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Long-Term Acute Care (LTAC) Hospitals as Part of the Value-Based Solution: *A Case Study of Kindred LTAC Hospitals in Las Vegas*

CEDAR GATE TECHNOLOGIES

ATI ADVISORY
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EXECUTIVE SUMMARY

This brief examines the role of long-term acute care (LTAC) hospitals in effectively managing the care of patients with complex conditions within a value-based model. As a case study, ATI Advisory (ATI) and Cedar Gate Technologies (Cedar Gate) each independently assessed the experience of Kindred LTAC hospitals in Las Vegas via Medicare Fee-for-Service (FFS) claims analysis. **We found that Medicare beneficiaries served by Kindred LTAC hospitals in Las Vegas experienced significantly lower Medicare spending in the 90- and 180-days following discharge from the initial post-acute setting when compared to beneficiaries served in other LTAC hospitals and skilled nursing facilities (SNFs) in Las Vegas on a risk-adjusted basis.** To note, this lower post-discharge spending was largely driven by lower readmission spending, indicative of less disruption and reduced time in the acute care setting for patients.

This analysis demonstrates potential improved outcomes and savings in the post-discharge period that could be accrued via value-based models that utilize LTAC hospitals for the management of high-acuity patients. As evident through the experience of Kindred LTAC hospitals in Las Vegas and their participation in the Silver State Accountable Care Organization (ACO), LTAC hospitals can meaningfully participate and contribute to success in value-based models, such as ACOs and managed care payer networks, by providing high-quality care for some of the most clinically complex cases.

BACKGROUND

LTAC hospitals are hospitals that specialize in providing treatment for patients with complex medical conditions who require intense and specialized treatment. LTAC hospitals must meet the Medicare Conditions of Participation for acute care hospitals and are required by Medicare to maintain an average length of stay of greater than 25 days.[1] This length of stay requirement does not apply to managed care admissions, however. LTAC hospital patients receive physician-led care executed by an interdisciplinary team made up of nurses, therapists, and other care management specialists.

The Silver State ACO was formed in 2013 to serve Medicare FFS beneficiaries in Nevada. ACOs aim to provide high-quality care to Medicare beneficiaries while reducing costs through care coordination and integrated provider networks. Originally a Track 1 ACO in the Medicare Shared Savings Program (MSSP), Silver State transitioned to the Enhanced Track in 2020, which offers the highest level of financial risk and reward within MSSP.[2]

Kindred Hospitals (Kindred), a division of the recently formed ScionHealth system, operates 61 LTAC hospitals across the country and numerous sub-acute units and acute rehabilitation units within several of these facilities. In Las Vegas, Kindred operates two LTAC hospitals, Kindred Sahara and Kindred Flamingo, which are the only LTAC hospitals included in Silver State ACO's preferred provider network. In addition to serving as an owner and management partner, Kindred also designed, implemented, and subsequently operated Silver State's care management program for four years, thus leading initiatives to drive quality patient care and efficient operations.

1 https://www.medicare.gov/Pubs/pdf/11347-Long-Term-Care-Hospitals.pdf

2 https://data.cms.gov/medicare-shared-savings-program/performance-year-financial-and-quality-results

This brief focuses on Silver State ACO as a case study to explore the role of LTAC hospitals within an ACO and their contribution to Silver State's success over the years. It examines the use of LTAC hospitals and the downstream medical utilization and outcomes for Medicare beneficiaries served by LTAC hospitals, including beneficiaries who are not attributed to the Silver State ACO. The brief also provides insights into how high-quality LTAC hospitals can be an integral part of the value-based solution and makes recommendations for further models and evaluations.

SILVER STATE ACO CASE STUDY

Silver State ACO has shown consistently high performance in MSSP (see inset). In addition to high quality scores, it earned the highest shared savings per assigned beneficiary in 2019 and the second highest in 2020 out of the top performing ACOs, defined as the 10 ACOs with the highest shared savings achieved.[3]

Furthermore, Silver State stands out from other ACOs in terms of its utilization patterns. In 2020, Silver State utilized short-term acute care hospitals (STACHs) considerably less than other top performing ACOs as well as all ACOs across the nation (Figure 1). Though COVID-19 resulted in unusual healthcare utilization during 2020, a review of STACH utilization in 2019 revealed utilization patterns that were largely consistent. Silver State leadership credits its aggressive chronic care management program and coordinated discharge process with preventing unnecessary hospital admissions and readmissions.[4]

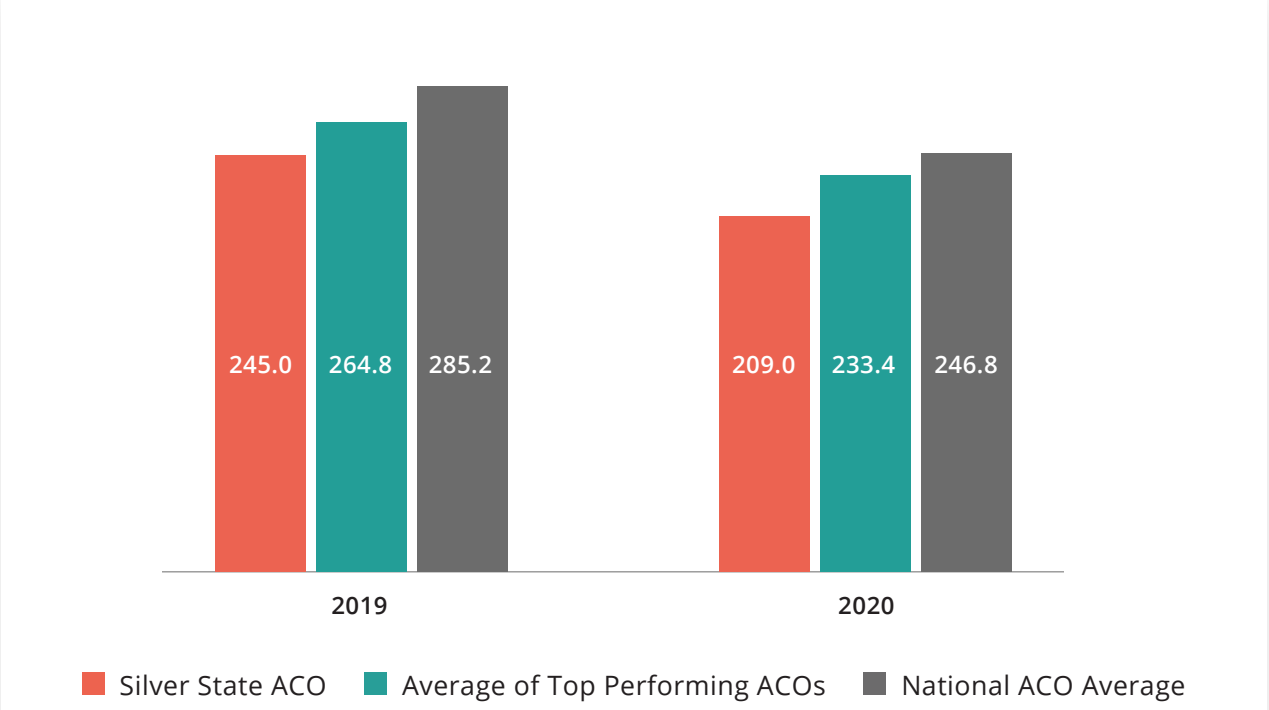
SILVER STATE ACO STATISTICS:

