SARAH CAVE CONSULTING

HUEBNER ADVISORY LLC

August 8, 2018

CBS Assembly Members:

Considerable effort has been directed at studying and evaluating the financial success of Sitka Community Hospital (SCH). In recent years, ECG completed an affiliation study on behalf of Southeast Alaska Regional Health Consortium (SEARHC) and SCH, Stroudwater completed an operations study on behalf of SCH. Both the ECG and Stroudwater reports questioned the sustainability of SCH without significant operating improvements and major turnaround efforts. As a result, SCH management has made progress toward implementing recommendations from the Stroudwater study, as well as identifying additional efficiencies that have yielded some positive results.

The healthcare environment continues to change, and short-term benefits are important to maintaining status quo. The greater challenge is to identify longer-term actions that could make SCH sustainable and of benefit to the community for many years to come. The ability of SCH to operate as a standalone, sustainable entity is a major consideration in evaluating the affiliation/merger opportunities that have emerged in response to the RFP. If SCH cannot address the operating challenges of the last several years and undertake a substantial operational turnaround, the risk of financial burden to the City and Borough of Sitka (CBS) is great, and the current affiliation opportunities may not be available in the future. Although SCH management has made some strides in implementing short-term benefits, there is little indication that the level of operational improvement that would be necessary for the long-term is achievable. In fact, capital and operating commitments for the new Cerner electronic health record have increased capital spending to much higher levels than in past years. That, coupled with other significant capital needs for equipment (e.g., replacement and upgrade of imaging equipment), will place a substantial burden on operating performance and limited cash reserves.

The CBS Assembly hired us, as consultants, to provide objective oversight of the SCH affiliation RFP process, including an objective evaluation of the proposals received in response to the RFP. As you know, Steve spent 40 years with Arthur Andersen and KPMG auditing and evaluating the financial condition and credit-worthiness of hospitals and health systems throughout the Northwest. And Sarah spent 15 years in strategy and business development with two large regional health systems, including significant experience working with small Critical Access Hospitals. Our commitment is to help ensure

the Assembly achieves the very important objectives you identified and prioritized at the outset of the process. Now that the proposer site visits are complete and two of the three remaining proposers have submitted refined proposals, we have completed a side-by-side comparison of the key terms of each proposal, as well as the degree to which each meets the Assembly's prioritized goals of affiliation. This objective evaluation of proposal responses will allow the Assembly to assess the future obligation to CBS, as well as influence the level of healthcare available in the community for many years to come. An important consideration as you make these decisions is whether SCH can be a long-term sustainable and standalone healthcare provider. If it cannot be sustainable, the current and future burden will fall to CBS, and opportunities to mitigate liability will go unfulfilled. As such, the attached report contains three Attachments:

1. ATTACHMENT A: Side-by-Side Comparison of the refined proposals received from potential affiliate organizations.

2. ATTACHMENT B:

    - Our observations related to the current operating performance of SCH and some issues we believe the CBS Assembly should discern.

    - An assessment of SCH against a "sustainability index" using Standard and Poor's industry benchmarks for hospital financial performance and market characteristics.

3. ATTACHMENT C: Demand for Healthcare Services in Sitka, Alaska

    - Some objective data on population size and healthcare utilization commonly used to determine the size and scope of hospital/healthcare services needed in a community. This attachment was prepared by Health Facilities Planning and Development (HFPD), a Seattle-based consulting firm that works extensively with hospitals and medical centers throughout the region to plan for the appropriate size and scope of facilities and services. (HFPD specializes in working with hospitals in rural communities.)

We hope you will find this information useful as we head into the next step in the RFP process, the oral presentations on August 13. We look forward to seeing you there and answering any questions you may have in the meantime.

