



WellSky CareInsights™ analytics report: Improving home health outcomes using predictive analytics

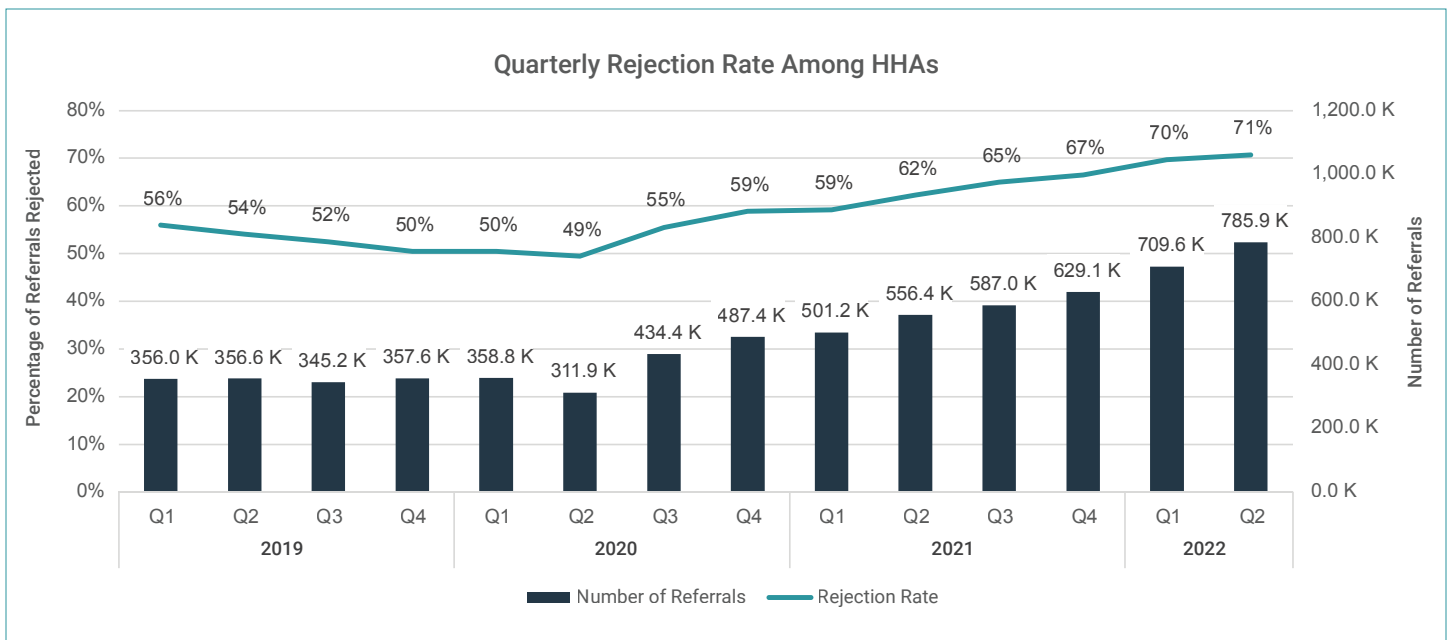


Since the COVID-19 pandemic began, the home has become an increasingly important care setting. Referrals to home health have seen unprecedented growth, but agencies have struggled to keep up with demand. Increased patient complexity, persistent caregiver shortages, and CMS’s changing reimbursement models have forced providers to “do more with less” – in other words, improve patient outcomes while remaining profitable and optimizing limited clinical resources.

Facing these challenges, home healthcare providers are looking for new tools to better manage their businesses and make more informed care decisions for their patients. And increasingly, the solution they are turning to is predictive analytics.

Using data to overcome healthcare’s biggest challenges

Demand for home healthcare skyrocketed in 2022. In fact, according to WellSky data, by May 2022, home health referrals were up by 123% compared to 2019 (pre-pandemic). Unfortunately, 71% of those referrals were rejected by home health agencies, a dramatic increase from 49% at the start of COVID-19.



There are several reasons agencies are struggling to meet demand for care. First, patients discharged to the home are higher acuity, meaning they are sicker and need more complex care. Workforce shortages have impacted agencies' ability to take on more patients. Additionally, the home health industry underwent extensive reimbursement changes. In 2020, CMS moved the home health reimbursement schedule to the Patient-Driven Groupings Model, shifting away from fee-for-service care. In January 2023, CMS also expanded Home Health Value-Based Purchasing to every state, tying quality outcomes to reimbursement.