- Received a quality score of 98.75% (out of 100%) in 2020 – higher than the average quality score across all ACOs
- Has earned shared savings for 6 consecutive years, totaling over $86 million from 2015 to 2020
- Has a provider network of 49 participating groups and 885 primary care providers, serving over 52,000 attributed lives in 2020

3 Performance Year (PY) 2019 and 2020 Shared Savings Program ACO Public Use Files

4 Based on ATI interviews with Silver State ACO leadership.

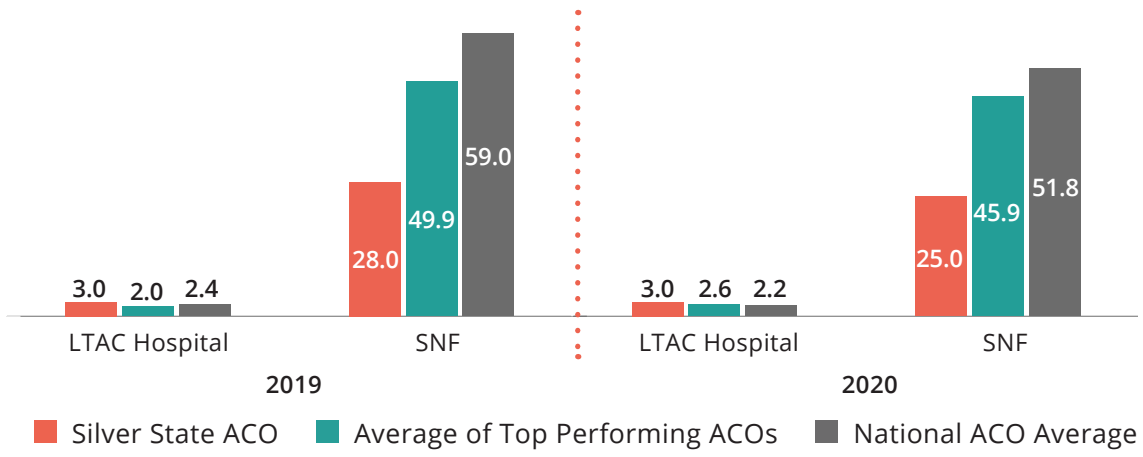
Figure 1: STACH Discharges of ACO Beneficiaries Per 1,000 Person-Years



Source: ATI analysis of PY 2019 and 2020 Shared Savings Program ACO Public Use Files

Note: Discharges defined as "total number of discharges per 1,000 person-years in the performance year" in specified care setting. Top Performing ACOs defined as 10 ACOs with highest shared savings achieved.

Figure 2: Discharges of ACO Beneficiaries Per 1,000 Person-Years by Post-Acute Care Setting



Source: ATI analysis of PY 2019 and 2020 Shared Savings Program ACO Public Use Files

Note: Discharges defined as "total number of discharges per 1,000 person-years in the performance year" in specified care setting. Top Performing ACOs defined as 10 ACOs with highest shared savings achieved.

As it relates to post-acute care patterns, Silver State had the lowest number of SNF discharges among the top performing ACOs (and less than half that of the overall ACO national average) and higher than average LTAC hospital utilization (Figure 2). Thus, **Silver State ACO utilized LTAC hospitals at higher rates than other ACOs while attaining some of the highest per capita savings in MSSP.** One explanation is that by providing care coordination and necessary preventive care to reduce avoidable STACH admissions, Silver State has been able to utilize more intensive post-acute care settings for complex patients, while still reducing overall Medicare spending per member. Another possible and supportive explanation is that LTAC hospitals within Silver State ACO provide high-quality care that in turn reduces downstream spending on events such as rehospitalizations. We explore this second explanation in the claims analysis in the next section.

KINDRED LTAC HOSPITAL PERFORMANCE AMONG THE SILVER STATE ACO BENEFICIARY POPULATION

Cedar Gate performed an analysis to examine utilization patterns and total Medicare spending for 90- and 180-day episodes involving Silver State ACO attributed beneficiaries.[5] Cedar Gate created chronic condition cohorts for sepsis and congestive heart failure (CHF) to identify patterns of care among top volume conditions discharged to Kindred LTAC hospitals in Las Vegas among Silver State ACO beneficiaries.[6] The main goal was to determine if Kindred LTAC hospitals in Las Vegas performed more favorably than other (non-Kindred) LTAC hospitals and SNFs in the Las Vegas market by comparing Medicare spending for the entirety of episodes across the identified condition cohorts.[7]

