

Strategic Business Plan Proposal to Expand a Pediatric
Diagnostic Sleep Laboratory to a New Market

Strategic Business Plan

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Project Summary:

This business proposal is for a specialty children's hospital (SCH) to expand a pediatric diagnostic sleep laboratory to a medically-underserved region in the state. Sleep disorders are common in children and are often undiagnosed and untreated (Common Sleep Disorders in Children, 2014). Currently SCH houses a 7-bed laboratory in large metropolitan city on the east coast. The second lab will be located within a county hospital 50 miles from the main campus and where the SCH already has a presence. The SCH maintains twelve beds on step-down pediatric inpatient unit in the county hospital and will convert two of the underutilized patient rooms to sleep rooms. The laboratory will be managed by, and electronically connected to, the main campus.

An essential element of this growth opportunity relies on commitments from the sleep-related business partners, an academic medical center (AMC) and a sleep laboratory management company (SLMC). The business partners have maintained a contractual agreement to perform and interpret sleep studies at the SCH location for over twenty years. The agreement has been profitable to all parties.

The business plan will focus on the incremental impact of expanding the capacity of the sleep lab operation by 30% in a new market. Although maximum capacity of the new sleep lab will accommodate 450 sleep studies a year, volume is assumed to rise to 200 cases within three years of operation. The main campus operation enjoys sustained demand for services and a positive bottom line. The promise of the satellite location is that within five years, the county hospital will relocate to a brand-new hospital facility and be rebranded as a regional medical center. The sleep lab, in a more desirable location, will be poised to attract patients and medical providers to an area that has been underserved. Expanding the services to a second location will fulfill a gap in health care for children in the state as well as strengthen the financial stability of the hospital.

Executive Summary

a. **The Company** – The focus of this business proposal is to open a satellite pediatric diagnostic sleep laboratory operation 50 miles from the specialty children’s hospital (SCH) main campus. SCH is a 100-bed not-for-profit specialty children’s hospital which admits over 800 patients and supports over 50,000 outpatient visits per year. The main campus sleep lab conducts over 1,700 studies per year on an outpatient basis. The hospital has two locations. The main location is in a large metropolitan city and the satellite operation comprises a small inpatient unit and an outpatient clinic in a county hospital 50 miles from the main campus.

b. **Market Opportunity** – The demand for sleep services remains strong in the state and is increasing due to childhood obesity-related sleep apnea. Currently, the specialty children’s hospital is the leading pediatric sleep lab in the metropolitan area and draws patients from throughout the state. Eight other sleep labs, both independently-operated and hospital-based, serve smaller markets and/or segments of the population. The overall healthcare environment, particularly related to adult sleep medicine, has caused some companies to leave the sleep laboratory market. The SCH is in a position to provide services where other companies have not ventured or are leaving.

c. **Capital Requirements** – The children’s hospital and the sleep lab management company (SLMC) will self-fund the capital for this proposal. The hospital will convert two inpatient pediatric rooms to sleep rooms, and create a sleep technician workstation in an adjacent office. This will require purchase of sleep and technician room furnishings (beds, end tables, desk, office chair, and supply cabinet), room-darkening window treatments, a fresh coat of paint and refinished flooring. In addition, the hospital will provide an internet connection and other telecommunication support for the tech room. The SCH will allocate capital funds from their budget for general physical plant upgrades, since the renovations will occur in existing patient

rooms. The sleep lab management company will provide and install the sleep monitoring equipment, video cameras and the technician work station. The SLMC will use their own technical support staff to install the equipment. The SLMC will not purchase equipment but will install used and fully-operational equipment from their inventory.

d. Mission Statement – The mission of the specialty children’s hospital is dedicated to maximizing the health and independence of the children served. As such, the pediatric sleep satellite operation fits within the SCH mission as it enables children to access important diagnostic and therapeutic sleep services close to home.

e. Management – The current management of the main campus sleep lab will oversee the operation of the new remote location at the county hospital. The management structure of sleep services is complex. The children’s hospital manages the overall operation and bills for, and is at risk for, all services. The physician interpretation is a contracted service performed by the pediatric pulmonary division of a large academic medical center (AMC). The sleep technician staff (polysomnographers and scorers) and a lab manager are provided by a contracted service from a national leader in sleep lab management.

f. Competitors – There are three types of direct competitors and one indirect competitor. The most significant direct competitor is a comparable lab located within a children’s academic medical center (CAMC) within 25 miles of the proposed location of the second sleep lab but is out-of-state. The CAMC sleep lab suffers from long wait times for services and is not able to absorb additional volume. The proposed county lab will offer a quick-access alternative.

