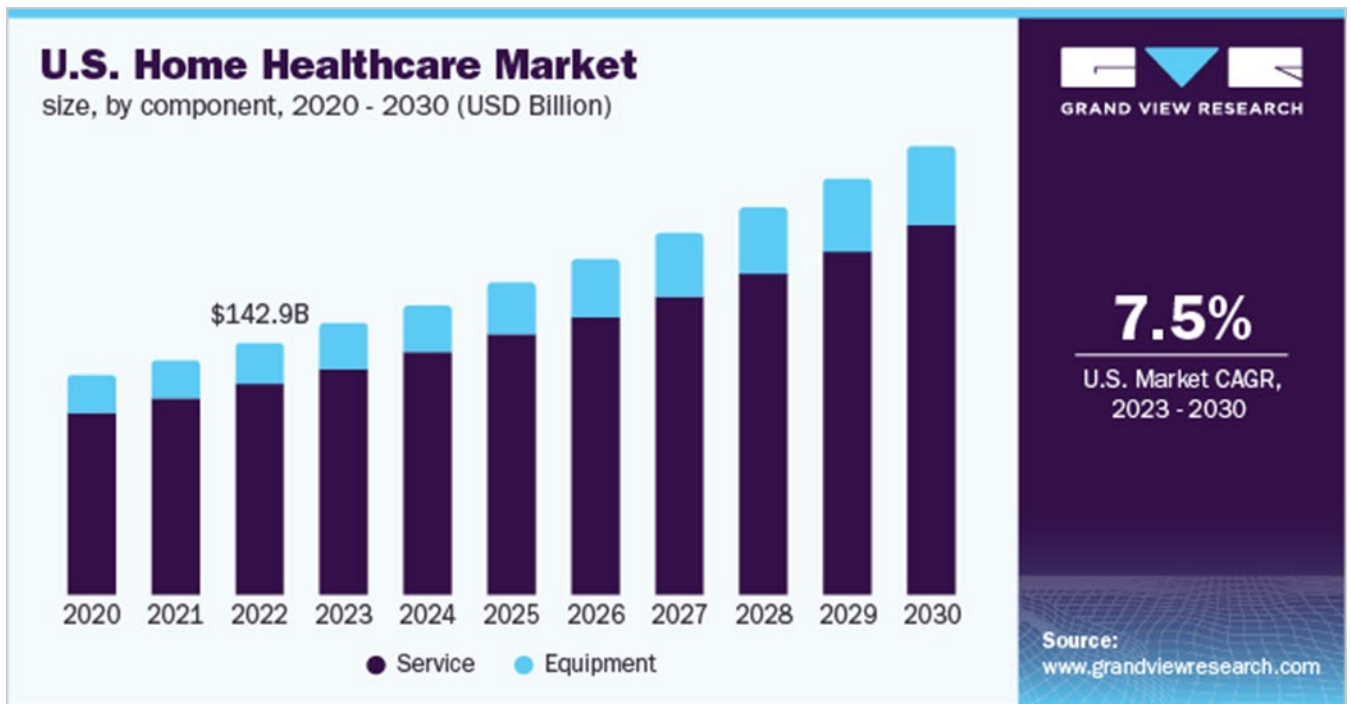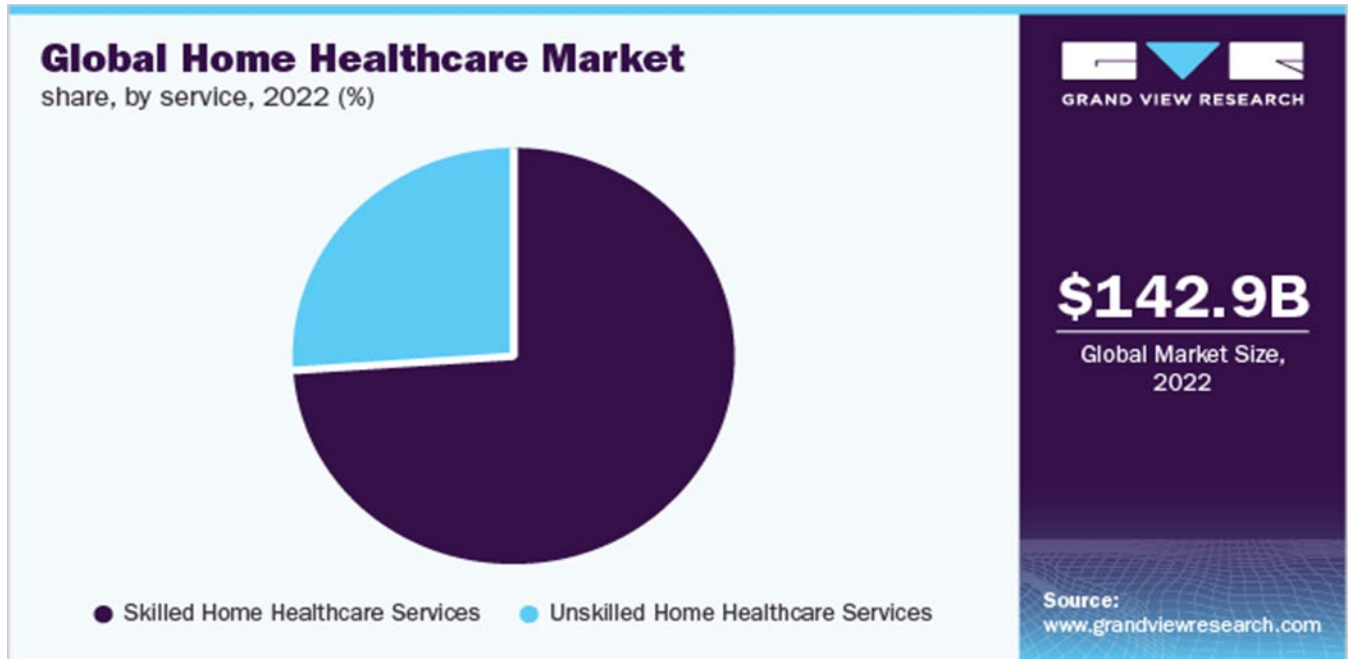
Exhibit 4: Fragmented Market Concentration

