**Santa Cruz LTAC Community Project**

**Leadership Team Midcourse Consensus Statement**

The *2011* *Dartmouth Atlas of Health Car*e reported that the Santa Cruz Hospital Referral Region (HRR) has the lowest per capita cost for Long Term Acute Care (LTAC) hospital expenditures for Medicare beneficiaries in the country. Because the reasons behind this low rate are not readily apparent, the Centers for Medicare & Medicaid Services (CMS) funded a 12-month Special Innovation Project, *Santa Cruz LTAC Community Project,* to engage the local community in studying the factors that contribute to the low cost of LTAC services in the Santa Cruz HRR and to identify strategies that can be replicated in other regions.

The *LTAC Project* is a collaboration involving CMS; Health Services Advisory Group of California, Inc. (HSAG of California), the Medicare Quality Improvement Organization for California; the Health Improvement Partnership of Santa Cruz County (HIP), a local health care coalition; and the Colorado Foundation for Medical Care (CFMC), the Medicare Quality Improvement Organization for Colorado. The *LTAC Project* is subtitled “*Using Data to Drive Dramatic Improvement in Santa Cruz*.” This fits with HIP’s mission as an IHI Triple Aim Improvement Community to preserve and advance positive components of the local model of care in order to improve the health of the population, enhance the patient experience of care, and reduce the per capita cost of care.

This statement represents the mid-point consensus findings of the Leadership Team organized for the *LTAC Study*. The Leadership Team is composed of representatives of the local hospitals, skilled nursing facilities, medical groups, hospice, the Medicaid health plan, an out-of-county LTAC facility, University of California Santa Cruz and a Medicare beneficiary. The findings are based on a three-part Root Cause Analysis that includes a qualitative study of a January 10, 2013 Learning and Action Network (LAN) community meeting structured using the Appreciative Inquiry process.[[1]](#footnote-1)

Background

According to the *Dartmouth Atlas of Health Care*, the risk-adjusted standardized per capita costs for LTAC services in the United States range from less than $10 to more than $1,000 with a national average of $155. The Santa Cruz Hospital Referral Region (HRR) is at the lowest end of the spectrum with a per capita cost of $8. In 2011, the Santa Cruz HRR had 31,000 Medicare Fee-for-Service beneficiaries and only seven received care from an LTAC.[[2]](#footnote-2)

LTAC hospitals are certified as acute care hospitals, but are not paid under the inpatient prospective payment system. LTACs focus on patients who, on average, require an extended length of stay of more than 25 days beyond their short term acute hospitalization. Many of the patients in LTACs are transferred there from an intensive or critical care unit.[[3]](#footnote-3)

LTACs specialize in treating patients with more than one serious condition, but who may improve with time and care, and return home. The conditions include: pulmonary conditions inclusive of ventilator weaning, neurological disorders, cardiac conditions, wound care, renal disorders, infectious disease, bariatric care, cancers, post trauma care, and surgical complications.[[4]](#footnote-4) There are 26 LTACs located in California. There are no LTACs on the Central Coast; there are two LTACs in the San Francisco Bay area.[[5]](#footnote-5)

Factors that are thought to contribute to low utilization of LTAC services fall into two broad categories: 1) substitution of services across the continuum of care, i.e. beneficiaries whose health conditions are amenable to LTAC services receive care in other settings; and 2) low demand for LTAC services, i.e., beneficiaries do not have health conditions that require use of services provided by a LTAC.[[6]](#footnote-6) These categories are used to report the *LTAC Study* midcoursefindings below.

Substitution of Services Across the Continuum of Care

 In initial conversations with local health care leaders, one hypothesis for why Santa Cruz County has low LTAC utilization is that patients with diagnoses generally seen in LTACs stay longer in short-term hospitals and/or are transferred to skilled nursing facilities or other post acute care services in lieu of an LTAC. 2011 Medicare data does not support this hypothesis.