Regards,

Steve Huebner
Huebner Advisory, LLC

Sarah H. Cave
Sarah Cave Consulting

SARAH CAVE CONSULTING

HUEBNER ADVISORY LLC

**ATTACHMENT A: Side-by-Side Comparison of Refined Proposals for SCH Affiliation (August 6, 2018)**

| | Sitka Jet | Quorum Health Resources (QHR) | SEARHC |
|---|---|---|---|
| Affiliation Type | Real estate purchase with leaseback | Management Agreement | Acquisition of SCH business via purchase or lease |
| Key Terms | 1 Option:<br>• Sitka Jet purchases SCH property for $5 million<br>• Sitka leases back SCH to CBS or a management company of CBS's choosing) on a triple net lease basis (SCH responsible for all taxes, insurance, and maintenance)<br>• Lease terms: $39,000/month with 4, 5-year options to renew (lease payment increases by 10% on each renewal)<br>• Internal Rate of Return (IRR) approximates 8%<br>• CBS guarantees lease payments and maintains oversight for hospital operations | 2 Options:<br>1. 5-Year Management Agreement for annual fee of $454,000. Fee does not include salary and benefits for CEO and CFO. Services included: CEO and CFO recruitment; leadership and governance support; use of Quorum management tools (CMS cost-reporting, productivity, benchmarking data, web-based board portal, data analytics); consulting services (revenue cycle, workforce efficiency, compliance, clinical/regulatory support, physician practice/compensation support, strategy).<br>2. In the event of SCH affiliation with SEARHC, Quorum provides "transitional" services until change of ownership (or for one year), for a fee of $480,000, paid in monthly installments of $40,000. Same services included in fee, except interim CEO/CFO provided as well as affiliation Due Diligence analysis. | 3 Options:<br>1. $8.3 million to buy the SCH business only + $140,000/ year lease payment for up to five years<br>2. $700,000 for 22 years for a total cash payment of $15,400,000 to buy the SCH business only + $646,000 one-time payment toward PERS Termination<br>3. $9 million to buy the SCH business only<br><br>Under all three options:<br>• CBS retains ownership of the SCH real estate.<br>• SEARHC assumes full responsibility for provision of healthcare services in Sitka<br>• Employment for SCH employees (no lay-offs), and future job opportunities throughout SEARHC system<br>• CBS Assembly and Sitka community play a role in governance through an Advisory Council |

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**ATTACHMENT A: Side-by-Side Comparison of Refined Proposals for SCH Affiliation (August 6, 2018)**

| | Sitka Jet | Quorum Health Resources (QHR) | SEARHC |
|---|---|---|---|
| Future Risk Assumed by Proposer | None | None | 100% |
| Assembly Goal 1A: Increase quality & scope of healthcare services in Sitka | No Change | Potentially, yes. Contingent on Quorum's success with operating SCH. | Yes, access to broader array of specialty providers and service offerings throughout the SEARHC system |
| Assembly Goal 1B: Mitigate current and future liabilities | No | No | Yes, significant mitigation of current and future liabilities to CBS |
| Assembly Goal 2: Maintain/expand employment opportunities | Contingent on future sustainability of SCH | Option 1: No changes to SCH employment initially. (QHR to complete a productivity review and recommend any changes in staffing levels to the SCH Board.) Option 2: Yes (via SEARHC) | Yes, employment for SCH employees (no lay-offs), and future job opportunities throughout SEARHC system. (Confirmed in SEARHC's one-page promotional collateral piece.) |
| Assembly Goal 3: Access to Capital | Cash from sale would go to CBS permanent fund (only available to SCH through public vote). Potential for buyer to contribute to future capital needs of SCH for same buyer return on investment. | No | Yes, SEARHC plans to build new facility for new consolidated entity, and will assume responsibility for all future capital improvements |
| Assembly Goal 4: Future Governance | No change | No change, however board education services provided | SEARHC establishes Sitka Advisory Council to provide input on clinical services. Membership includes 3 members selected by SEARHC and up to 9 at-large members initially appointed by SEARHC and the CBS Assembly. Council reports to SEARHC Accreditation Governing Body. |

**ATTACHMENT A: Side-by-Side Comparison of Refined Proposals for SCH Affiliation (August 6, 2018)**

# ATTACHMENT B

SITKA COMMUNITY HOSPITAL SUSTAINABILITY ASSESSMENT

August 8, 2018

The following report provides our observations related to the current operating performance of SCH and some concerns that we believe should be taken under consideration by the CBS Assembly. Following our observations, we have provided an assessment of SCH against a "sustainability index" using Standard and Poor's industry standards.

SCH Current Operations

Overall, management has made some considerable gains in improving short-term operating performance and the staff of SCH is highly committed and dedicated to the future of the Hospital. Even with these efforts, FY 2018 operating results are $1.3 million behind budget and far from the levels necessary to reach sustainable performance. Some of the financial shortfall for FY 2018 is because some key operational changes took place later in the year than expected and some is the result of anticipated volume increases that did not materialize throughout the year. FY 2016 and FY 2017 losses (after nonoperating activity) were $3.8 million and $5.7 million, respectively. Preliminary, unaudited losses for FY 2018 are $1.8 which is $1.3M below budget. After transfers for CBS support and tobacco tax, FY 18 net change in fund balance is a negative $850 thousand and $1.2 million behind budget.

Following are some observations related to FY 2018 performance and the FY 2019 budget:

- Operating Performance: Management has made good strides in improving operating performance but is falling far short of the levels of improvement outlined in the Stroudwater report. Certain of the larger impact recommendations in the Stroudwater report, upon further study, have been determined to be unfeasible (e.g., conversion of 15-LTC beds to CAH beds for an annual benefit of $900,000-$1.6 million from 2018-2026). The Stroudwater report, if implemented in its entirety, would move SCH toward sustainability, resulting in FY 2018 operating income of $1.9 million and a cash balance of $6.2 million. Instead, SCH is ending FY 2018 with an operating loss of $1.8 million and a cash balance of $3.1 million.