As a result of this changing landscape, providers must be more mindful of the efficient use of clinical resources while still achieving better patient outcomes. Each agency's financial stability relies on providing better care while navigating complex reimbursement schedules.

Predictive analytics tools can aid in resolving these challenges by surfacing relevant and actionable insights from patient data to determine the type of care needed – both medical and non-medical – to improve health outcomes. Using these tools, providers can uncover real-time patient hospitalization risk, social determinants of health needs, and utilization management insights for improved care planning. Building these capabilities into workflows gives caregivers real-time information that can help them make decisions at the most critical times to ensure patients get the right care in the right setting. However, adoption of this technology has been slower to take hold in home health compared to other settings of care, like inpatient acute care. Agencies know that data matters, but with so many competing priorities, it has been difficult for providers to innovate.

Do predictive analytics make a difference? The clear answer is 'yes'

WellSky recently evaluated the impact predictive analytics provided for home health clients. The study compared agency performance in the 12 months before implementation of WellSky's predictive analytics solution WellSky CareInsights™ to the 12-month period after implementation. It also examined whether agencies that use the solution consistently over time outperform those that do not. For this, WellSky CareInsights clients with sustained usage were compared against non-analytics users between 2019 and 2021, using claims data from CMS Standard Analytical Files. There was meaningful improvement in two key areas.



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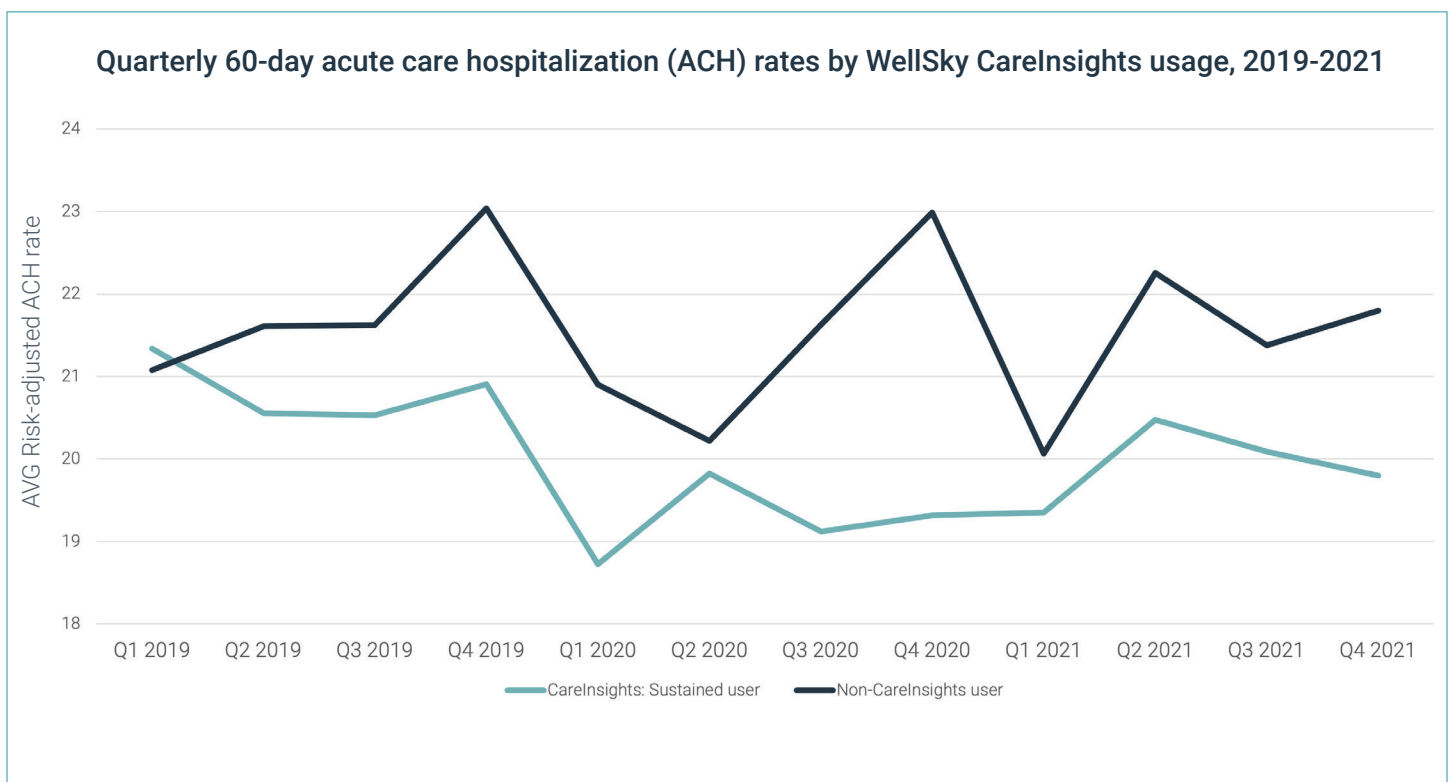
Improved clinical outcomes