* Santa Cruz HRR had a shorter average length of stay in short-term hospitals for the top 10 LTAC diagnosis categories than 14 of the other HRRs in California.[[7]](#footnote-7)
* Santa Cruz HRR has one of the lowest per-user standardized cost for short-term hospitals of all HRRs in the State of California with the exception of San Luis Obispo HRR.[[8]](#footnote-8)
* Santa Cruz HRR has the lowest per-user standardized cost for SNFs of all HRRs in the State of California with the exception of San Mateo County HRR.[[9]](#footnote-9)
* In addition to low LTAC use, the average cost per beneficiary for the Santa Cruz HRR was also lower than the State of California for short-term hospitals, home health agencies, and skilled nursing facilities.[[10]](#footnote-10)

Another community hypothesis is that hospice substitutes for LTAC utilization. Although of the top 10 diagnosis categories for hospice and LTACs, only one category, chronic obstructive pulmonary disease, is the same[[11]](#footnote-11) , the Santa Cruz HRR does have significantly higher average per capita costs for hospice than the State of California.[[12]](#footnote-12) As discussed below, strong hospice and palliative care programs appear to be part of the reason for low health care utilization in the Santa Cruz HRR.

 Based on the finding that patients with diagnoses generally seen in LTACs are not substituting other services, the Leadership Team asked if there is any indication that this affects patient outcomes. A primary quality indicator available from the Medicare claims database is the rate of 30-day readmissions following short- term hospital discharge.

 The Santa Cruz HRR has lower, not higher, 30-day readmission rates than the nation and the State of California, including overall, by gender and stratified by disease category.[[13]](#footnote-13) In October to December 2011 30-day readmissions per 1,000 Medicare beneficiaries living in the Santa Cruz region was 7.18 per 1,000 as compared to 11.32 for California beneficiaries and 13.51 for US beneficiaries.[[14]](#footnote-14) Watsonville HSA had a higher readmission rate than the Santa Cruz HSA, however both HSAs had lower readmission rates than the State of California and the nation.[[15]](#footnote-15)

The Leadership Team recognizes the limitations of relying only on Medicare claims data to understand the factors that contribute to the low cost of LTAC services in the Santa Cruz HRR. A Learning and Action Network (LAN) meeting was held on January 10, 2013 to engage the community in discovering the reasons, values, and conditions for these results. The 43-participants answered the questions “What is already working well?” “What enables the community to achieve these results?” and “What values fuel your dedication and that of your community?” The most frequently mentioned themes were Collaboration among Agencies, Patient Centered Care, and Patient/Family/Community Relationships.

***Collaboration among Agencies*** was one of the most-frequent themes noted by participants from Community Organizations, Hospice, Long Term Care, and Medicare Beneficiaries.[[16]](#footnote-16)

Collaboration among Agencies was defined as “communication, collegial atmosphere, community support/collaboration/problem solving (despite differences).” Examples included: collaborative spirit within community; diversity of small organizations that are willing to cooperate, not competing.[[17]](#footnote-17) Collaboration among agencies may indicate that substitution of services includes community programs that are not billed to Medicare, for example Hospice’s Transitions Program. <http://www.hospicesantacruz.org/patients-family-community/transitions-program>

Low Demand for LTAC Services

 Another hypothesis for the differences in demand for LTAC services in the Santa Cruz HRR is that the population characteristics of Santa Cruz beneficiaries differ from the overall Medicare population and the former rarely require LTAC services.[[18]](#footnote-18) Although 7.4 percent of Medicare beneficiaries in the Santa Cruz HRR are Hispanic, similar to California with 7.6 percent Hispanic beneficiaries, the Santa Cruz HRR has significantly fewer Blacks, Asians, and Native Americans than the State of California and the nation. [[19]](#footnote-19) There are no substantial differences in the age distribution of the Santa Cruz HRRs.[[20]](#footnote-20)

Although differences in the population characteristics may be part of the explanation for low LTAC utilization, Medicare beneficiaries residing in the Santa Cruz HRR have a pattern of low utilization of acute care services in comparison with beneficiaries of the same race/ethnicity.

* The Santa Cruz HRR has lower short term acute care admission rates than the nation and the State of California, including overall, by gender and stratified by disease category.[[21]](#footnote-21) In October to December 2011 inpatient admissions per 1,000 Medicare beneficiaries living in the Santa Cruz region was 50.80 per 1,000 as compared to 61.21 for California beneficiaries and 73.61 for US beneficiaries.[[22]](#footnote-22)
* Watsonville HSA had a slightly higher admission rate than Santa Cruz HSA; however, both HSA’s had lower admission rates than the State of California and the nation.[[23]](#footnote-23)
* There are fewer differences in utilization patterns for the different race/ethnicities in the Santa Cruz HRR when compared with the State of California and the nation. This suggests that there may be fewer disparities for different ethnic groups.[[24]](#footnote-24)
* The number of ED visits for the Santa Cruz HRR is lower than the State of California and the nation.[[25]](#footnote-25)