Acute care hospital-based sleep labs in the region are another direct competitor but are not a threat. These labs typically are smaller and do not specialize in pediatrics. Of the four, hospitals in the catchment area, three are low volume and rarely serve children, and one closed its sleep program.

The last direct competitors are stand-alone or otolaryngology-affiliated sleep labs in the region. While these are often the preferred provider by the insurance companies as a lower cost option, none of the three labs are well-suited for the care of a pediatric patient. While not the case state-wide, the stand-alone sleep labs in the catchment area are low volume with limited resources to compete.

An indirect competitor worth noting is home sleep testing. This method is not recommended for patients under 18 years old, however, the alternative has suppressed demand for adult sleep services. In the future, technological advances may make home sleep studies an option for children and would have an impact on demand for in-lab tests.

g. Competitive Advantages – The proposed pediatric diagnostic sleep lab is intended to serve pediatric patients in the surrounding underserved area in the county as there are few options close to home. Indeed many of these patients opt to travel over 50 miles to the SCH main campus for a sleep study. The specialty children’s hospital has a competitive advantage primarily for its market dominance at the main hospital with an established high quality reputation. The sleep lab operation has grown every year since its inception over 20 years ago. There are few sleep labs that are able, or desire, to serve the catchment area. The greatest challenge is to promote the services and convince both referring providers and patient parents that they need not travel to obtain a pediatric sleep study.

h. Financial Projections – With a conservative ramp up of volume, the pediatric sleep lab will produce a loss of about \$26,000 in the first year due to hiring, training and planning expenses as well as the front-loaded marketing expense. More aggressive growth anticipated for years two and three are expected to yield a positive net income of \$60,000 and \$165,000 respectively. By year four, the sleep lab will relocate, along with the hospital, to the newly-built and state-of-the-art regional medical center. At that point, the sleep lab will benefit from local, county and state promotion of the facility to serve the local residents.

Part I: The Organizational Plan

1. Summary Description of the Business – This business proposal is to expand a segment of the outpatient services offered at a SCH: pediatric diagnostic sleep testing. The expansion is targeted for a new satellite county hospital location that will reach several underserved areas in the state. The 100 bed not-for-profit specialty children’s hospital admits over 800 patients and supports over 50,000 outpatient visits annually. The hospital’s main location is in a large metropolitan city but maintains an inpatient and outpatient presence at the county hospital 50 miles from the main campus.

a. Mission – The specialty children’s hospital’s mission is simple – the SCH is dedicated to maximizing the health and independence of the children served. The proposed sleep lab’s short-term and long term goals falls squarely with the SCH mission. The short term goal will be to educate the consumer and medical community about pediatric sleep disorder symptoms and sleep services availability closer to home. Success in this goal will be evidenced by internet search engine activity and referrals for sleep studies at the lab. The end goal will be a high-volume sleep lab to meet the needs of children suffering from poor sleep quality or quantity.

Sleep problems are highly prevalent with estimates as high as 50% of children experiencing a sleep problem with only 4% receiving a formal diagnosis (Common Sleep Disorders in Children, 2014). Obstructive sleep apnea, snoring, insomnia, sleep walking, narcolepsy, restless leg syndrome and sleep terrors are some of the most common sleep issues experienced by children. Left undiagnosed and untreated, sleep disorders often are linked to problems including academic, behavioral, developmental and social difficulties, weight abnormalities, and other health issues. The long-term goal is to be the leader in pediatric sleep medicine in the state and help families get a good night sleep.

b. Business model – The pediatric diagnostic sleep program at the SCH is a best-in-class model with its partners. The children’s hospital facilities and medical support services are ideal for the

care of the pediatric patient in a family-friendly environment. The hospital has an established, nearly 100 hundred year reputation with a sole focus on pediatric health care. The SCH partners with the national leaders in sleep medicine: a sleep lab management company (SLMC) and an academic medical center (AMC). The sleep lab management company hires and retains highly qualified polysomnography technicians and scorers in 140 locations across 20 states. The SLMC technicians are skilled in caring for children of all ages including infants and children with medically complex conditions. The AMC medical doctors are board-certified in sleep medicine and pediatric pulmonology. The sleep medicine doctors have developed trusted relationships from referring pediatricians and otolaryngologists in the community. The sleep medicine team reputation will help open doors in the communities surrounding the satellite sleep laboratory.