Cedar Gate first performed a risk stratification to determine the complexity of beneficiaries being treated at Kindred LTAC hospitals in Las Vegas and how this might impact expected spending. An average HCC score was calculated within each chronic condition cohort for each discharge facility comparison group (i.e., Kindred LTAC hospitals in Las Vegas market, other LTAC hospitals in Las Vegas market, and all SNFs in Las Vegas market).[8] With an average HCC score for Kindred facilities above that of the total analysis population (4.09 vs. 3.14), the analysis found that **Silver State ACO beneficiaries treated at Kindred LTAC hospitals across all studied conditions were more clinically complex than ACO beneficiaries treated at other LTAC hospitals and SNFs in the Las Vegas market.**[9]

5 Cedar Gate utilized Silver State ACO claims data from 2017-2020. Sepsis and CHF cohorts were identified from the STACH claims using ICD-10 codes. Beneficiaries were assigned to a cohort using primary and secondary diagnosis codes, with the primary diagnosis taking priority in cohort assignment. Cedar Gate also analyzed the conditions of chronic obstructive pulmonary disease and DRG 207, but volume was too low to extrapolate meaningful results. An episode is defined here as the 90 or 180 days following discharge from either a SNF or LTAC hospital in the Las Vegas market.

6 Sepsis and CHF had the highest volume, by occurrence of related ICD-10 codes, for discharges from STACHs to Kindred LTAC hospitals in Las Vegas among Silver State ACO beneficiaries.

7 "Las Vegas market" is the Las Vegas-Henderson-Paradise MSA, composed of Clark and Nye counties.

8 "HCC score" is the "hierarchical condition category" – it utilizes ICD-10 codes and demographic factors to assign a complexity level to an individual. A higher HCC score indicates higher complexity.

9 The "Population HCC score" of 3.14 represents the average HCC of beneficiaries included in the analysis for all conditions and all cohorts.

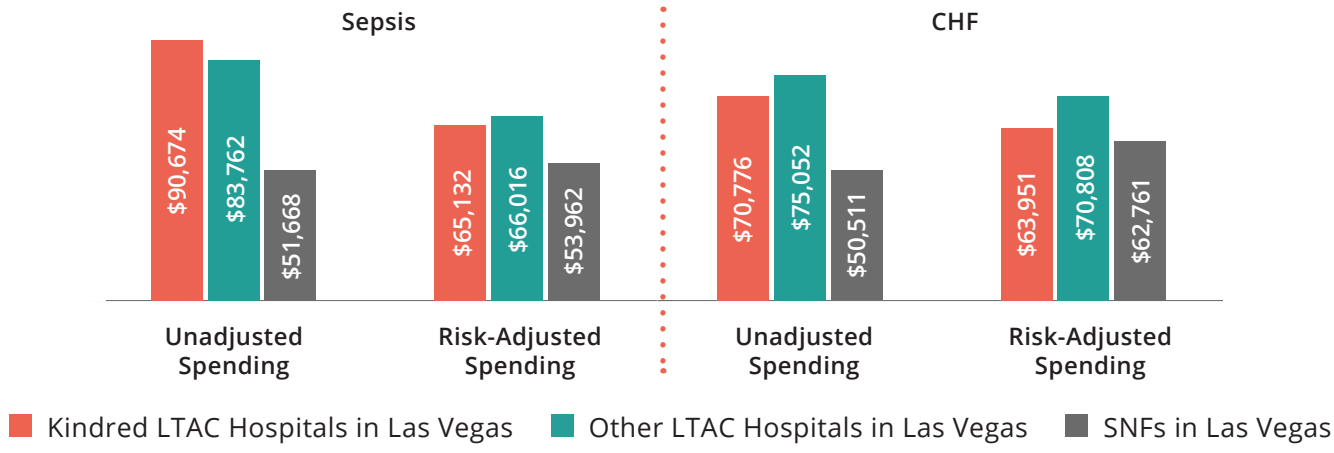
Figure 3: Risk Stratification of HCC Scores by Discharge Facility Comparison Group

Discharge Facility	Case Count	Average HCC Score	Population HCC Score
Kindred LTAC hospitals in Las Vegas Market	302	4.09	3.14
Other LTAC hospitals in Las Vegas Market	894	3.73	
All SNFs in Las Vegas Market	4,190	2.95	

Source: Cedar Gate analysis of 2017-2020 Silver State ACO claims

To risk-adjust the total Medicare spending for the 180-day episode and thus create comparable spending amounts across comparison groups, Cedar Gate normalized the observed Medicare spending amounts for each comparison group based on each comparison group's respective average HCC scores.[10] Figure 4 displays the total Medicare spending for the initial post-acute care setting (i.e., SNF or LTAC hospital) and the 180 days after discharge from that post-acute care setting, on both an unadjusted and risk-adjusted basis. Notably, **Kindred LTAC hospitals were found to have lower risk-adjusted total Medicare spending for the 180-day episode after the acute care discharge** when compared to other LTAC hospitals in Las Vegas for both sepsis and CHF, and comparable costs for CHF when compared to SNFs in Las Vegas. While initial stays at LTAC hospitals are more costly than SNF stays due to the clinical capacity and standards of delivering acute-level care, the cost differentials shrink dramatically after accounting for patient complexity in these settings.

Figure 4: Unadjusted and Risk-Adjusted Spending for Initial Post-Acute Care Setting Plus Subsequent 180-day Episodes by Chronic Condition Cohort