It is again important to note that the small sample size for LTACs made analysis of results difficult to compare for DRG frequency, utilization as a function of race/ethnicity, per user standardized cost, mortality rates, length of stay, and percentage of beneficiaries discharged to hospice.[[26]](#footnote-26)

An alternate hypothesis is that the Santa Cruz community promotes advance directives and has a strong hospice culture and, therefore, more consistently honors patients’ expressed preferences for End of Life Care (i.e., not placing them on ventilators as often as might otherwise be done results in less LTAC services for ventilator maintenance and attempts to wean patients).[[27]](#footnote-27)

Palliative care programs are also expanding in the Santa Cruz region. Palliative care places focus on improving quality of life while providing comfort for patients with serious chronic conditions and life-threatening illnesses. Another limitation of the Medicare claims data used in this study is that it does not recognize or use the term palliative care, so the data may exemplify underutilization of this diagnosis code (V66.7).[[28]](#footnote-28)

The most common explanation of why Santa Cruz HRR beneficiaries have a low per capita LTAC costs is that there is no LTAC in the Santa Cruz HRR. Although there are many HRRs that do not have LTACs and have higher LTAC use, the lack of a local facility IS an important factor. Medicare beneficiaries residing in the Santa Cruz HRR receive most of their care within the Santa Cruz HRR. The other common regions in which Santa Cruz HRR beneficiaries receive care include the following surrounding HRRs: Salinas, San Jose, Alameda County, San Francisco, and San Mateo County.[[29]](#footnote-29)

Participants at the January 10, 2013 Learning and Action Network (LAN) underscored the importance of local services. ***Patient/Family/Community Relationships*** was frequently mentioned as a reason that the community achieves good results for seriously ill patients. LAN participants from Community Organizations, Long Term Care, and Outpatient Care/Rehab/Palliative Care/Health Plans/EMS most frequently cited this theme.[[30]](#footnote-30) Patient/Family/Community Relationships was defined as “community neighborly spirit, close trusted relationships/strong network, patient choice/patient voice, and patient/family engagement.” Examples included: importance of working with network of trusted resources (friends, agencies, physicians, etc.), and collaboration between family and health care providers.

***Patient-Centered Care*** was another frequently mentioned explanation for good results for seriously ill patients by LAN participants from Community Organizations, Hospice, and Hospitals/Home Health Services (only theme mentioned by this group).[[31]](#footnote-31) Patient-centered Care was defined as “individual level of care coordination, case management, cultural sensitivity/competency, care/quality of life positive, caring/compassion/commitment, and end-of-life care.” Examples included: emotional needs met; care management—interdisciplinary team; honored patient wishes; do everything possible to keep patients at home; and the nurse listened.

All of these factors appear to explain the low utilization of LTAC services within the context of a pattern of low utilization of Medicare acute care and post acute care services. Specifically the small percentage of black beneficiaries; a community culture promoting advance directives and hospice services; preference for local health care services; strong patient/family/community relationships; and patient-centered care.

Work Plan for Second 6-Months of *LTAC Project*

Over the second 6-months of the *LTAC Project,* the Leadership Team will continue to collect data and engage the community to understand the reasons for the low rate of LTAC use and other acute care utilization including exploring disparities in this pattern for low income and the Hispanic residents. In June 2013, HIP will conduct two focus groups: one for low-income Medicare beneficiaries (dual eligible) and the second for Spanish-speaking residents.

The January 10, 2013, Learning and Action Network (LAN) meeting also provided direction for actions that could be taken to sustain and further improve the efficient Santa Cruz delivery system. During the dreaming portion of the meeting, LAN participants were asked to build on what is already successful and design a thriving, sustainable system that truly provides the best care for people in all stages of life—healing, recovery, and end of life—and ultimately improves the capacity to deliver long-term community-based care.[[32]](#footnote-32)

Important themes of the dreaming questions include ***patient advocacy/support*** and ***patient empowerment.[[33]](#footnote-33)*** Patient Advocacy/Supportis defined as providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.[[34]](#footnote-34) Patient Empowermentis defined as providing of information regarding therapeutic options so that a patient can actively participate in the decision on whether to undergo a diagnostic/therapeutic procedure or pursue alternatives.[[35]](#footnote-35)

In response to these findings, the Work Plan for the second six months of the *LTAC Project* includes small tests of change to improve the discharge decision process for seriously ill hospital patients; evaluation of *The Conversation Project* tools (<http://theconversationproject.org>) to advance patient/family/community communication; and policy changes to support the Santa Cruz HRR model of care. All the findings of the *LTAC Project* will be presented at a second LAN meeting in July 2013.