c. [SWOT Analysis – Strengths, Weaknesses, Opportunities and Threats](#)

Strengths

- The hospital and its partners employ highly engaged and well-trained staff including schedulers, polysomnographers, scorers, sleep medicine doctors and administrators.
- The sleep lab uses state-of-the art monitoring equipment for highly reliable test results.
- Delivering safe pediatric care in a family-friendly environment is the sole focus of the sleep lab.
- The sleep lab is one of the few that is capable of safely performing sleep studies on infants and children with medically complex conditions.
- The hospital maintains insurance contracts with most payers, thus relieving a financial burden on patient families.

Weaknesses

- While referrers such as pediatricians, pulmonologist and otolaryngologists (ENTs) appreciate the value of a sleep study, historically they have been reluctant to order a test that is not readily available in the community. Pediatricians may only recommend a

sleep study to patients with the most severe symptoms and to the families of patients willing to travel to obtain it. The SCH will need to educate the consumer and the pediatric health care providers in the community that a sleep study is a viable option closer to home.

- The consumers in the new market may lack knowledge about the value and process for a pediatric sleep study. Even if a physician refers a patient for a sleep study, the parent/guardian may not fully understand the benefits of a sleep study and available treatments that may significantly improve a child's sleep and related behavior and performance.
- Lastly, the county-owned hospital where the new lab will be housed has been plagued with financial and image problems causing an estimated two-thirds of residents to seek health services elsewhere. The hospital's reputation is a barrier for families needing an elective diagnostic procedure such as a sleep study. Although currently a weakness, the state has stepped in and acquired the hospital. Under new leadership and an influx of operating and capital funds, the hospital has broken ground on a new state-of-the-art facility. The sleep lab will relocate to this new highly desirable facility within three years.

Opportunities

- The prevalence of sleep disorders has been increasing due to social and behavioral factors.
 - Childhood obesity has increased the incidence of obstructive sleep apnea (OSA), subsequently leading to an increase in sleep studies to confirm the diagnosis (Common Sleep Disorders in Children, 2014).
 - The increasing and wide-spread use of screen-based media (smart phones, tablets, etc.) by children is a contributing factor to poor sleep quality and quantity for children. Researchers are just beginning to investigate the various influences related

to screen time such as the effects of light emissions; stimulation from the digital content or overall screen time crowding out other activities including sleep. (Digital Media and Sleep in Childhood and Adolescence , 2017)

- In the state’s current healthcare environment, some hospital-based competitors are leaving the sleep medicine market to focus on more mainstream services (cardiology, orthopedics, oncology, etc.). At a time when other labs are closing, the sleep lab expansion has an as opening for pediatricians to change their referral preferences.

Threats

- Home sleep studies are a potential diagnostic method for the adult patient although there has been no move in pediatric circles to conduct sleep studies at home.
- Insurance companies increasingly require advance authorization of services or deny the procedure and refer their patients to lower cost stand-alone facilities.
- High-deductible insurance plans are increasingly prevalent. For many families, the out-of-pocket expense is a barrier to accessing care. As a not-for-profit hospital, the SCH encourages families with high deductible health plans to apply to the financial assistance / charity care program.

d. **Strategy** – The business strategy is to capitalize on the strength of the main campus sleep lab to break into an adjacent market. Some of the main campus patients travel great distances from the catchment area of the proposed sleep lab. Marketing both in mass media and on the ground with provider relations representatives will be needed to educate consumers and the medical community about the sleep services available closer to home.

e. **Strategic relationships** – The children’s hospital has had a contractual relationship with the AMC since its founding nearly 100 years ago. In recent years, the AMC formalized the arrangement by purchasing a 50% ownership share of the SCH. The two institutions, while affiliated, operate independently. At the board of trustees’ level, the SCH and the AMC are in

strategic alignment to be the leading provider of pediatric sleep studies in the area. Of note, the AMC maintains several small sleep labs within their network across the state, but none are in direct competition with the pediatric lab.

The other necessary strategic relationship is with the sleep management company who has been the hospital's vendor since the creation of the laboratory nearly twenty years ago. To win support for the strategic expansion, the SCH renewed the contract to guarantee the SLMC as the sole provider of sleep services for the SCH. The AMC is also strategically aligned with the SLMC having acquired the SLMC as a majority and principal shareholder.

f. Key stakeholders/key decision-makers – Despite the shared operations across three entities, the key decision makers are a relatively small group. From the SCH, the executives responsible for Outpatient Services and Finance represent the hospital leadership and take the lead on attaining operational and capital approval from the entire executive team and the board of trustees.