COMPETITIVE LANDSCAPE

While there has been steady transaction activity in the home health and hospice market in recent years, the market remains relatively fragmented. As presented in **Figure 4**, the top 10 home health providers represented 26.6 percent of the national market share, while the top 10 hospice providers represented 19.0 percent of the national market, based on claims data as of 2020.[8]

FIGURE 4 – MARKET SHARE BASED ON NUMBER OF CLAIMS

HOME HEALTH PROVIDER	MARKET SHARE	HOSPICE PROVIDER	MARKET SHARE
KINDRED HEALTHCARE	6.0%	VITAS HEALTHCARE	4.4%
AMEDISYS, INC.	5.0%	KINDRED HEALTHCARE	4.3%
LHC GROUP, INC.	4.4%	AMEDISYS, INC.	2.9%
ENCOMPASS HOME HEALTH & HOSPICE	3.9%	HCR MANORCARE	2.2%
ACCENTCARE	1.7%	SEASONS HOPSICE & PALLIATIVE CARE	1.6%
BAYADA HOME HEALTHCCARE	1.4%	COMPASSUS	0.9%
BROOKDALE SENIOR LIVING	1.2%	CHARTERS HEALTH SYSTEM	0.8%
ELARA	1.1%	HOSPICE OF THE VALLEY	0.7%
INTERIM HEALTHCARE	1.0%	CROSSROADS HOSPICE AND PALLIATIVE CARE	0.6%
TRINITY HEALTH AT HOME	0.9%	TRUSTBRIDGE, INC.	0.6%
COMBINED MARKET SHARE FOR TOP 10 HOME HEALTH PROVIDERS	26.6%	COMBINED MARKET SHARE FOR TOP 10 HOSPICE PROVIDERS	19.0%

Source: https://healthcareappraisers.com/wp-content/uploads/2022/02/2022-Outlook-Home-Health-and-Hospice.pdf