- Cash Balance: The fiscal $2018 year-end cash balance of $3.1 million is impacted by two major considerations. In FY 2017 and FY 2016, SCH was required to record significant adjustments related to its PERS pension liability. These adjustments resulted in additional charges to expense of $5.9 million and $2.8 million in FY 2017 and FY 2016, respectively. Since these amounts are paid by the state of Alaska, SCH did not have to write a check to fund these expenses. SCH has been able to successfully include these costs within its Medicare cost reports and has recognized cash benefit of $950 thousand related to the FY 2017 costs and $1.7 million related to the FY 2016 costs. These are "one-time" benefits that are contributing to current cash balances. In FY 2018, Medicare has overpaid SCH by $600 thousand. This overpayment is included in the hospitals $3.1 million cash balance at year end. Without the cash benefits described above, SCH would have a precariously low level of cash. Similar one-time benefits are not expected in the future.

- Out-of-Period Income: Due to the uncertainty of the recoverability of PERS costs from Medicare, management has elected to defer recognition of income until it has received the finalized cost report for the respective fiscal years. Accordingly, $1.7 million of income was deferred from FY 2016 and recorded in FY 2017 and $950 thousand of income has been deferred from FY 2017 and will be recorded in FY 2018. While it is not unusual to take a conservative position in recording income, such income is considered "out-of-period" and should not be included in income in determining the hospitals "run rate," which is indicative of baseline operating performance for the year.

- Capital Demands: According to SCH's audited financial statements for FY 2017 and FY 2016, the hospital incurred capital expenditures of $370 thousand and $65 thousand, respectively, some of which was funded by CBS. Capital expenditures for FY 2018 were $296,000 and FY 2019 budget is $200,000 ($150,000 to be funded by CBS). The FY 2019 approved budget shows deferred capital from 2017 and 2018 of $1.1 million, and capital requests for 2019 of $1.9 million which are currently under review. Both are indicative of the pent-up demand for capital. Over the last few years, capital has been funded through the deferral of debt repayment and large, non-recurring cost report benefits. The need to fund future capital from SCH operating performance will place greater pressure on cash flow.

- Performance Improvement: The FY 2019 budget represents optimism on the part of management to make significant operational improvements. It is highly dependent on outpatient revenue growth and salary and benefit expense reduction. These performance improvements are necessary to fund the added expense of the Cerner EHR implementation. The FY 2019 budget reflects income (after non-operating and transfers) of $1,050,000. This compares to a FY2018 loss of $1,185,000, which represents a $2,235,000 turnaround. Some of this will be accomplished through termination of the OB program and changes to surgery programs, which took place in FY 2018 and for which a full year of benefit will accrue to FY 2019. However, much of it is dependent on meeting highly variable revenue growth and expense reduction efforts.

- Cash Reserves: The FY 2019 budget highlights positive cashflow of $1,845,000. This amount is the "gross" cashflow which is comprised of the budgeted $1,050,000 net income (including City funding and tobacco tax) plus cashflow related to depreciation of about $800,000. Net cashflow—after covering Cerner capital costs, scheduled debt repayment, and $50,000 of SCH funded capital—is only $34,000. The cashflow assumption includes a payback to Medicaid of $100,000, but not the payable to Medicare of $600,000 resulting from a recent interim review by the intermediary. To the extent that the turnaround in operating performance of $2,235,000 does not take place, the shortfall will further deplete cash reserves or will become a responsibility of CBS.

- Future Cashflows: At the end of FY 2018, SCH held $3,100,000 of operating cash which represents 42 days of cash. Management recently became aware of a $600,000 Medicare overpayment related to 2018 – this equates to 8 days of cash. The $2,235,000 operating turnaround (which is necessary to achieve break-even cashflow for the year) equates to 30 days of cash. If only half of the turnaround is achieved, SCH could experience a cash shortfall of about $1,700,000 which equates to 23 days of cash—more than half of its current cash balance.

Risks to CBS

Budgets are built with the best of intention, and hospital management and staff put considerable effort toward achieving budgeted performance. The ability to achieve such performance comes with a relatively high degree of risk, since many factors are outside the control of management. The unfortunate fact is—to the extent that performance is not achieved—it falls back on CBS since SCH operates as a component unit (subsidiary) of the City. Following are some key risks that the CBS Assembly should take into consideration in evaluating SCH performance and longer-term sustainability. Risk is a function of both probability of occurrence and overall impact. We encourage the CBS Assembly to consider both probability and potential impact on the important risk factors noted below.

- Sporadic month-to-month performance continues to drain operating cash. Hospital operations have been sporadic in recent months and are somewhat unpredictable. It is likely that this pattern will continue, which presents ongoing risk to CBS. The margin for error related to non-performance is great and the consequences of non-performance are high.

- SCH has made modest capital expenditures over the last several years, much of which has been funded by CBS. The Cerner project raises the commitment to capital substantially. In addition to Cerner, SCH is facing other significant short-term needs for equipment. All of these commitments are placing greater pressure on SCH cashflow. To the extent that SCH cannot meet these needs, it presents significant risk to CBS.