Although it has national presence, the CEO and COO of the local sleep lab management office are the key decision-makers. Key stakeholders from the AMC are the leaders in the Department of Pediatrics and the Division of Pediatric Pulmonology. Because of the long-standing relationships, the key stakeholders have developed a collegial arrangement to promote a win-win outcome.

2. Services – The pediatric sleep lab schedules, conducts, scores and interprets sleep studies. Several types of sleep studies are offered. A typical sleep study is a polysomnography / PSG billed as CPT 95810 for patients that are six years and older and CPT 95782 for patients younger than six years. A child will spend an overnight with a parent for the sleep study. A full study will run a minimum of six hours. A second type of service is a CPAP (continuous positive airway pressure) Titration study (CPT 95811 or 95783 for patients six years or older or under six years old) in which CPAP therapy is initiated and adjusted to determine the lowest pressure to maintain an open airway. Finally, a Multiple Sleep Latency Test/MSLT (CPT 95805) is a daytime

study ordered to detect daytime sleepiness or narcolepsy. The test consists of four or five 20-minute nap opportunities set two hours apart, often following an overnight sleep study. All of these studies include interpretation of the results by a board-certified physician in pediatric pulmonology and sleep medicine. This satellite sleep lab will offer only polysomnography at the outset and will be staffed by one polysomnography technician for a 2:1 patient to staff ratio. As the lab matures the other more complex sleep study types may be added.

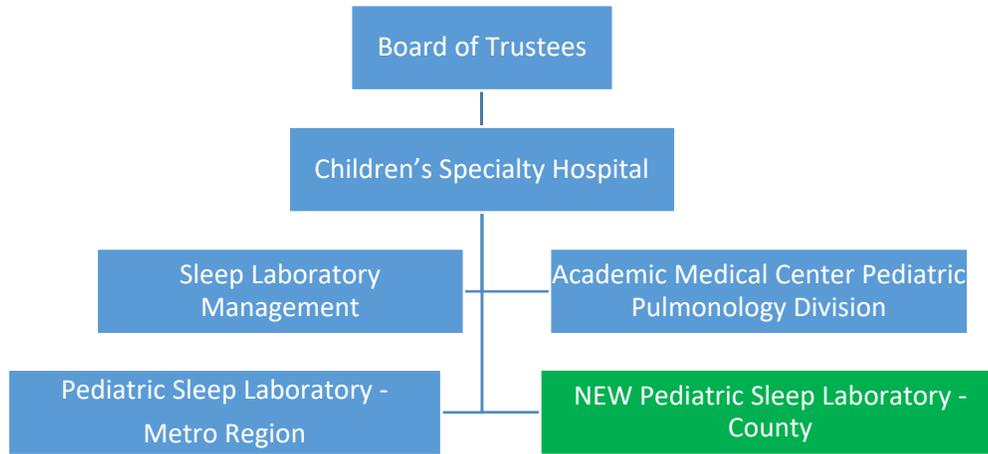
3. Administrative Plan – The provision of services involved in a pediatric sleep laboratory is complex. The new satellite sleep laboratory will be managed from the main campus, therefore the staffing and processes will be consistent with the established sleep lab operations. Although the ultimate accountability belongs to the SCH board of trustees, the administration of the pediatric diagnostic sleep lab is shared among the partners. Each partner has clearly defined responsibilities.

a. Responsibilities – The SCH provides general management of the diagnostic sleep lab and assures accountability of the other partners. The SCH provides space to deliver services including ancillary services such as information technology and telecommunication support, housekeeping, laundry, security as well as urgent medical and/or nursing care. In addition, the SCH provides oversight for patient safety, infection control and adherence to regulatory requirements. The SCH maintains 100% of the risk with the payers and assumes all liabilities. The SCH bills the technical fees and professional fees and keeps 100% of the collections. The SCH reimburses the business partners fee-for-service. Most importantly for this business proposal, the SCH provides the marketing, public relations and provider relations funds and staff to promote and grow the patient volume.