Exhibit 5: Home Healthcare Market Segmentation

U.S. Home Healthcare Market Segmentation

This report forecasts revenue growth at the country level and provides an analysis of the latest industry trends in each of the sub-segments from 2018 to 2030. For this study, Grand View Research has segmented the U.S. home healthcare market based on component:

- **Component Outlook (Revenue, USD Million, 2018 - 2030)**
  - Equipment
    - Therapeutic Equipment
    - Diagnostic Equipment
    - Mobility Assist Equipment
      - Wheelchair
      - Home medical furniture
      - Walking assist devices
  - Service
    - Skilled Home Healthcare Services
      - Nursing care
      - Physician/primary care
      - Hospice & palliative care
      - Physical/occupational/speech therapy
      - Nutritional support
      - Other skilled home healthcare services
    - Unskilled Home Healthcare Services

U.S. Home Healthcare Market Size, Share & Trends Analysis Report By Component (Equipment, Service), And Segment Forecasts, 2023 - 2030

- Report ID: GVR-4-68039-922-1
- Number of Pages: 154
- Format: Electronic (PDF)
- Historical Range: 2018 - 2021
- Industry: Healthcare

Source: https://www.grandviewresearch.com/industry-analysis/us-home-healthcare-market-report

Exhibit 6: Bright Day Brochure Outer Page

Source: Bright Day Home Healthcare, LLC. Internal marketing documents

Exhibit 7: Bright Day Brochure Inner Page

Source: Bright Day Home Healthcare, LLC. Internal marketing documents

Exhibit 8: Home Care Utilization

Who needs long-term care insurance?

If you prefer to live in your home for as long as possible, and you want to help protect your retirement savings, you may benefit from a long-term care insurance policy. Typically, Medicare doesn't fully cover assisted care expenses, including custodial care, which is provided in nursing homes, assisted living facilities or at home. Coverage for these types of health expenses helps you maintain control of where you will receive care and helps protect your life's savings.

70% of Americans over 65
expect to use some form of long-term care services[1]

The national average cost for a private room in a nursing home is
$7,698 per month[1]

Long-Term Care (LTC) Insurance | Bankers Life

Source: https://www.bankerslife.com/long-term-care-insurance/

Exhibit 9: Cost of Care Trends

Genworth Cost of Care 2004 - 2021

In-Home Care Costs[5]
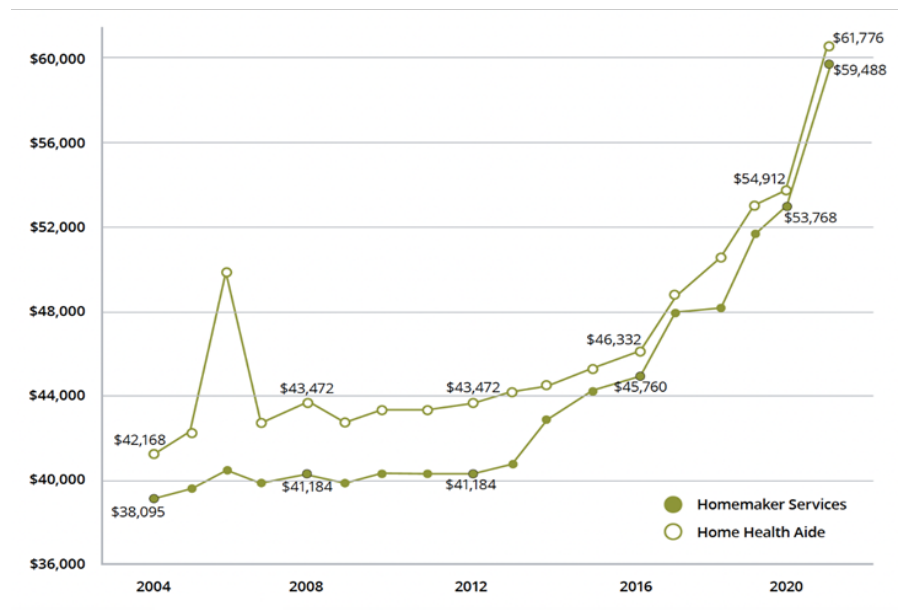
$27.00

National hourly cost for a Home Health Aide in 2021[6]

The median yearly cost of in-home care in the United States in 2021 was $61,776 for a Home Health Aide and $59,488 for Homemaker services. The hourly rate for a Home Health Aide ranged from $19 in West Virginia to $36 in Minnesota.