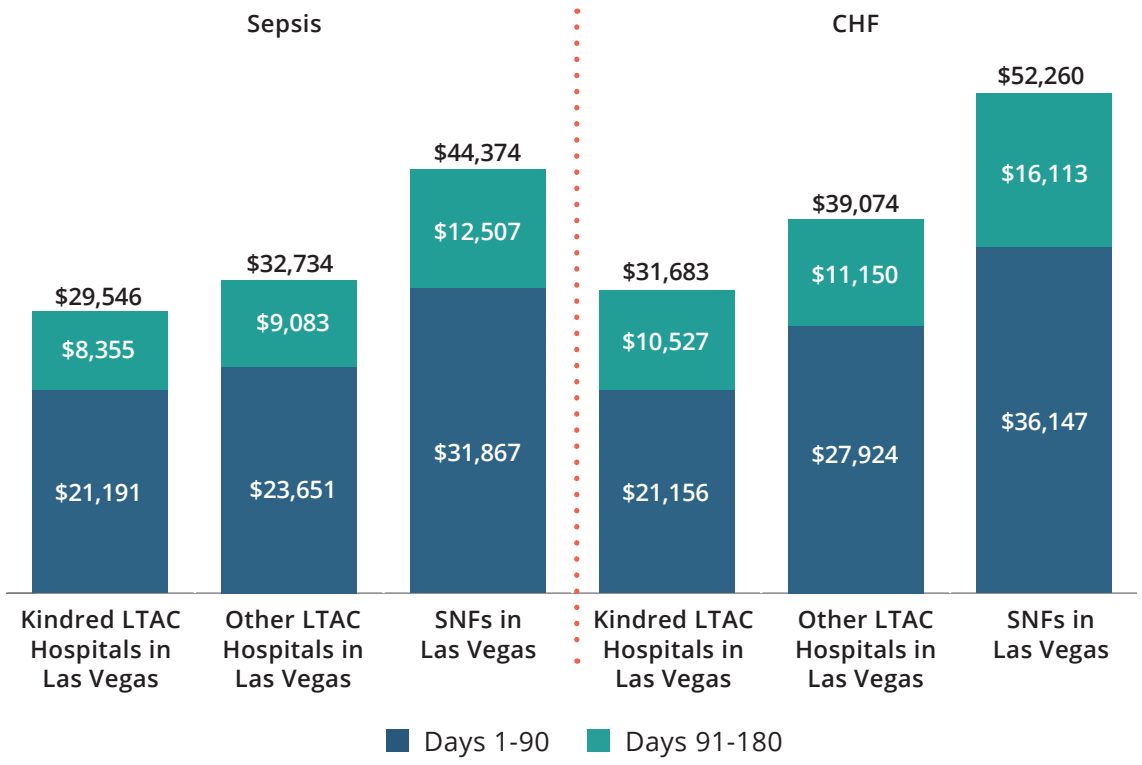


Source: Cedar Gate analysis of 2017-2020 Silver State ACO claims

10 Normalization was calculated by dividing the population HCC score by the average HCC score.

Using the same risk-adjustment process and methodology, Cedar Gate compared the risk-adjusted Medicare spending for the 180 days after discharge from either an LTAC hospital or SNF in the Las Vegas market. This analysis revealed substantially lower risk-adjusted Medicare spending for ACO beneficiaries initially discharged to Kindred LTAC hospitals for sepsis and CHF as compared to Medicare beneficiaries initially discharged to SNFs. More specifically, **ACO beneficiaries with an initial discharge to Kindred LTAC hospitals experienced a 33% and 39% reduction in the risk-adjusted Medicare spending for sepsis and CHF, respectively, compared to Medicare beneficiaries with initial discharge stays at SNFs in Las Vegas** (Figure 5).[11] Furthermore, even without risk-adjustment, spending within the 180-day post-discharge episode was also lower for patients initially discharged to Kindred LTAC hospitals compared to SNFs in Las Vegas across these two conditions (not pictured).

Figure 5: Risk-Adjusted Spending for Episodes Following Discharge from Initial Post-Acute Care Setting (by Chronic Condition and Comparison Group)



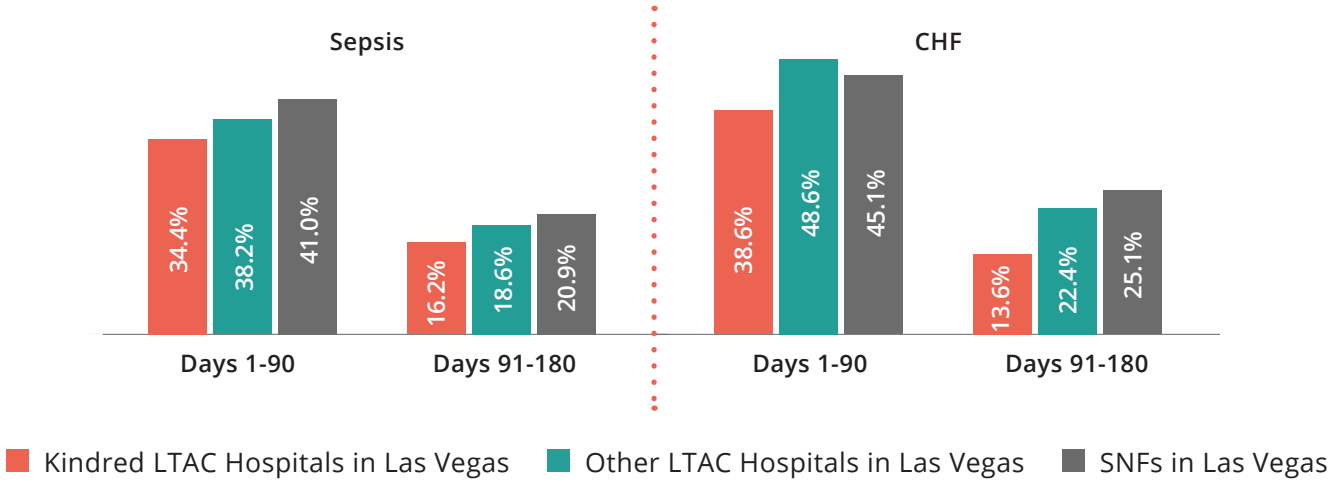
Source: Cedar Gate analysis of 2017-2020 Silver State ACO claims

For CHF and sepsis cohorts, Kindred LTAC hospitals in Las Vegas controlled total Medicare spending over the 180-day post-discharge episode better than other LTAC hospitals and SNFs within the Las Vegas market. As a contributing factor, **Kindred LTAC hospitals saw a lower STACH readmission rate in the 90- and 180-day**

11 Beneficiaries who expired during the 180-day episode were excluded from this analysis.

periods after discharge for both chronic conditions when compared to other LTAC hospitals and SNFs within the Las Vegas market, as shown in Figure 6. These findings suggest that Kindred LTAC hospitals may have been providing higher-quality care for these beneficiaries during their stay, thus resulting in reduced spending in other care settings, including readmissions, during the subsequent 180 days.