The sleep lab management company ensures the smooth operation of the sleep lab. SLMC call center staff schedule patients for the appropriate test at the appropriate location. The local leadership ensures adequate numbers of staff are hired and trained at both locations. The

SLMC performs the overnight and daytime sleep studies and scores them before submission to the AMC interpreting physician. The AMC provides medical director oversight, interprets the sleep studies and sends the reports to referring providers.

b. Organizational Chart



4. Operational Plan –

a. Project Timeline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
Project Approval							
Capital Improvement							
<i>Purchase and install furnishings</i>							
<i>Install window treatments, paint, refinish floor</i>							
<i>Install monitoring equipment</i>							
Marketing Plan							
<i>Create content for radio ads</i>							
<i>Update website with satellite location</i>							
<i>Update and print brochures with satellite location</i>							

<i>Run radio ads</i>							
<i>Provider Relations outreach</i>							
<i>Ribbon cutting</i>							
Schedule Patients							
Staff Sleep Lab							
Conduct sleep studies							

b. **Potential Operational Roadblocks and Resolutions** – The above timeline represents the sequence of events that should occur in order to open a pediatric sleep lab in a satellite location. Three key milestones drive the success of the project. The first milestone to meet is the project approval. The two months allotted assumes general agreement among the parties to support the project and commit the capital and/or staff resources to complete the work. In the course of revising the contracts between the SCH and the SLMC and the SCH and AMC, attorneys may present a roadblock. Attorneys may delay the process because of their own work load and priorities or they may have questions and concerns about the proposed terms. In either case, the SCH leadership will actively shepherd the contract revisions between the parties. Another roadblock may be the ability of the entities to marshal the resources required in a synchronized manner. Again, the SCH will negotiate with all parties to determine the earliest feasible start date for all parties to commit to. To further reduce the risks for the remainder of the project, no subsequent work will start on the project until project approval is attained and contract are signed.

The second critical milestone to meet is the capital improvements timeline. A myriad of issues may crop up at any time when dealing with supply vendors and contractors and especially with older buildings like the one to house the satellite sleep laboratory. Items may be back-ordered, work bids may be overpriced or workers may find faulty wiring. Often the longest lead time is needed for furnishings. To reduce the risk of a late delivery, furnishings will be the first task to allow three months for delivery. To further reduce the risk of the capital improvements straying from the timeline, the proposed project plan builds in some cushion. Lastly, some of the tasks can occur simultaneously instead of serially as planned. For example, installing monitoring

equipment could occur at the same time as installing window treatments. It is essential the SCH leadership obtain frequent updates on the progress of capital improvements.

The third key milestone is scheduling patients! The SLMC will target patients that live in the vicinity of the satellite lab to have their study done there. At the time the lab opens, the consumer marketing and referral outreach will be in full swing. Getting the word out will jump start the success of the sleep lab. For a service like pediatric sleep studies that relies heavily on referrals from the medical community, success with just one or two referrers is enough to enable a sustainable operation. The expectations for the first year of operation is 60 patients or 5 patients per month, a conservative goal.

Part II: The Marketing Plan

1. **Overview and goals of the marketing strategy** – Since the business plan requires introducing a pediatric diagnostic sleep laboratory in a new market where the name recognition is not as strong, marketing will involve both a business-to-consumer approach for brand and service recognition and a business-to-business approach to generate referrals to the program

2. Market analysis

a. **The Company** – The sleep lab is a state-of-the art lab with highly trained technicians in a child-friendly atmosphere and will be located at the county hospital in a medically-underserved area. The sleep lab is affiliated with the regional leader of pediatric sleep services and partners with a world-renowned academic medical center.

b. **Market Opportunity** – The prevalence of pediatric sleep problems is estimated at 50% of children and is growing (Common Sleep Disorders in Children, 2014). While the need is great, the lack of quality services is a barrier to patients accessing the services. A significant number of patients from this underserved area are choosing to attend sleep study at the main campus even if it means a one or two hour drive one way. Presently, there are no pediatric sleep labs operating in the immediate area, and there are no clear market competitors vying for the patients.

c. **Market competition** – The market competitors are in three categories: a comparable children’s hospital lab, acute care hospital-based sleep labs and stand-alone labs.

The strongest competitor is the comparable children’s academic medical center (CAMC) within 25 miles of the proposed location of the second sleep lab but is out-of-state. The services and capabilities of CAMC are near identical to the services proposed by the second lab and attracts patients from the same catchment area. The main weakness of the CAMC sleep lab is that the lab has been at capacity for many years and has long wait times for services. In addition, the CAMC is large and complex and diagnostic sleep services do not rise to the top of the organization’s priorities. Finally, the CAMC may have difficulty receiving reimbursement from out-of-state medical assistance insurance companies.