Source: https://www.genworth.com/aging-and-you/finances/cost-of-care/cost-of-care-trends-and-insights.html

Exhibit 10: Bright Day Private Duty Rate Schedule 2022

EXCELLENT, RESPONSIVE, CUSTOMIZED CARE

PRIVATE DUTY HOURLY RATES:

Regular Rate*

Companion	$32.00 per hour
CNA/HHA	$35.00 per hour
LPN:	$56.50 per hour
RN:	$65.00 per hour

PRIVATE DUTY VISIT RATES: (CNA/HHA)

Regular Rate*

1 Hour Visit:	$50.00 per visit
2 Hour Visit:	$72.00 per visit
3 Hour Visit:	$102.00 per visit

SKILLED NURSING VISIT RATES: (RN/LPN)

Regular Rate*

Med Set-up:	$95.00 per visit
Skilled Visits:	$95.00 per visit

RN CARE MANAGEMENT

Care Management $120.00 per hour

__MILEAGE__: Caregiver car usage mileage is billed per the current IRS rate.
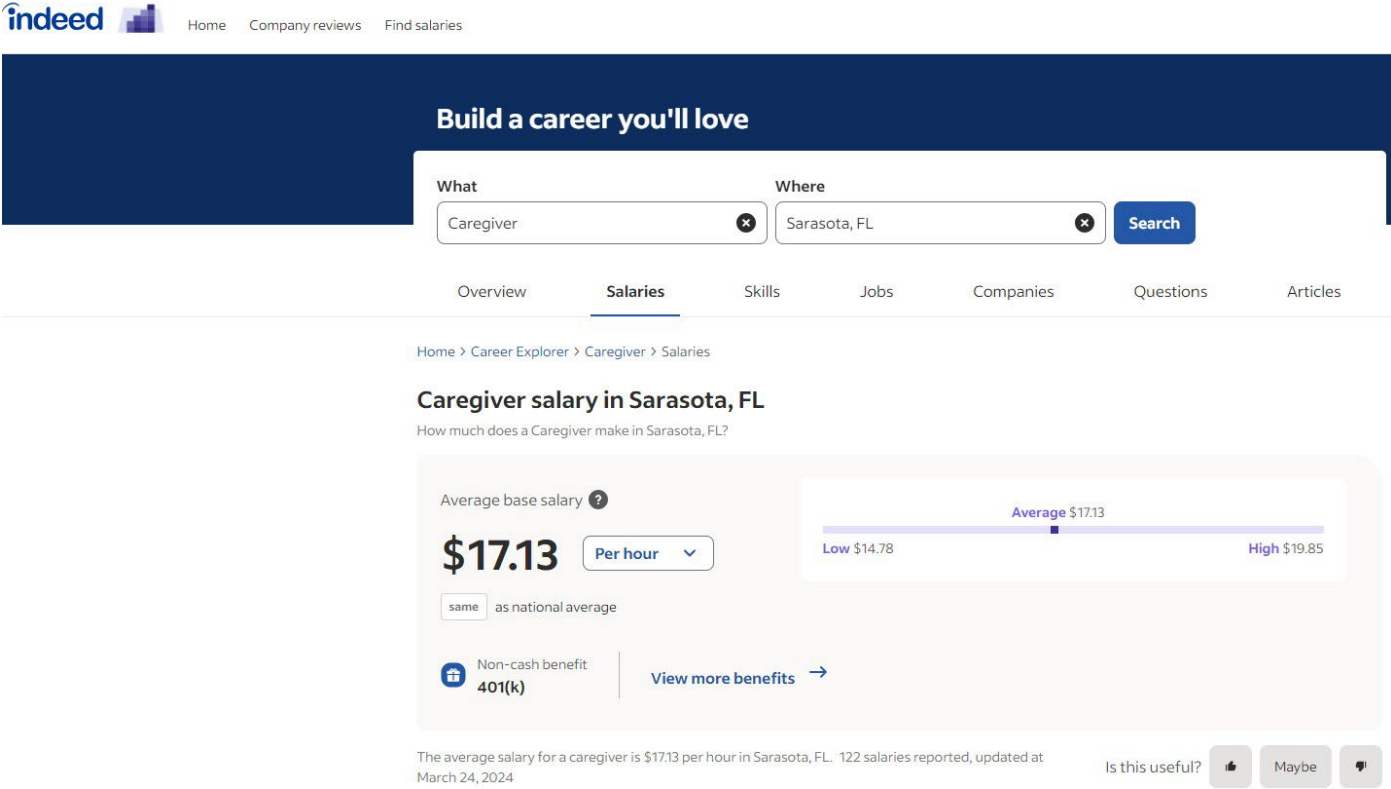
*Note:
1.) Preferred Caregiver rates will be billed at an additional $2 per hour.
2.) Care of two people is billed at $10.00 above regular rate per hour for a visit or a shift; weekend only care is billed at $5.00 above regular rate per hour for a visit or a shift.
3.) Overtime is billed at time and one-half regular rate for hours over 40 with each caregiver.