Figure 6: STACH Readmission Rate after Discharge from SNF or LTAC Hospital (by Chronic Condition and Comparison Group)



Source: Cedar Gate analysis of 2017-2020 Silver State ACO claims

KINDRED LTAC HOSPITAL PERFORMANCE AMONG THE MEDICARE FFS POPULATION

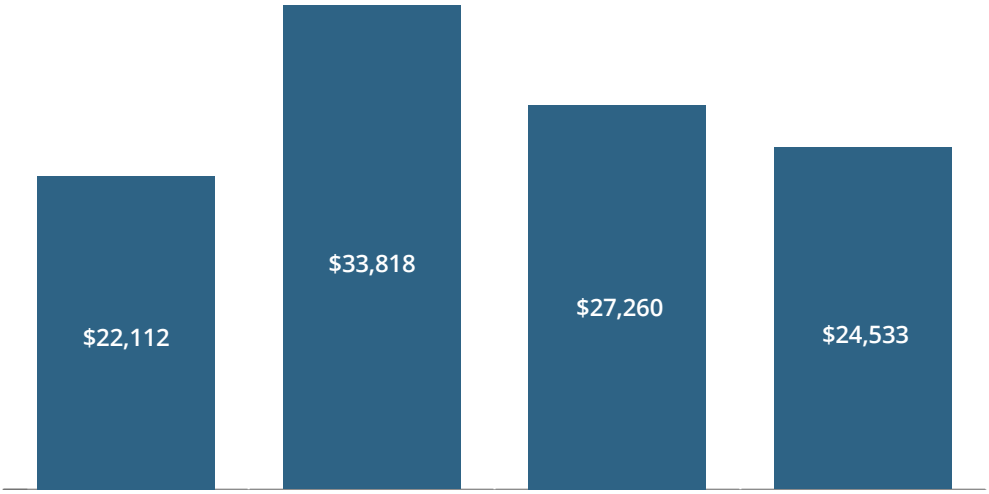
An analysis by ATI demonstrated that positive utilization patterns among Kindred LTAC hospitals in Las Vegas are not limited to Silver State ACO beneficiaries but extend to the broader Medicare FFS population within Las Vegas and greater Nevada. ATI studied 100% Medicare Part A claims files to determine how Kindred LTAC hospitals in Las Vegas have performed for the Medicare FFS population as a whole and if this aligned with its favorable performance and management of Silver State ACO beneficiaries, as discussed above.

ATI evaluated 90-day episodes in CY 2019 to examine the utilization and performance of Kindred LTAC hospitals in Las Vegas. All episodes were initiated with a STACH stay where the initial site of discharge was an LTAC hospital. The analysis focused on average Medicare spending within 90-day episodes for discharges to Kindred facilities compared to other LTAC hospitals in the Las Vegas, Nevada, and national markets.[12] In order to isolate the impact of the LTAC hospital stay on post-LTAC hospital discharge spending, ATI did not incorporate the spending associated with the initiating STACH stay or initial LTAC hospital stay (i.e., the initial STACH discharge destination) in the average spending amounts that were compared.

12 The analysis defined Medicare spending as the average Medicare Part A spend in the 90 days post-STACH discharge for all episodes initially discharged to an LTAC hospital. Spending was not standardized across geographic markets or risk-adjusted for patient severity. Beneficiaries who expired during the 90-day episode were excluded from this analysis. The Las Vegas market is defined as all facilities in Clark County; the Nevada market is all facilities in all Nevada counties; and the National market is all facilities in all U.S. counties. There were four LTAC hospitals in the Las Vegas market, six in the Nevada market, and 365 in the National market in CY 2019. These counts are not mutually exclusive.

ATI's analysis revealed favorable Medicare spending patterns in 2019 for Kindred LTAC hospitals in Las Vegas, even without risk-adjusting to reflect the complexity of Kindred's patients. Representing almost one-third of the total 90-day episodes within the Las Vegas LTAC hospital market, **Kindred's average Medicare spending for the 90-day episode ($22,112) for all conditions was 35% lower than that of all other LTAC hospitals in the Las Vegas market ($33,818), and also lower than LTAC hospitals nationally ($24,533)** (Figure 7).

Figure 7: Overall Average Spending after Discharge from Initial LTAC Hospital Stay for All Conditions, CY 2019



	Kindred LTAC Hospitals in Las Vegas Market	Other LTAC Hospitals in Las Vegas Market	All LTAC Hospitals in Nevada Market	All LTAC Hospitals in National Market
#90-day Episodes	120	305	572	33,335

Source: ATI analysis of 100% Medicare FFS claims, CY 2019

Furthermore, the breakdown of these overall average Medicare spending totals by care setting revealed favorable readmission spending at Kindred LTAC hospitals in Las Vegas (Figure 8).[13] **Kindred's average readmission spending ($6,703) was nearly half the spending of all other LTAC hospitals in the Las Vegas market ($13,019)** and was a large driver of its lower overall spending during the 90-day episode. This pattern of low readmission spending holds when comparing Kindred LTAC hospitals against all LTAC hospitals in the Nevada and national markets as well. This suggests that **Kindred LTAC hospitals effectively managed patient needs during the initial LTAC hospital stay, likely reducing disruption to patients and improving patients' overall care experience during their post-LTAC hospital period**.

13 Readmission spending captures spending associated with readmissions to a STACH that occur within the 90-day episode and after discharge from the initial LTAC hospital stay.