Four acute care hospital-based sleep labs in the region are another direct competitor. Like the children’s hospital, the hospital-based labs can provide sleep medicine specialists along with access to specialists for coordinated care. Unlike the children’s hospital, these hospital-based labs typically do not specialize in pediatrics and tend to have smaller labs with limited combined patient/parent sleep rooms. The other hospital-based sleep labs tend to provide services at a higher cost and are less likely to be covered by insurance. Lastly, in today’s healthcare climate, sleep services may not fit the business model for full-service hospitals that are attempting to consolidate services and reduce costs. In the last year, one hospital shuttered its sleep lab. In general, these labs have been at low volume and have not been a significant competitive threat.

The last competitor in the area are stand-alone labs and three operate in the county. These labs are often the preferred provider by the insurance companies as a lower cost option. The weakness for these labs is that they do not specialize in pediatrics, and therefore their facilities and staffing are not set up to accommodate sleep arrangements for a child patient and an adult guardian. Staff may not be competent in child development and behavior. Lastly, stand-

alone labs are reluctant to accept infants or medically complex children for a variety of reasons ranging from the size and sensitivity of the equipment to patient safety concerns.

A future and indirect competitor is home sleep testing. Currently home sleep testing is not medically indicated for patients under 18 years old, and for practical purposes, would not be reimbursable through insurance. For pediatric patients up to 21 years old, or adult patients with cognitive delay, the home sleep test can detect obstructive sleep apnea but no other sleep disruptions. Given the technology limitations, home sleep tests are not a serious competitor for the pediatric population. Future technological advances with home testing devices may enable children to use them and thus would be a more significant threat to high cost in-lab sleep studies.

d. **Capital Requirements** –The SCH will self-fund the marketing expense through an allocation from the annual operating budget.

3. Marketing Strategy

The marketing strategy will emphasize brand recognition in both a business-to-consumer and business-to-business approach. Consumer marketing will employ radio ads, web search engine optimization, print brochures and media events. A three year budget will be front-loaded to provide the greatest reach in year one and sustained promotion in years two and three.

The year one budget will be \$25,000 with the largest portion, \$17,000, allocated for radio ad content and media buys. \$3,000 will be budgeted for a ribbon cutting with anticipated coverage by local TV and newspaper. Another \$3,000 will be used for search engine optimization and brochure reprints and mailing. The remaining \$2,000 will be earmarked for face-to-face meetings including breakfasts and lunches with high-volume potential referrers in the area. In the subsequent two years, \$8,000 per year will be devoted to face-to-face referral development and another \$2,000 will be used for search engine optimization and brochure/collateral printing.

4. Implementation of Marketing Strategy

There are two target populations in the marketing strategy: consumers, specifically young families, and referring doctors. The consumer marketing will involve radio ads, website updates search engine optimization (SEO) / click marketing and media attention through a public ribbon-cutting event. A radio ad campaign will be the largest expense and will target patient populations in the immediate vicinity of the county hospital sleep lab location. The content of the radio ads will focus on name recognition and common reasons why a parent might want their child to have a sleep study. For most families, the most common symptom is loud or excessive snoring that disrupts the child's sleep. The ads will run on stations such as Pandora that target the caregivers of children (generally millennials) in addition to Spanish-speaking and gospel stations that are popular channels in the county. The cost to create the content for a 20 or 30 second radio ad is estimated at \$2,000. The ad will run for three months starting just prior to the lab opening, and the media buy is anticipated to cost \$15,000.

The SCH website will be updated to reflect the new location and promote that it is the same great service and reputation of the main campus but closer to home for many families. The SCH currently uses a firm to manage website search engine optimization. The primary click strategy is to capture a "call-to-action" such as to view education materials or documents as well as seek appointments. The SCH will review and update keywords and closely monitor the internet traffic specifically in the targeted catchment area. Capturing click data from the target zip code areas will be one of the measures of success.

Another outreach to consumers is through media attention generated by a public ribbon-cutting since the county hospital and the surrounding area is a healthcare shortage area and investments in pediatric services are welcomed by businesses, the medical community and civic leaders. The ribbon-cutting may also be pitched to local TV and print news along with a story about better sleep habits for children.