- SCH is at a precariously low level of cash of 42 days. This is further demonstrated in the "sustainability" analysis provided below. Its current cash position has been bolstered by some one-time events: accounts receivable improvements, favorable cost report settlements, and a current overpayment of $600,00 by Medicare. As described above, there are significant risk factors that could further deplete current reserves or threaten anticipated cashflows. The greatest risk is that a break-even cash position for FY 2019 is dependent upon a significant $2,235,000 turnaround in operating performance. SCH needs to generate and build cash reserves to be sustainable. It's inability to do this will present substantial risk to CBS.

There are other risks that are important for the CBS Assembly to understand that are not directly related to SCH operating performance but have become apparent through the RFP process. The RFP was distributed broadly to a significant number of providers throughout the state of Alaska and the Pacific Northwest. While many expressed interest, in working with SCH through clinical relationships or other types of partnering efforts, only one respondent was willing to assume risk for hospital operations, address pension commitments, future capital needs, or employment opportunities. There is a high degree of risk that if CBS does not take advantage of current proposal opportunities, there will be even more pressure on SCH operating

performance and the risk of non-performance will be greater. The comprehensive nature of the RFP process also suggests that the CBS Assembly may not have similar opportunities in the future.

S&P Financial Profile

In March 2018, Standard &Poor's (S&P) published its framework for assigning ratings for not-for-profit health systems in the United States. The approach uses the same criteria that S&P has incorporated into its historical rating process, but provides a broader overall framework incorporating both "financial" risk and "enterprise risk" of a health care organization. Financial risk will be addressed first, and enterprise risk will be addressed in the next section of this report.

Financial risk includes three major categories. These categories and their related financial indicators are as follows:

1. Financial Performance:
    - Total operating revenue
    - EBIDA margin (Earnings Before Interest Depreciation and Amortization)
    - Operating margin
    - Excess margin (Total Margin, including Non-operating)
    - Maximum annual debt service coverage

2. Liquidity and Financial Flexibility:
    - Average age of plant
    - Capital expenditures/depreciation expense
    - Days' cash on hand
    - Unrestricted reserves over long-term debt
    - Unrestricted reserves/contingent liabilities

3. Debt:
    - Debt burden
    - Long-term debt/capitalization
    - Contingent liabilities/long-term debt
    - Funded status of defined benefit pension plan

S&P has identified six ranking categories ranging from "extremely strong" to "highly vulnerable". Values are assigned for each financial indicator within the categories. In addition, there are other factors to be considered of which one relates to SCH—the consideration of significant unfunded pension plan liability.

We have chosen to utilize elements of the S&P capital formation framework as an independent and objective assessment of SCH's current financial position, as well as an indication of overall financial sustainability. The selected criteria are representative of operating performance, liquidity, and debt burden (leverage). The S&P values for each indicator are shown below along with the 2018 baseline values for SCH. The comments related to each criterion describes SCH's current state and provides some indication of what it might take to achieve an "adequate" level according to S&P's values provided below. It is reasonable to believe that SCH would need to reach at least this level of performance to be sustainable for any period of time.

The indicators provided below are based upon what S&P uses to rate health care systems and stand-alone hospitals that issue debt in public markets. Understandably, SCH does not have access to these markets and, as such, is not a ratable credit. Smaller rural hospitals are even more vulnerable than "rated credits" and therefore, to be sustainable, should be held to these benchmarks. *Rural hospitals in the 50$^{th}$ to 75$^{th}$ percentiles of performance maintain ratios that are at least comparable to the "adequate" level of performance indicated in the table below.*

| **Standard & Poor's Financial Profile: Categories & Ratings** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Indicator** | **Extremely Strong** | **Very Strong** | **Strong** | **Adequate** | **Vulnerable** | **Highly Vulnerable** | **2018 SCH Baseline Values** |
| Age of Plant | < 8.5 | 8.5-10 | 10-11 | 11-12 | 12-14 | > 14 | 23 |
| Cap Spending Ratio | > 1.75 | 1.4-1.75 | 1.2-1.4 | 1.0-1.2 | .8-1.0 | < .8 | .4 |
| DCOH (days) | > 275 | 205-275 | 160-205 | 110-160 | 80-110 | < 80 | 42 |
| Debt to Cap (%) | < 25 | 25-35 | 35-42 | 42-50 | 50-60 | > 60 | -2.40 * |
| Op Margin (%) | > 6.0 | 4.0-6.0 | 2.5-4.0 | 1.0-2.5 | 0-1.0 | < 0 | -6.7 |
| Tot Margin (%) | >7.0 | 5.5-7.0 | 4.0-5.5 | 2.0-4.0 | .5-2.0 | <.5 | -3.1 |

*Negative value is result of SCH negative fund balance

As can be seen from the table above, SCH is in a "highly vulnerable" state by every indicator. Each of these key indicators is further described below.

*Age of Plant* – Based on the financial indicator above, SCH has a very old plant. It is functional for the time being, but the capital investment in plant and equipment is fully depreciated and future investment in both plant and equipment will be substantial. The capital investment required to move SCH to an Average Age of Plant of 11-12 years, placing the indicator at an "adequate" level, would be $24 to $25 million. SCH does not have the ability to generate that level of capital, internally, nor does it have debt capacity to finance this eventual investment.