After one year of using WellSky CareInsights for Home Health, providers experienced 12% lower risk-adjusted 60-day hospitalization rates. In assessing results over three years after implementation of the solution, there are even more pronounced differences in performance between analytics users and non-users. Agencies with 1,000+ Medicare admissions per year using WellSky CareInsights experienced 12% lower risk-adjusted 60-day hospitalization rates than non-users. Additionally, top users (providers using the solution consistently and ubiquitously in an agency's daily processes) saw risk-adjusted 60-day hospitalization rates 26% lower than non-users.

Reducing hospital readmissions is top of mind among healthcare industry professionals. Patients who return to the hospital within 30 days of discharge often have poor outcomes. According to one study by the National Institutes of Health, the risk of death for patients readmitted to the hospital within 30 days of discharge was approximately two times that of patients that were not readmitted within 30 days. Readmission is also costly and puts a strain on provider resources. Therefore, these improvements in hospital admission rates demonstrate that WellSky CareInsights users deliver much higher quality care while greatly reducing costs for hospital referral sources.



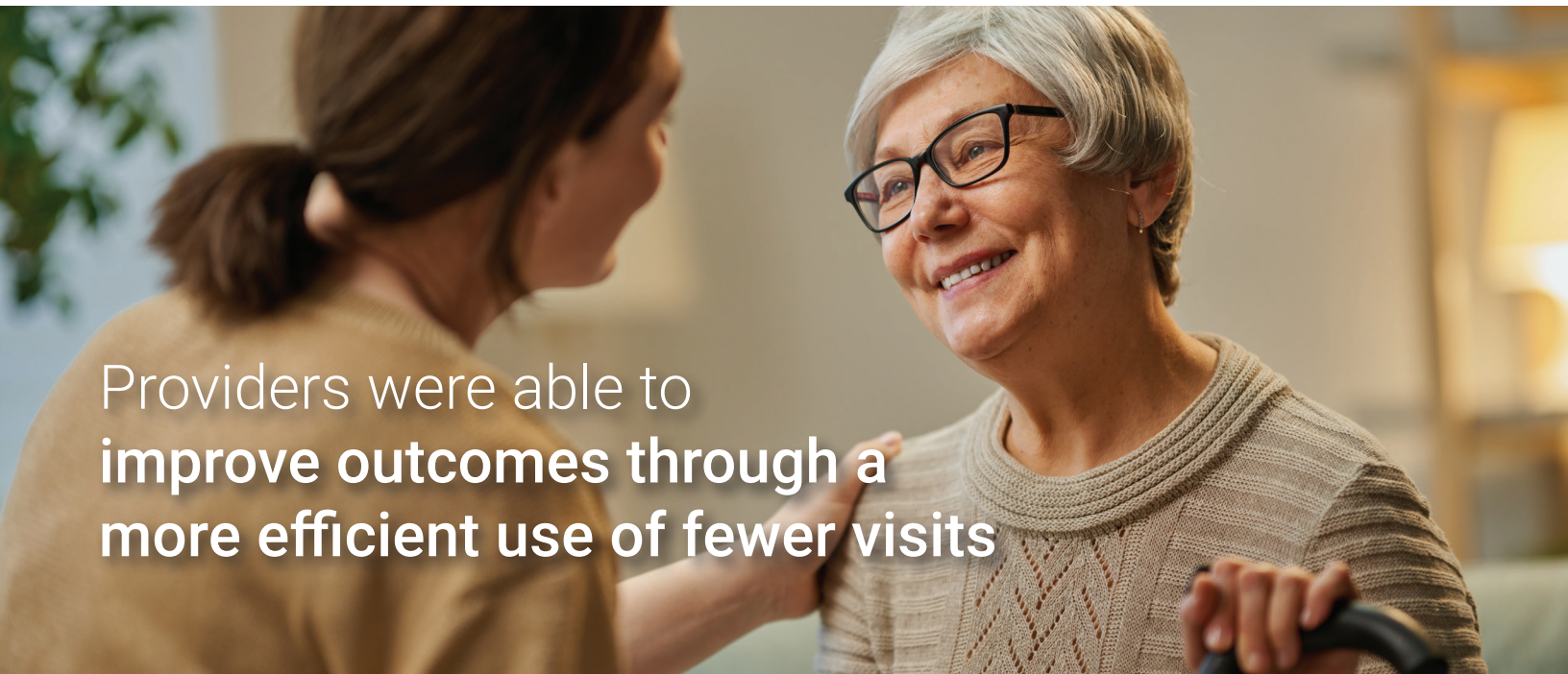
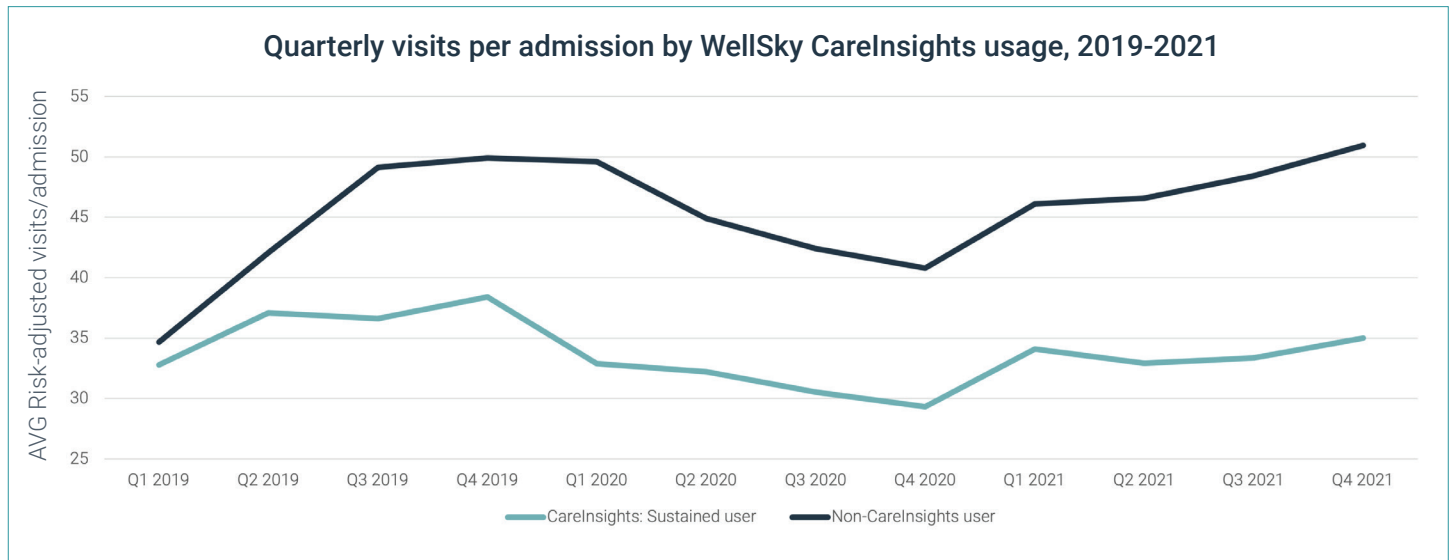
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More efficient care