A business-to-business effort will coincide with the start of the ad campaign with outreach to referring medical providers via mail, email and in-person communications. The SCH already enjoys a small number of referrers in the area for some of the other pediatric services provided at either of the hospital locations. The sleep lab brochure will be updated and reprinted with the county hospital location. A letter announcing the new sleep lab in the community will be mailed along with the brochure to approximately 300 pediatricians, otolaryngologist (ENT), and pulmonologists in the county and the surrounding medically-underserved counties.

Taking advantage of the hospital's provider relations team, several staff members will be deployed to visit face-to-face with the larger pediatric practices and ENT offices and leave brochures and sleep study order forms behind. Lastly, the introduction of the new sleep lab will utilize an email blast to alert the current medical staff and those providers at the AMC affiliated with pediatrics.

Part III: Financial Documents

1. Summary of financial needs

a. **Financing** – The project will not require financing however will require a board of trustees' approval and business partner agreement to proceed. The hospital will self-fund the initial capital and operational expenses (primarily salaries for planning activities and advertising).

b. **The capital outlay** will be provided predominantly by the SCH. The hospital will be responsible for preparing the sleep rooms with furnishings and interior decorating as well as securing the information systems network connection to the main hospital. Total capital for the hospital is approximately \$68,000. The sleep management company will provide the testing equipment, however they have asserted that the company will install older but still functioning equipment for the start-up operation and will not invest additional capital. The SLMC technical staff will install and test the diagnostic equipment.

c. **Resource costs associated/opportunity costs** – Sleep services are one of the highest margin services for the hospital. The hospital allocated inpatient rooms for use by the lab due to anticipated low patient census. The inpatient rooms were not generating revenue and modifying them to accommodate the sleep patients was the best alternative use of the space. Renovations to the sleep rooms will be done so that all functions of an inpatient room will remain intact so that the rooms could revert to inpatient use with short notice.

2. Key Assumptions

In developing the cash flow and income statements, the following assumptions were established.

1. The financial documents reflect only incremental revenue and expense for the satellite operation understanding that as part of a larger organization, the project benefits from some economies of scale
2. While not reflected in the financial statements, the main campus sleep program has delivered a strong positive bottom line and is the basis for assuming that the up-front capital and expenses are self-funded. The sleep program generates an annual surplus much greater than the startup costs for the satellite sleep lab.
3. Volume projections are aggressive but doable. A conservative 60 sleep studies are anticipated for the first start-up year. Given the staffing to run two sleep studies per night, 60 studies equate to 30 days of operation throughout an entire year. Year two volume will double to 120 cases given the demand for services and increased name recognition. The third year anticipates volume of 200 cases which is slower growth than the previous year yet an aggressive goal of 20% growth.
4. Charges per case vary widely between \$100 for an aborted sleep study to \$3,000 for a complex study for a vent-dependent child under 6 years old. For the purpose of the financial analysis, the median charge (and the standard fee for the most common procedure, polysomnography) of \$2,450 is used. In addition, a 3% annual increase in charge amounts is assumed.

5. Given the reliance on purchased services to conduct the sleep studies, the SCH estimates that in the first year, the combined reimbursement to their partners will be at a rate of \$1,100 per study. In order to attain the higher volume estimates, the specialty hospital will set aside an incentive structure of 2% for both the management company and the academic medical center. To avoid risk of Stark Laws, the incentive structures will be driven by fair market value.

3. Pro Forma Cash Flow Statement (Budget)
 Diagnostic Sleep Program
 Sources and Uses of Cash

<u>Sources Of Cash</u>	Budget
 <u>Cash From Operations</u>	
Operating Income	\$ 132,300
Add: Depreciation and Amortization	
	<hr/>
Cash Generated From Operations	\$ 132,300
	<hr/>
 <u>Cash From Other Sources</u>	
Contributions and Investment Income	
Total Cash From Other Sources	<hr/>
 <u>Total Sources of Cash</u>	 \$ 132,300
 <u>Uses of Cash</u>	
 <u>Capital Requirements</u>	
1. Plant and facility improvements	\$ 57,000
Information technology -	
2. routine	\$ 9,000
New/replacement medical	
3. equipment	\$ 2,300
Subtotal Capital Budget	\$ 68,300
	<hr/> \$ 68,300 <hr/>
 Total Uses of Cash	 \$ 64,000