*Capital Spending Ratio* – Capital Spending Ratio measures the annual investment in capital spending against the annual depreciation charge for facilities and equipment. A higher value demonstrates that the hospital is making the necessary investment in facilities and equipment. A lower value is a good indicator that capital investment is being deferred, placing greater financial burden on future operations. An "adequate" level of spend would be 1-1.2 times the annual depreciation charge. SCH is spending less than 50% of that level on an annual basis, and some of that spend is currently being funded by CBS. SCH does not have sufficient cash and investment reserves nor does it have the ability to generate cash flow from operations to make the necessary capital investments.

*Days Cash on Hand (DCOH)* – This value is a strong indicator of liquidity. SCH has 42 days of cash which places it in a "highly vulnerable" position – well below the 80 DCOH value which would still leave it at a vulnerable level. To reach an "adequate" level of DCOH (greater than 110 days), SCH would need to accumulate cash reserves of over $8 million–after it had made the necessary investments in plant and facilities and repaid outstanding third-party settlements, lines of credit and other obligations. Accumulating this level of cash reserves to is unlikely and leaves the hospital vulnerable to a liquidity crisis. Also, as discussed above, current cash balances have been bolstered by one-time benefits of accounts receivable process improvements, cost report settlements related to PERS expense, and overpayments by Medicare in the current year. These special events are not likely to recur or at least not in the same magnitude. The only way to improve cash reserves is through improved operating performance. Even with a high degree of success, it will take many years to improve the hospitals overall liquidity position.

*Debt to Capitalization* – This indicator reflects the percentage of debt to capitalization. Capitalization is defined as debt and net assets combined. SCH does not have a significant amount of long-term debt outstanding. It has a line of credit repayable to CBS of $475,000 and a note payable of $273,000. Its primary long-term liability is its net pension liability of roughly $24 million which will require SCH to fund about $1.6 million, annually, for the next 22 years. As a result of prior year losses and poor operating margins, combined with the recording of the PERS pension liability, the hospital has negative net worth or fund balance of $11.8 million. SCH has a very precarious capital structure and virtually has no debt capacity for further borrowings. To achieve a debt to capitalization ratio in the S&P "adequate" range of 42-50%, SCH would need to have sufficient margins from operations to erase its negative fund balance position and accumulate positive net assets of roughly $ 20 million – a swing of over $30 million and a very difficult undertaking.

*Operating Margin* – SCH's operating margin, based on unaudited June 30, 2018 financial statements, is a loss or negative margin of -6.7%. This margin does not include any prior year cost report settlements that may be recorded in income prior to final closing of year end balances, but it is indicative of true operating performance for the fiscal year. Out of period settlement activity (both positive and negative) should be adjusted out of earnings when determining the hospital's true "run rate" for the year. S&P indicators would require a 1-2.5% operating margin to be considered "adequate". The FY 2019 budget has an operating margin of .02% which equates to $45,000. Transfers in related to tobacco tax provides an additional $831,500 of funding that can be used to supplement operations. Alternatively, these funds could be put to other uses. Achieving the FY 2019 budget is highly dependent upon strong volume growth for outpatient services and continued expense reduction. Monthly performance for 2018 has been sporadic and, if this continues, it is unlikely the budgeted performance will be achieved. SCH has little "staying power" if budget levels are not achieved and any shortfalls could become the responsibility of CBS.

*Total Margin* – Total Margin is Operating Margin plus non-operating activity (grants, interest income, interest expense). Management also includes transfers (tobacco tax and CBS support for capital) in its total margin calculation, although technically they might be considered capital transactions. Including transfers, Total Margin is a loss or negative margin of -3.1%. An "adequate" performance level would require a total margin of 2-4% which would equate to an earnings level of about $500,000 to $1 million. This level of performance is assuming that the hospital has a reasonable strong capital and liquidity structure. Due to SCH's weak capital and liquidity structures, it's necessary that it perform at a higher level to make up for past performance.

*Unfunded Defined Benefit Plan* – S&P's criteria are used widely to assess the financial viability and sustainability of a broad range of hospitals. Many of these hospitals are not-for-profit, a number are public entities such as SCH, some are parts of larger health systems and some are standalone hospitals. Many hospitals have moved away from defined benefit plans to defined contribution plans. Just like other organizations, hospitals have funded defined benefit pension plans to varying degrees. To the extent that there is a significant unfunded liability, this is a major consideration of S&P in evaluating the overall credit worthiness of an organization.