Figure 8: Unadjusted Average Readmission Spending by Care Setting (Within 90-Day Episode) after Discharge from Initial LTAC Hospital Stay (all DRGs), CY 2019

	Kindred LTAC Hospitals in Las Vegas Market	Other LTAC Hospitals in Las Vegas Market	All LTAC Hospitals in Nevada Market	All LTAC Hospitals in National Market
#90-day Episodes	120	305	572	33,335

Source: ATI analysis of 100% Medicare FFS claims, CY 2019

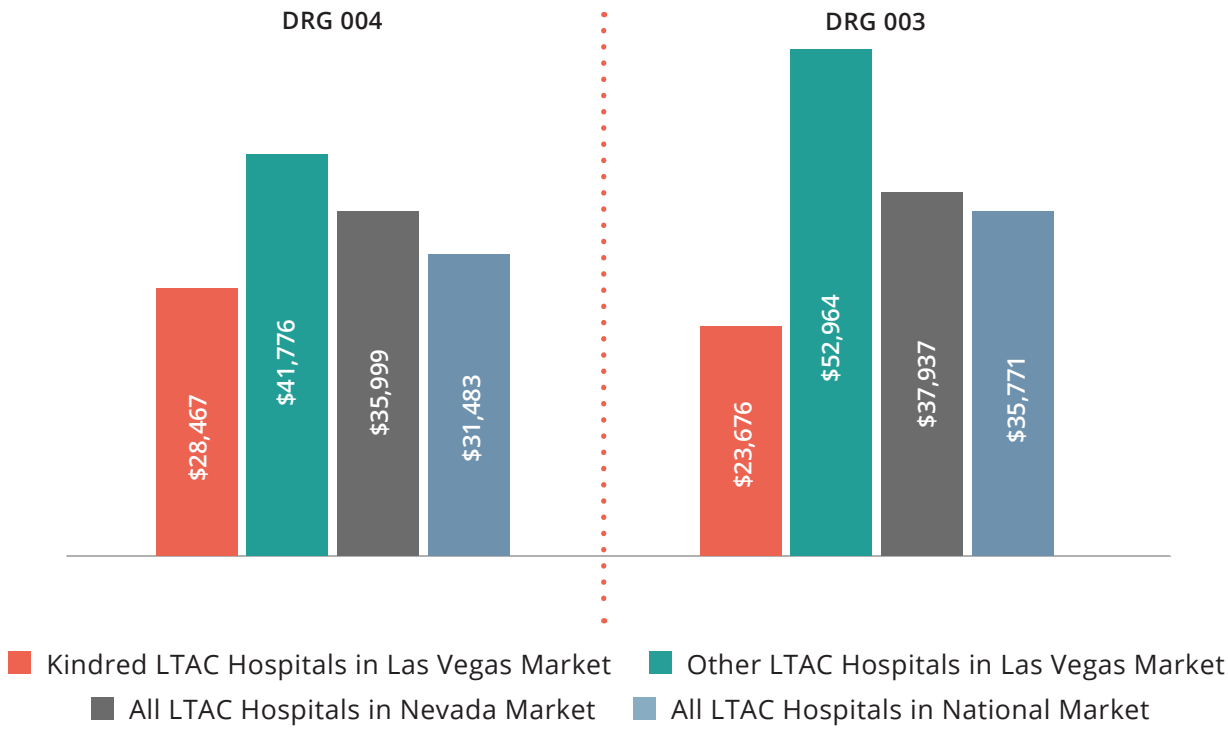
ATI sought to pressure-test these favorable findings for Kindred LTAC hospitals in Las Vegas to confirm that lower volume (and possibly lower acuity) DRGs discharged to LTAC hospitals were not masking the overall patterns. To do so, ATI examined the average Medicare spending overall and by care setting for two STACH DRGs commonly discharged to LTAC hospitals in 2019 (Figure 9). In 2019, these two DRGs represented 26% of the total case volume among all Medicare FFS beneficiaries who received care at Kindred LTAC hospitals in Las Vegas.

Figure 9: High Volume STACH DRGs Discharged to LTAC Hospitals, CY 2019

DRG	Description
004	TRACHEOSTOMY WITH MECHANICAL VENTILATION >96 HOURS OR PRINCIPAL DIAGNOSIS EXCEPT FACE, MOUTH AND NECK WITHOUT MAJOR O.R. PROCEDURE
003	ECMO OR TRACHEOSTOMY WITH MECHANICAL VENTILATION >96 HOURS OR PRINCIPAL DIAGNOSIS EXCEPT FACE, MOUTH AND NECK WITH MAJOR O.R. PROCEDURE

ATI's analysis found that the patterns held for 2019 across both DRGs. Specifically, **Kindred LTAC hospitals continued to have lower overall spending within the 90-day post-discharge episode for these two DRGs** (Figure 10). Notably, Kindred's overall Medicare spending for the episode was 45% of the spending for all other LTAC hospitals in Las Vegas for DRG 003. Furthermore, the analysis (not pictured) showed that Kindred's average readmission spending within the 90-day episodes also looked favorable compared to Las Vegas LTAC hospitals across these high-volume DRGs, largely driving the lower overall spending totals.

Figure 10: Overall Unadjusted Average Medicare Spending (Within 90-day Episode) after Discharge from Initial LTAC Hospital Stay by High Volume LTAC Hospital DRGs, CY 2019