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1. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Root Cause Analysis: Part III, March 15, 2011, p. ES 1. [↑](#footnote-ref-1)
2. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, p. 2-3 and p. 3-11. [↑](#footnote-ref-2)
3. HSAG, Revised Response to Request for Proposal for SIP-CA-01 entitled “Using Data to Drive Dramatic Improvement in Santa Cruz”, September 14, 2012, p. 2. [↑](#footnote-ref-3)
4. HSAG, Revised Response to Request for Proposal for SIP-CA-01 entitled “Using Data to Drive Dramatic Improvement in Santa Cruz”, September 14, 2012, p. 2. [↑](#footnote-ref-4)
5. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, p. 2-2. [↑](#footnote-ref-5)
6. HSAG, Revised Response to Request for Proposal for SIP-CA-01 entitled “Using Data to Drive Dramatic Improvement in Santa Cruz”, September 14, 2012, p. 3. [↑](#footnote-ref-6)
7. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3: Root Cause Analysis, November 2012, p. 2-12. [↑](#footnote-ref-7)
8. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Root Cause Analysis: Part III, March 15, 2011, p. 34. [↑](#footnote-ref-8)
9. Ibid, p. 34-35. [↑](#footnote-ref-9)
10. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, p. 3-20. [↑](#footnote-ref-10)
11. Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3: Root Cause Analysis –Nov. 2012, p. 1-2. [↑](#footnote-ref-11)
12. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, p. 3-20. [↑](#footnote-ref-12)
13. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, p. 3-4. [↑](#footnote-ref-13)
14. Ibid, p. 3-4. [↑](#footnote-ref-14)
15. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Root Cause Analysis: Part III, March 15, 2011, p. 17. [↑](#footnote-ref-15)
16. Ibid, p. 43. [↑](#footnote-ref-16)
17. Ibid, p. 44. [↑](#footnote-ref-17)
18. HSAG, Revised Response to Request for Proposal for SIP-CA-01 entitled “Using Data to Drive Dramatic Improvement in Santa Cruz”, September 14, 2012, p. 5. [↑](#footnote-ref-18)
19. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, p. 3-16. [↑](#footnote-ref-19)
20. Ibid, p. 3-16. [↑](#footnote-ref-20)
21. Ibid, p. 3-2. [↑](#footnote-ref-21)
22. Ibid, p. 3-2. [↑](#footnote-ref-22)
23. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Root Cause Analysis: Part III, March 15, 2011, p. 16. [↑](#footnote-ref-23)
24. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, p. 3-17. [↑](#footnote-ref-24)
25. Ibid, p. 3-21. [↑](#footnote-ref-25)
26. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3 Initial Root Cause Analysis, October 2012, page 2. [↑](#footnote-ref-26)
27. HSAG, Revised Response to Request for Proposal for SIP-CA-01 entitled “Using Data to Drive Dramatic Improvement in Santa Cruz”, September 14, 2012, p. 8. [↑](#footnote-ref-27)
28. Using Data to Drive Dramatic Improvement in Santa Cruz”, Deliverable 3.3: Root Cause Analysis –Nov. 2012, p. 2-7. [↑](#footnote-ref-28)
29. Ibid, p. A-1. [↑](#footnote-ref-29)
30. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Root Cause Analysis: Part III, March 15, 2011, p. 43. [↑](#footnote-ref-30)
31. Ibid, p. 43. [↑](#footnote-ref-31)
32. HSAG, “Using Data to Drive Dramatic Improvement in Santa Cruz”, Root Cause Analysis: Part III, March 15, 2011, p. 45. [↑](#footnote-ref-32)
33. Ibid, page 46. [↑](#footnote-ref-33)
34. Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century, 2001.* [↑](#footnote-ref-34)
35. The Free Dictionary, *Patient empowerment*, 2013. [↑](#footnote-ref-35)