In 2016, SCH adopted GASB 68 which required it to record its share of its pension liability on its balance sheet. The recorded liability is only for the defined benefit pension plan. A recent pronouncement, GASB 75, will require that a similar liability related to post employment retirement benefits (OPEB) be recorded by the hospital. The effective date of the pronouncement is June 30, 2018. Generally, The OPEB liability represents a smaller liability than the pension. The combined liability for both pension and post-retirement benefits for SCH is $35.2 million which will require an annual funding of about $1.6 million through FY 2040. This presents a major commitment for SCH and, to the extent that it can't be covered through SCH operating performance, becomes a major commitment of CBS.

S&P Non-financial Enterprise Profile

Enterprise risk assesses the operating environment and incorporates broad industry factors as well as organization-specific factors. It includes such criteria as economic fundamentals (e.g., population and demographic characteristics of the primary service area); industry risk (e.g., industry cyclicity, competition, regulation, and barriers to entry); market position (e.g., market share, competition, payer mix, medical staff, clinical quality); and management and governance (e.g., strategic positioning, risk and financial management, and organizational effectiveness). Although much of institutional vulnerability is focused on financial risk, enterprise risk factors are equally important and will play an important role in the future sustainability of SCH. The table on the following page provides a limited assessment of SCH based on a subset of the quantitative criteria addressed in the S&P framework for enterprise risk. Due to the nature of this engagement, we are not in a position to make more subjective assessments, but we have provided the range of scenario descriptions for your review and consideration in Appendix 1.

| Standard & Poor's Enterprise Profile: Categories & Ratings | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Indicator** | **Extremely Strong** | **Very Strong** | **Strong** | **Adequate** | **Vulnerable** | **Highly Vulnerable** | **SCH Values** |
| Population of the Primary Service Area | > 1.5 million | 500,000-1.5 million | 350,000-500,000 | 150,000-350,000 | 100,000-150,000 | < 100,000 | 9,000 (2016) |
| Industry Risk | 1 | 2 | 3 | 4 | 5 | 6 | 3* |
| Market Share (for hospital w/population <100,000) | N/A | N/A | >65% | 50-65% | 40-50% | <40% | 22%** |
| Payer Mix | <25% Medicare; <5% Medicaid; >55% Commercial | 25% Medicare; <5% Medicaid; >55% Commercial | 25-50% Medicare; 5-20% Medicaid; 30-55% Commercial | 25-50% Medicare; 5-20% Medicaid; 30-55% Commercial | >50% Medicare; >20% Medicaid; <30% Commercial | >50% Medicare; >20% Medicaid; <30% Commercial | 46.6% Medicare; 21.8% Medicaid; 25.8% Commercial*** |

**Standard and Poor's assigns the healthcare industry an average Industry Risk rating of 3 (strong), based on cyclicity, competition, regulation, and barriers to entry. Given the small population size, market competition, and fluctuations in government reimbursement facing SCH, this rating may be generous.*

***2015 Medicare Inpatient Market Share from Stroudwater report.*

****SCH Payer Mix based on 2017 Gross Charges (vs. Net Patient Service Revenue). While Medicaid and Commercial would indicate a "Highly Vulnerable" rating, a significant proportion of Medicare is favorable with Critical Access Hospital reimbursement, thus the "Vulnerable" rating.*

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# Overview of Sitka, Alaska
# Demand for Health Care Services
# August 6, 2018

*Health Facilities*
*Planning & Development*

## 1. Background/Deliverable

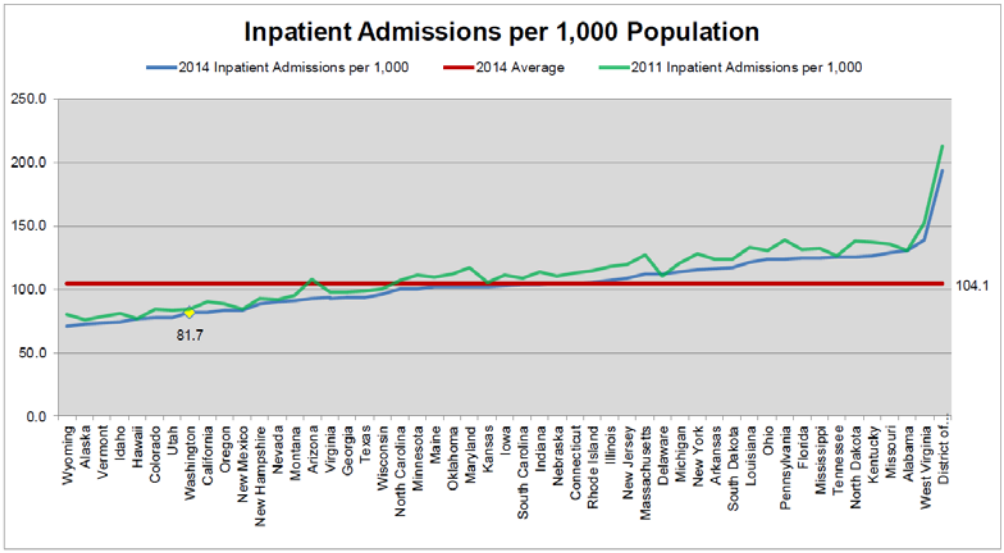
In late July 2018, Sarah Cave Consulting requested Health Facilities Planning & Development (HFPD) to provide a brief snapshot of the healthcare services the residents of a community the size of Sitka, AK are likely to need. Specific services that HFPD was asked to incorporate into the snapshot include inpatient, outpatient, long-term care and provider visits.