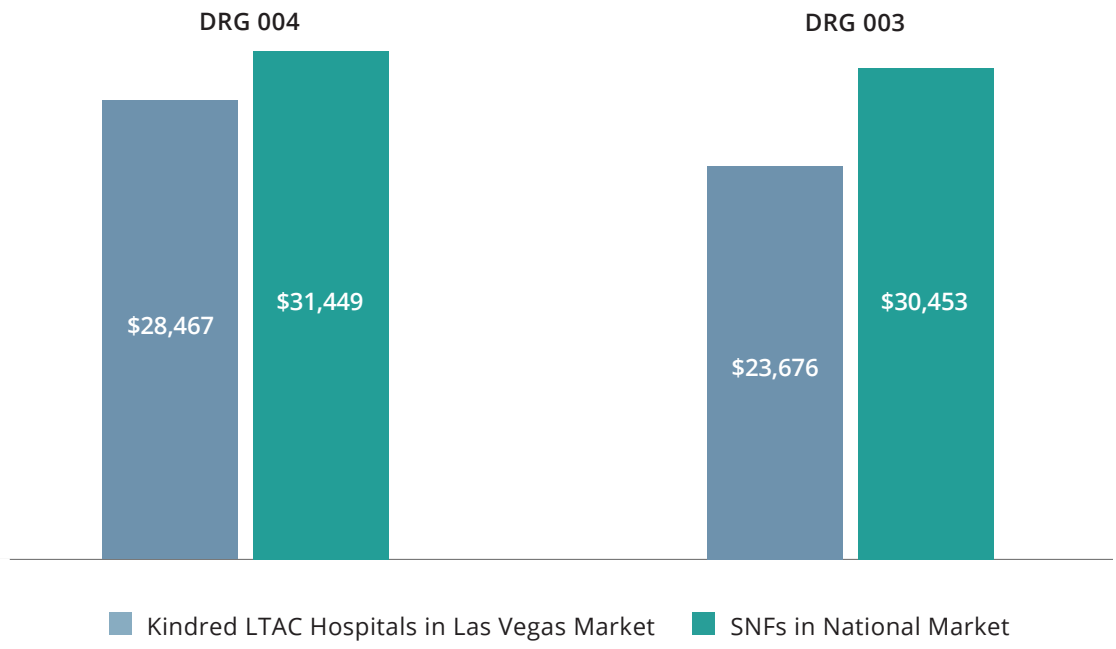


Source: ATI analysis of 100% Medicare FFS claims, CY 2019

ATI mirrored the analysis above to examine how average spending in the 90-day episode for Kindred LTAC hospitals in Las Vegas compared to SNFs nationally.[14] In addition to their favorable performance when compared to other LTAC hospitals (as shown in Figure 10 above), Kindred LTAC hospitals also outperformed national SNF spending for DRGs 003 and 004. Despite not being risk-adjusted for patient complexity, **for beneficiaries discharged from a STACH with either DRG 003 or 004 to Kindred LTAC hospitals in Las Vegas, the overall average Medicare spending (within the 90-day episode) was lower – on average 22% or 9%, respectively – than for beneficiaries initially discharged to a SNF** (Figure 11).

14 All 90-day episodes were initiated with a STACH stay where the initial site of discharge was a Kindred LTAC hospital in Las Vegas or a SNF in the national market. A national SNF comparison group was used since the volume for these DRGs for the Las Vegas and Nevada SNF comparison groups was too small to be reliable. Medicare spending was not standardized across geographic markets or risk-adjusted for patient severity.

Figure 11: Overall Unadjusted Average Medicare Spending (Within 90-day Episode) after Discharge from Initial Discharge Location by Care Setting and High Volume LTAC Hospital DRGs, CY 2019



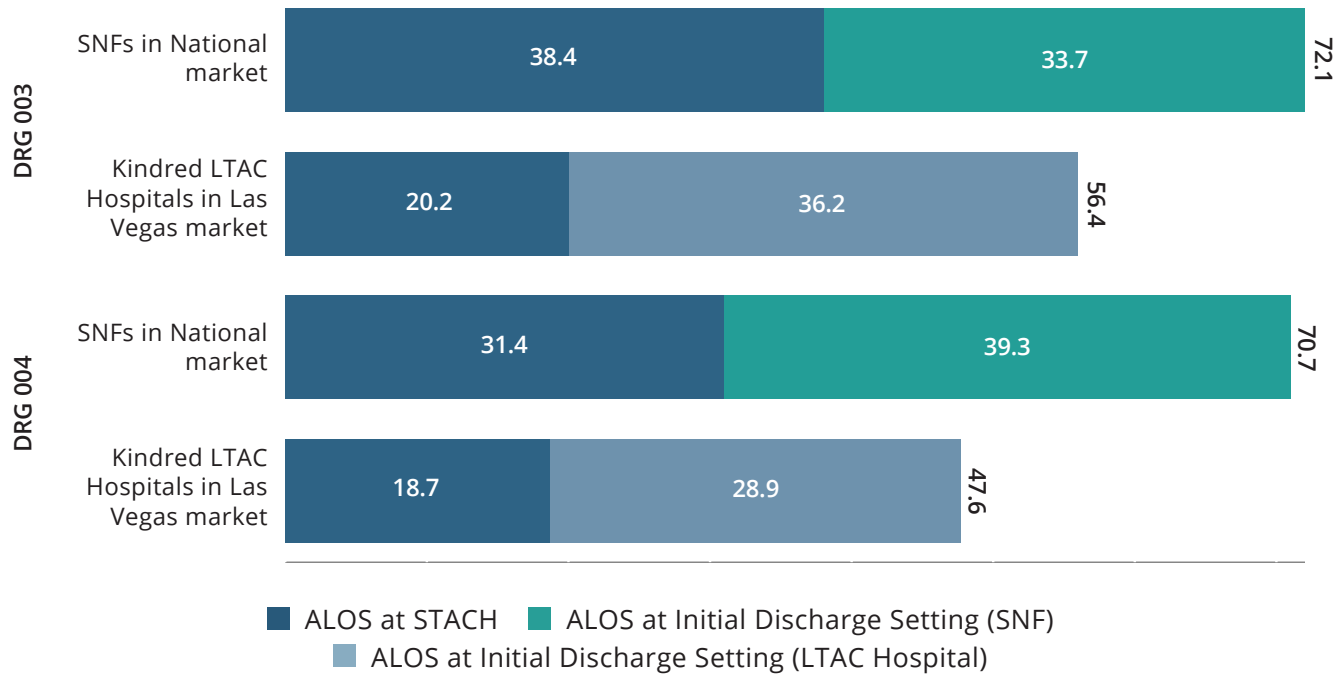
Source: ATI analysis of 100% Medicare FFS claims, CY 2019

This analysis further reaffirms the value of LTAC hospitals for patients on ventilators. Specifically, these findings suggest that Kindred LTAC hospitals were more effective at managing care and Medicare spending after discharge for these complex patients when compared to SNFs. In fact, this analysis found that the overall total cost of care in Kindred LTAC hospitals for DRG 003 was five percent less than the total cost of care for patients discharged to SNF.[15] Though not as significant, the total cost of care for DRG 004 STACH discharges was within one percent between initial discharges to a SNF and to Kindred LTAC hospitals (not pictured).