Source: Bright Day Home Healthcare, LLC. Internal marketing documents

Exhibit 11: Competitive Caregiver Pay Rates in Sarasota, FL

Exhibit 12: CNA Average Hourly Pay Rates

As of Aug 24, 2023, the average hourly pay for a CNA in the United States is $19.31/ hour.

While ZipRecruiter is seeing hourly wages as high as $28.85 and as low as $10.34, the majority of CNA wages currently range between $15.62 (25th percentile) to $21.63 (75th percentile) across the United States. The average pay range for a CNA varies greatly (by as much as $6.01), which suggests there may be many opportunities for advancement and increased pay based on skill level, location and years of experience.

Based on recent job postings on ZipRecruiter, the CNA job market in both Sarasota, FL and the surrounding area is very active. A CNA in your area makes on average $20 per hour, or $0.34 (17.476%) more than the national average hourly salary of $19.31. Florida ranks number 46 out of 50 states nationwide for CNA salaries.

Source: https://www.ziprecruiter.com/Salaries/CNA-Salary-per-Hour

Exhibit 13: Due Diligence – CareSmartz360 Software

*Source*: Bright Day Home Healthcare, LLC. Internal operations documents

Exhibit 14: Due Diligence – Software Comparison Notes

Source: Bright Day Home Healthcare, LLC. Internal operations documents

Exhibit 15: Due Diligence – MatrixCare by Soneto Software

Source: Bright Day Home Healthcare, LLC. Internal operations documents

Exhibit 16: CareSmartz360 Cost Structure

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CareSmartz360

A BETTER WAY TO CARE

CareSmartz360 SaaS License Agreement

This Software as a Service (SaaS) Agreement is between the Provider and Subscriber as below:

Provider ("US", "We")	Subscriber ("You", "Your")	
Company: Caresmartz INC 1250 Pittsford-Victor Road Ste 190, Pittsford, NY 14534 Phone: 647-542-0114 Representative: Nicola Boyd Email: nicola.boyd@caresmartz360.com	**Company Legal Name:**	Bright Day Home Healthcare, LLC
	Contact Name: **Contact Title:** **Contact Phone:** **Contact Email:**	Bonti Burgess Administrator 941-955-8900 bonti@brightday.care
	Billing Contact Name: **Billing Email:** **Billing Contact Phone:** **Company Address:**	Bonti Burgess bonti@brightday.care 941-955-8900 P.O. Box 15582, Sarasota, FL 34277-1582
	Effective Date	November 9th 2020