The underlying assumptions/data HFPD used to create the snapshot include:

- Actual and forecast population for Sitka (zip code 99835), with specific emphasis on two cohorts (0-64 & 65+) was sourced from Claritas.
- Because the State of Alaska has limited inpatient use data by zip code, HFPD created use rates using Washington State's inpatient CHARS data base for the 45 communities defined by the State Office of Community and Rural Health as rural. This data may slightly overstate demand, as the data in **Graph 1** suggests Alaska has even lower use rates than Washington State.
- Because HFPD was projecting resident demand, the estimates assume no in or outmigration.
- Outpatient data for 2017 was derived from IBM Truven's Outpatient Profiles.
- Nursing home use data was sourced from the State of Alaska's Certificate of Need nursing home bed need projection methodology.

Additional assumptions identified in pertinent section of snapshot. Each pertinent section also details where the findings from HFPD differ from those provided in ECG's 2017 Report entitled "Sitka Community Hospital & SouthEast Alaska Regional Health Consortium". In addition to a slight variance in the defined Service Area, the most significant difference is that ECG calculated need (market share adjusted) for the two hospitals, wherein HFPD calculated need for residents.

**Graph 1. Inpatient Admissions per 1,000 Population by State**




*Source: AHA Annual Survey of Hospitals. Population is from the Bureau of the Census.*

## 2. Population

HFPD used national Claritas data. Sitka was defined as the City and Borough of Sitka (99835). As **Table 1** details, the population is largely flat, with an actual decline in the 0-64 population during the 2010-2017 timeframe and a significant growth (nearly 29%) in the 65+. This trend is expected to continue through 2022.

**Table 1. Population 2010, 2017, and 2022**

| | 2010 | Pct of Tot Pop | 2017 Est | Pct of Tot Pop | Pct Chg 2010-2017 | 2022 Proj | Pct of Tot Pop | Pct Chg 2017-2022 |
|---|---|---|---|---|---|---|---|---|
| **Tot. Pop.** | **8,937** | **100.0%** | **8,896** | **100.0%** | **-0.5%** | **8,950** | **100.0%** | **0.6%** |
| **Pop. By Age** | | | | | | | | |
| 0-17 | 2,104 | **23.5%** | 1,980 | **22.3%** | **-5.9%** | 1,964 | **21.9%** | **-0.8%** |
| 18-44 | 3,157 | **35.3%** | 3,126 | **35.1%** | **-1.0%** | 3,045 | **34.0%** | **-2.6%** |
| 45-64 | 2,663 | **29.8%** | 2,487 | **28.0%** | **-6.6%** | 2,381 | **26.6%** | **-4.3%** |
| 65-74 | 581 | **6.5%** | 785 | **8.8%** | **35.1%** | 976 | **10.9%** | **24.3%** |
| 75-84 | 295 | **3.3%** | 365 | **4.1%** | **23.7%** | 426 | **4.8%** | **16.7%** |
| 85+ | 137 | **1.5%** | 153 | **1.7%** | **11.7%** | 158 | **1.8%** | **3.3%** |
| | | | | | | | | |
| Tot. 0-64 | 7,924 | **88.7%** | 7,593 | **85.4%** | **-4.2%** | 7,390 | **82.6%** | **-2.7%** |
| Tot. 65 + | 1,013 | **11.3%** | 1,303 | **14.6%** | **28.6%** | 1,560 | **17.4%** | **19.7%** |
| | | | | | | | | |
| Fem. 15-44 | 1,746 | **19.5%** | 1,632 | **18.3%** | **-6.5%** | 1,601 | **17.9%** | **-1.9%** |
| Alaska Native/American Indian | 1,510 | **16.9%** | 1,286 | **14.5%** | **-14.8%** | 1,131 | **12.6%** | **-12.1%** |

Source: *Nielsen Claritas*

Note: HFPD's population estimates are lower than those in the ECG Report, because ECG used the Sitka Metropolitan area (Sitka and Hoonah).

## 3. Inpatient Service Demand

To estimate inpatient service demand, HFPD used Washington State hospital discharge data (CHARS) from the WA Department of Health. Specifically, HFPD used the Office of Community and Rural Health's 45 rural communities to calculate use rates for the 0-64 and 65+ cohorts. This information is included in **Table 2**. The Washington State use rate was then applied to the Sitka population cohorts as a proxy to estimate 2017 and 2022 volumes as well as average daily census.