Importantly, these data also showed that **patients experienced nearly 20 fewer days away from their homes and loved ones when under the care of Las Vegas Kindred LTAC hospitals as compared to SNFs across the nation** (Figure 12). These findings may partly be attributed to a care transitions initiative operating in these facilities during the study period, which identifies patients in the STACH who might benefit from LTAC hospital services and facilitates their earlier discharge to LTAC hospitals. This process expedites intensive therapy and care in the LTAC hospital to improve outcomes and the overall patient experience. Taken together, these findings indicate that Kindred LTAC hospitals in Las Vegas have developed a specialization in caring for critically complex patients, which has likely created efficiencies and contributed to a better care experience overall, in addition to Medicare savings within the 90-day episode timeframe. Kindred's care transitions initiative also warrants additional evaluation and replication in other markets, as appropriate.

15 Overall total cost of care incorporates Medicare spending for the STACH, initial discharge location (i.e., SNF or LTAC hospital), and Part A Medicare spending for all settings during the 90 days post-STACH discharge.

Figure 12: Average Length of Stay (in Days) at STACH and Initial Discharge Location by High Volume DRGs Discharged to LTAC Hospitals, CY 2019



Source: ATI analysis of 100% Medicare FFS claims, CY 2019

CONCLUSION AND FUTURE CONSIDERATIONS

These findings indicate that Kindred LTAC hospitals in Las Vegas have been successful at providing specialized care while reducing Medicare spending following discharge from the initial post-acute care setting, especially within readmissions, when compared to other LTAC hospitals and SNFs on both a risk-adjusted and unadjusted basis. As seen in the Silver State ACO case study, the ACO has remained successful in achieving shared savings despite its higher utilization of LTAC hospitals. Furthermore, this research reaffirms that certain ventilator associated STACH DRGs, such as 003 and 004, are particularly well-suited for the highly specialized respiratory care provided at LTAC hospitals, based on the observed impact on beneficiaries' length of stay and reductions in overall Medicare spending.

The Cedar Gate and ATI analyses demonstrate that Kindred LTAC hospitals can meaningfully participate and contribute to success in value-based care models, and that a continued and expanded role exists for them in providing cost-effective care to and appropriately managing clinically complex patients in these models. While the analysis presented here focused on the Medicare FFS population, we expect the findings related to reducing downstream rehospitalizations and patient disruption could be translated to a managed

> **"LTAC hospitals definitely have a role [in value-based care]. A lot of times it is the most appropriate site of care for a patient, and this can prevent readmissions…if [LTAC hospital utilization] is appropriate, it is necessary."**
>
> – Silver State ACO leadership in conversations with ATI Advisory

care population as well, given the similarities in care delivery for beneficiaries across Medicare FFS and Medicare Advantage (MA). There are likely additional opportunities for LTAC hospitals to play an active role in managing high-acuity populations in MA, given the additional flexibility in MA related to patient eligibility, length of stay, and risk-based financial models. For example, a MA plan could reimburse LTAC hospitals on an alternative basis, such as a per diem basis (vs. a DRG basis), with an opportunity for shared savings if the LTAC hospital reduces expected costs, which could result in further savings. In an illustrative analysis, Cedar Gate modeled this scenario by standardizing the length of stay for all initial discharge location settings (i.e., LTAC hospital or SNF in the Las Vegas market) and saw a 10-13% reduction in the risk-adjusted spending over 180 days, even when including the cost of the initial discharge location.

This analysis demonstrates that additional savings could be accrued via value-based models that utilize LTAC hospitals for the management of high-acuity patients. Kindred LTAC hospitals in Las Vegas and Silver State ACO's experience strongly suggest that LTAC hospitals can be a cost-effective site of care that minimizes disruption to patients through fewer readmissions following the initial post-acute care stay. It is essential that payers and at-risk entities consider the lower overall spending and impact on patient experience that may occur after the initial post-acute care setting when assessing the value of LTAC hospitals in the value-based care continuum. As such, these findings indicate that LTAC hospitals should be considered for participation in additional value-based models, such as ACOs as well as payer networks to provide high-quality care for a complex patient population. We recommend further evaluation of LTAC hospital performance nationwide beyond the Las Vegas market, as well as testing and evaluation of innovative value-based models across payers utilizing the unique clinical characteristics of LTAC hospitals.

METHODS SUMMARY

	Cedar Gate Technologies	ATI Advisory
Data Source	100% Medicare Parts A and B FFS claims (risk-adjusted for clinical complexity)	100% Medicare Part A FFS claims
Year(s) Studied	Calendar Years 2017-2020	Calendar Year 2019
Study Population	All Silver State ACO beneficiaries	All Medicare FFS beneficiaries
Conditions Studied	Sepsis and CHF (identified from STACH claims using ICD-10 codes)	All DRGs; DRGs 003 and 004 (from STACH claims)
Episode Definition	180-day period following discharge from initial SNF or LTAC hospital stay	90-day period following discharge from STACH

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IDEAS TO ACTION IN HEALTHCARE & AGING

ABOUT ATI ADVISORY

ATI Advisory (ATI) is a research and advisory services firm working to transform the delivery of healthcare and aging services for older adults. ATI conducts research, generates new ideas, and helps organizations lead and deliver change in senior care.

Founded in 2014 by Anne Tumlinson, ATI Advisory is a team of researchers and business strategists with expertise in Medicare, Medicare Advantage, Medicare and Medicaid integration, long-term care service delivery innovation, post-acute care service delivery innovation, and seniors housing and healthcare integration. Team members have worked in both public and private sector positions and bring diverse experiences and perspectives to each new project.

ATI's focus is to break down public and private sector barriers that prevent innovative solutions to siloed, broken systems across acute, post-acute, and long-term care services and supports. ATI provides insight and strategy backed by original research and delivers practical solutions for organizations and families they serve.

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CEDAR GATE TECHNOLOGIES

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