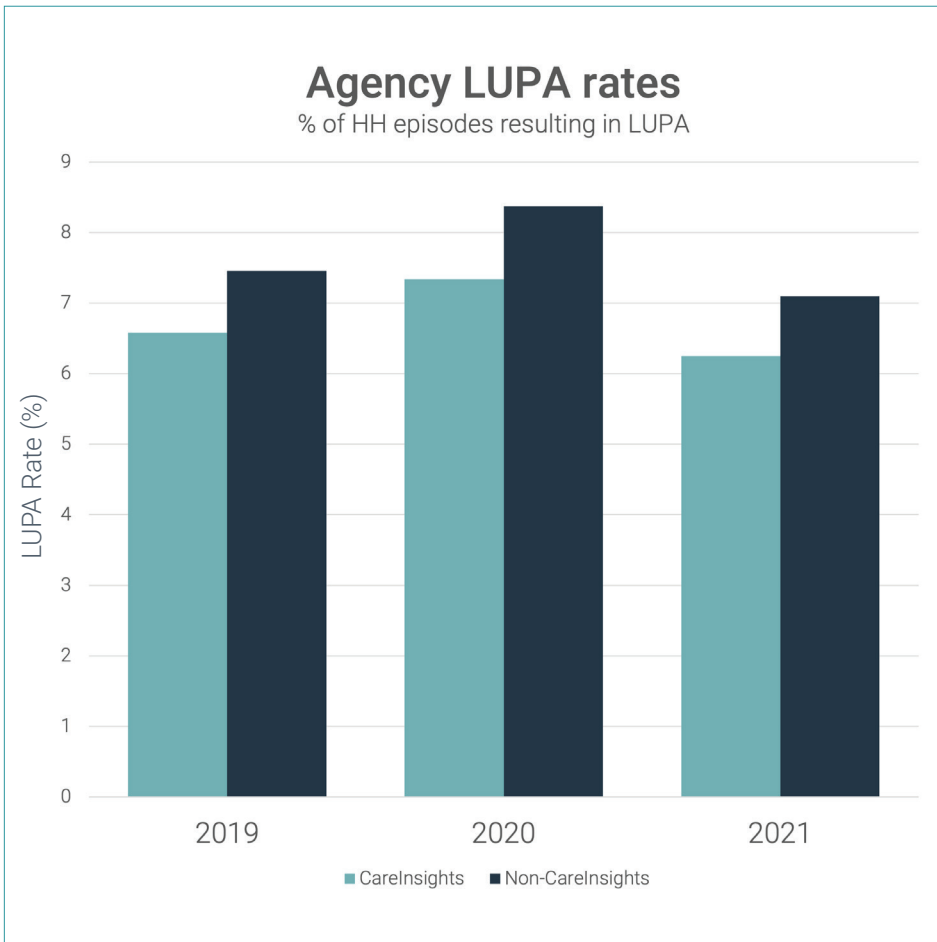
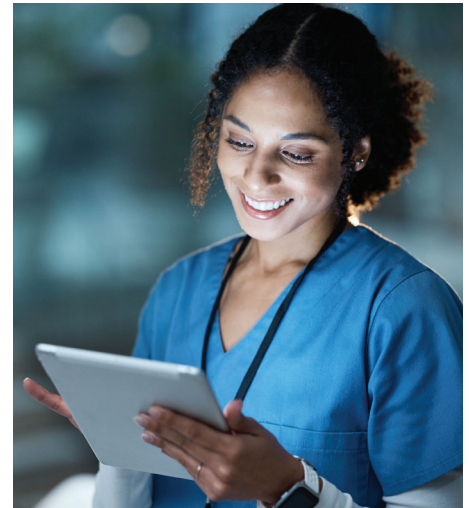
The right intelligence can reduce waste and inefficiencies in episode management. The study found that WellSky CareInsights users were able to manage episodes of care more efficiently. After one year of using WellSky CareInsights, providers averaged 8% fewer visits per admission year-over-year. Additionally, over three years after CareInsights activation, large agencies experienced visits/admissions 32% lower than non-users, and top users experienced visits/admissions 45% lower than non-users.

It is important to note that fewer visits does not mean a reduction in quality – it means providers were actually able to improve outcomes through a more efficient use of fewer visits. It also means their capacity is increased so they can take care of more patients at a given staffing level, decreasing the need to reject referrals. And combined with lower re-hospitalization rates, it shifts the cost of care in the right direction.