**Table 2. Estimated Resident Volumes – Inpatient (Assumes 100% of residents stay locally for care)**

| Service | Washington State Use Rate (per 1,000) | 2017 Volumes | 2017 Average Daily Census | 2022 Volumes | 2022 Average Daily Census |
|---|---|---|---|---|---|
| ***Acute Care*** | | | | | |
| 0-64 | 199.5 | 1,515 | 4.2 | 1,474 | 4.0 |
| 65+ | 877.0 | 1,143 | 3.1 | 1.368 | 3.8 |
| **Total** | **317.0** | **2,658** | **7.3** | **2,842** | **7.8** |
| ***Psych*** | | | | | |
| 0-64 | 23.5 | 179 | 0.5 | 174 | 0.5 |
| 65+ | 48.0 | 63 | 0.2 | 75 | 0.2 |
| **Total** | **23.2** | **242** | **0.7** | **249** | **0.7** |
| ***Swing Bed*** | | | | | |
| 0-64 | 5.3 | 41 | 0.1 | 39 | 0.1 |
| 65+ | 134.5 | 175 | 0.5 | 210 | 0.6 |
| **Total** | **27.7** | **216** | **0.6** | **248** | **0.7** |
| ***Rehab*** | | | | | |
| 0-64 | 5.5 | 42 | 0.1 | 41 | 0.1 |
| 65+ | 48.0 | 63 | 0.2 | 75 | 0.2 |
| **Total** | **12.9** | **105** | **0.3** | **116** | **0.3** |

Source: WA CHARS and Claritas. Calculated use rate based on WA comparable.

Note: HFPD would target a 50-55% midnight occupancy for a provider at the acute census level estimated in Table 2. In other words, acute care ADC of 7.8 (midnight census), would require **approximately 16 beds**, including labor, delivery and post-partum.

## 4. Outpatient Service Demand

To estimate outpatient service demand, HFPD used 2017 outpatient estimates from IBM Truven Analytics: Outpatient Profiles, Code Profiles. Truven collects outpatient claims data at the CPT code level which allows estimates by procedure volume by ZIP code for specific CPT codes. Without access to Alaska data, HFPD used Truven for the same 45 rural WA communities to determine a use rate for the outpatient service demand below. Truven outpatient data is not disaggregated by age, so age-specific use rates could not be calculated. The Washington State use rate was applied to the Sitka population cohorts to determine 2017 and 2022 volumes.

**Table 3. Estimated Outpatient Volumes**

| Service | Use Rate (per 1,000) | 2017 Volumes | 2022 Volumes |
|---|---|---|---|
| ED Visits | 341.3 | 3,036 | 3,054 |
| Surgery Cases | 29.8 | 265 | 267 |
| X-Ray Exams | 595.1 | 5,294 | 5,326 |
| CT Scan | 168.9 | 1,502 | 1,511 |
| MRI Scan | 80.3 | 715 | 719 |
| Ultrasound Exams | 208.1 | 1,851 | 1,863 |
| Mammography Scan | 132.5 | 207 | 208 |
| Physical Therapy Procedures | 2,784.5 | 24,771 | 24,921 |

Source: Truven Analytics and Claritas 2017. Calculated use rate based on WA outpatient data and OR use come from comparable hospital DOH year end reports.

Note: Because this is resident need only, any impact on ED visits associated with tourism is not included.

## 5. Nursing Home Beds

To estimate nursing home bed need, HFPD reviewed recent nursing home certificate of need decisions in Alaska for long term care. The CN methodology uses three years of actual nursing home patient day data to estimate future need. HFPD used the most recent decision, dated January 2018, for a Juneau long term care facility as a proxy for Sitka (as specific Sitka utilization data was not available). Using the total bed need estimated, HFPD calculated a bed to population use rate for the 65+ age cohort. Applying this bed to population ratio to the Sitka population estimates resulted in the bed need in Table 4.

**Table 4. Long Term Care Beds**

| Service | Beds (per 1,000 population, age 65+) | 2017 Beds | 2022 Beds |
|---|---|---|---|
| Long Term care | 12.75 | 17 | 20 |

Source: Claritas 2017. Calculated use rate based on January 2018 Juneau, AK Certificate of Need Decision

## 6. Providers and Clinic Exam Rooms

To estimate gross primary care physician demand, HFPD relies on established physician to population ratios from several sources. HFPD averages the ratios eliminates outliers and then, using data from the National Ambulatory Care Survey, "age adjusts" to reflect the actual age distribution of the population.

Using these ages adjusted physician to population ratios, **Table 5** details the estimated gross physician need:

**Table 5. Estimated Resident Volumes – Inpatient (Assumes 100% of residents stay locally for care)**

| Physician Specialist | Physician to Population Ratio | 2017 Age Adj. MD Need | 2022 Age Adj. MD Need |
|---|---|---|---|
| Family Practitioner | 2,845 | 3.1 | 3.2 |
| Internist | 3,994 | 2.2 | 2.5 |
| Pediatrician | 8,148 | 1.1 | 1.1 |
| **Subtotal: Primary Care** | | **6.4** | **6.8** |

*Source: HFPD and various physician to population ratios*

Using a ratio of 2.5 rooms per provider (~7), a total of approximately **18 exam rooms** are needed.