Price Per Location:	**Standard Month to Month** US$10/Active Client/Month **Texting (SMS):** US$ 0.015 per text **IVR/Telephony:** No additional cost **Solution Implementation and Set-up:** No additional cost **Training:** No additional cost **Product Support:** No additional cost **Product Maintenance (monthly upgrades):** No additional
Maximum Permitted Solution Users	No maximum
Minimum Number of Clients	15 per office. If you have less than 15 clients, we will charge a monthly minimum of US$150. **1 Month Free

Source: Bright Day Home Healthcare, LLC. Internal operations documents

Exhibit 17: MatrixCare Core Functions

MatrixCare *by ResMed*

Bundle Breakdown				
Category	**Module**	**Bundles**		
		Select	**Elite**	**Enterprise**
DATA CONVERSION		Add-On		
CORE FUNCTIONS	Client Management (Client Inquiry Script, Client Inquiry, Client, Admission, Authorizations, Service Plans, Matching, Activities)	x	x	x
	Caregiver Management (CG Inquiry Script, Hire History, Trainings/Inservices, Certifications/Expirations, Documents, Badges, Activities)	x	x	x
	Referral Source Management	x	x	x
	Physician Management	x	x	x
	Payer Management (Configurable for type of billing, type of remit, EDI formats, Authorizations, Invoice formats, Delivery - print or email)	x	x	x
	Scheduling (Calendars, Lists, Timeline, Split Screens, Scroll, Drag/Drop, Recurrences, Multiple Services, CG Search, Schedule Conflict Checks)	x	x	x
	Dashboards (Operations - Financials, Conversions)	x	x	x
	Reports (Operations)	x	x	x
	Payroll (Weekly, Daily; Holiday and Shift Differentials, Service Codes configurable for OT Flag)	x	x	x
	Payroll Extract - Generic, QuickBooks	x	x	x
	Billing (Standard, 1500, UB04 Invoice formats; Holiday & Shift Differentials, Payer Allocations - Splits, Splits %, Co Pays, Benefits, Service Allocations, Balance)	x	x	x
	Payment Register (Payment Posting)	x	x	x
	Period Closing	x	x	x
	Accounting Interface - QuickBooks GL Export	x	x	x

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Source: Bright Day Home Healthcare, LLC. Internal operations documents

Exhibit 18: MatrixCare Add-On Modules

MatrixCare
by ResMed

	Module	Bundles		
		Select	Elite	Enterprise
	Document Management	x	x	x
	Attachments (Scanning)	x	x	x
ADVANCED REV CYCLE	Letters	x	x	x
	e-Claims & remits (837P, 837I, 835) *LOB DISCOVERY FIRST*	x	x	x
	PAYRIGHT epayment processing, CC and ACH.	x	x	x
	Zirmed/Waystar claims clearinghouse.	x	x	x
	AOD Payroll Extract	x	x	x
	AOD Resident Billing Extract	x	x	x
	AOD Resident GL Extract	x	x	x
	SH INFINITI Employee & Payroll Extracts	x	x	x
	Payroll Extracts - ADP, Paychex, Kronos, Millennium	x	x	x
	Payroll Overtime Across Offices	x	x	x
	Royalty Process & Extract File	x	x	x
	Registry Billing Process & Invoice Format	x	x	x
	Contractual Rates Billing Process	x	x	x
	Non Working Hours Payroll and Billing	x	x	x
	Auto Bill Taxes	x	x	x
	Auto Bill Overtime	x	x	x
	Auto Travel Time	x	x	x
EVV	EVV - Mobile Caregiver Check In/Out	x	x	x
	EVV - Telephony Toll Free Line	x	x	x
	EVV - Telephony/GPS Time & Attendance	x	x	x
	EVV - Tellus, HHAX, Sandata integrations	x	x	x
TEXT	SMS Text Missed Visit Notifications		x	x
	SMS Text Open Shift Messages		x	x
	SMS Wellness & Work Reminders		x	x
CARE COMMUNITY	Family Portal - Schedules		x	x
	Family Portal - On Line Bill/Pay		x	x

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Source: Bright Day Home Healthcare, LLC. Internal operations documents