Providers were able to **improve outcomes through a more efficient use of fewer visits**

Home health agencies also have an interest in optimizing their financial health, to which Low Utilization Payment Adjustments (LUPAs) and length of stay are both contributors. Users of WellSky CareInsights for Home Health saw a consistent reduction in LUPA rates when compared to the broader home health market. Between 2019 and 2021, users received 12% fewer LUPA adjustments on average when compared to non-users.



There are also differences in lengths of care. WellSky CareInsights users consistently saw shorter risk-adjusted lengths of home health stays, averaging 20% shorter lengths of care to discharge than non-analytics users. Shorter lengths of care in home health, coupled with improved outcomes, signify that providers are more efficiently delivering the necessary care that results in the desired outcomes for patients. This increased efficiency allows providers to accept more referrals at a higher rate even at the same staffing levels – all while maintaining quality of care.

Integrating analytics into care

Healthcare providers and payers alike need intelligent technology to ensure that they have 1) the data-driven insights they need to provide the most appropriate type and level of care, and 2) the connective technology they need to ease and optimize any potential care transitions their patients might need on their care journeys. WellSky has invested heavily in developing predictive analytics tools that help agencies proactively manage patient populations while elevating clinical confidence and decision-making through trustworthy and timely insights. WellSky CareInsights for Home Health supports providers during the care-planning process, delivering vital population- and patient-level insights to clinicians at the point of care so they can make informed, individualized decisions to improve the patient experience.






Drawing from data on over 7 million home health episodes, the solution provides predictive measures of hospitalization risk, care setting suitability, and the likelihood of improving daily living activities. These predictions are updated in real time for an agency's entire census, helping the clinician team identify high-risk patients and prioritize resources.

Additionally, the solution embeds patient-level insights directly into clinical workflows. WellSky CareInsights provides notifications for medication changes, LUPA risks and, in conjunction with CarePort Connect, acute care hospitalization events through admission, discharge, transfer (ADT) feeds connected to inpatient hospitals and other post-acute care settings. Real-time alerts for these and other events also provide clinicians with a way to passively monitor their populations for adverse changes in condition, freeing up more time for direct face-to-face care.



WellSky CareInsights for Home Health

Improved clinical and operational performance

 <p>Care setting suitability</p>	 <p>Care plan optimization</p>	 <p>Real-time patient risk</p>	 <p>Passive monitoring</p>	 <p>Clinician efficiency</p>
<p>Assess patient's suitability for alternative care settings given goals/status</p>	<p>Identify inefficiencies to help lower the cost of quality care</p>	<p>Proactively manage rising levels of risk to prevent adverse patient events</p>	<p>Alerting for patient status changes and real-time hospitalizations</p>	<p>More efficient care enables current staffing levels to care for growing census</p>

WellSky CareInsights for Home Health was created to help providers become more efficient with their limited time while maximizing clinical outcomes. Efficient care improvements are required in a value-based reimbursement world. With this innovative solution, agencies can manage a higher patient census with their current staff, while helping improve clinical outcomes, and reduce the cost of care.

Conclusion

Today, home health providers are caring for more complex patients while experiencing workforce constraints, greater demand for home-based care, and reimbursement uncertainty. Predictive analytics that offer holistic decision support in patient care and clinic operations can help providers overcome these challenges. With proven results like those outlined in this report, analytics tools will be welcomed by clinicians who seek to deliver the best care using the most efficient means.

Data sources

[CarePort, powered by WellSky, "The evolution of care: A care delivery report," WellSky, 2022.](#)

[Centers for Medicare and Medicaid Services, "Standard Analytical Files \(Medicare Claims\) - LDS," 2021.](#)

[J.A. Shaw, S. Stiliannoudakis, R. Qaiser, E. Layman, A. Sima, A. Ali, "Thirty-Day Hospital Readmissions: A Predictor of Higher All-cause Mortality for Up to Two Years," Cureus, 2020.](#)

[S. Harder, "Opportunities and challenges: The transformation of post-acute care in America," WellSky, 2022.](#)



Want to learn more about the ways
WellSky CareInsights for Home Health
can support your agency?

Contact your WellSky representative for a solution demonstration and a customized calculation of your organization's return on investment.

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