4. Three-Year income projection
Diagnostic Sleep Program
Income Statement Projections
Base year and 3 year projection

	Projected year 1	Projected year 2	Projected year 3
Gross Patient Service Revenue	\$ 147,000	\$ 302,820	\$ 524,888
Deductions From Patient Service Revenue: Third Party Contractual Allowances and Discounts (including Charity Care)	11,025	22,712	39,367
Provision For Uncollectible Accounts	3,675	3,028	5,249
Total Deductions from Patient Service Revenue	14,700	25,740	44,615
Net Patient Service Revenue	132,300	277,080	480,273
Other Operating Revenue	-	-	-
Total Operating Revenue	132,300	277,080	480,273
Operating Expenses			
Salaries & Wages	36,500	37,595	38,723
Fringe Benefits	8,760	9,023	9,293
Supplies	4,000	4,120	4,244
Purchased Services	64,800	136,080	238,140
Rent	16,000	16,480	16,974
Advertising	25,000	10,000	5,000
Other Direct Expense	4,000	3,000	3,000
Depreciation and Amortization	-	-	-
Total Operating Expenses	159,060	216,298	315,374
NET INCOME (LOSS)	\$ (26,760)	\$ 60,783	\$ 164,898

5. Projected balance sheet

Diagnostic Sleep Program Balance Sheet

	<u>Start-up year Year</u>	<u>Projected Year 2</u>
Current Assets:		
Cash and Cash Equivalents	\$35,000	\$134,740
Accounts Receivable:		
Patients and Third parties, Less Advances		
and Allowances for Uncollectibles		220,500
Inventories of Supplies and Drugs	4,000	4,120
Prepaid and Other Current Assets	4,000	3,000
Total Current Assets	<u>43,000</u>	<u>362,360</u>
Property , Plant and Equipment	<u>68,000</u>	<u>68,000</u>
Total Assets	\$111,000	\$430,360
Current Liabilities:		
Accrued Payroll and Benefits	14,000	45,260
Accounts Payable	26,000	314,100
Total Current Liabilities	<u>40,000</u>	<u>359,360</u>
Self-funded capital	<u>\$ 71,000</u>	<u>\$ 71,000</u>
Total Liabilities	\$111,000	\$430,360
Balance	\$ -	\$ -

6. **Break-even analysis:** Break-even will be reached in year two or after the completion of approximately 85 sleep studies. Due to the healthy margin of approximately 55% on the current sleep laboratory program, the break-even is dependent on attracting patients to the new location enough to cover the incremental expenses for base rent, advertising, physician referral communications and the capital expense. Since the sleep lab can be managed from the main campus, the SCH can take advantage of economies of scale and continue to grow a high margin service.

7. **Financial statement analysis** – The financial documents reflect just the incremental portion of expanding a high-margin service. The SCH plan to expand to the satellite location is on sound financial footing. Even with a slow ramp up in business, the cash flow is positive. The sleep program is a high-margin service and is able to generate cash quickly. As demonstrated in the projected income statement, the satellite pediatric sleep laboratory will generate a surplus in year two and grow net income with modest volume increases annually.

Part IV: Innovative elements and expected business outcomes

Although a sleep laboratory is not an innovative diagnostic tool, several elements of this business proposal deliver positive outcomes for the hospital and the community. The first concept is that financial stability is driving consolidation in the industry. The SCH plans to expand a successful service in an area where other healthcare providers are withdrawing. While sleep services remains one of the highest margin and most reputable ambulatory services for the SCH, other hospital have chosen to leave the market. Through economies of scale and the delivery of high quality service for a niche market like pediatric sleep, SCH has found market strength. While competition is good for patients, healthcare organizations are realizing that doubling-down on their star performers helps the bottom line. Conversely, organizations are also

retreating from markets and services that do not meet their business goals. In this instance, the SCH is ready to fill the void when other providers leave the market.

The second innovative concept is that it is a worthy exercise to create demand for a formerly scarce healthcare resource. For the SCH, expanding into a medically underserved area has an extra challenge of providing an important health service that patients are not aware could benefit them. One can assume that children in medically underserved areas suffer from sleep disorders at the same rate as children in areas where sleep services are available, but the children seek diagnosis and treatment less frequently. Furthermore, it is common sense that sleep-deprived children do not perform at their best, yet parents may not be aware of the tools available to help their children get a good night sleep. Diagnosing and treating a sleep disorder can make a dramatic difference in a child's life.

Over the course of preparing this business proposal, I encountered several personal challenges. The first was to identify a suitable topic that interested me and would benefit my organization. As a result, I chose an actual idea that was toyed with but not fully implemented. Having extensive knowledge of a project is beneficial but at times can cloud the topic. Not all of the real-life factors have a place in a business plan.

The second challenge was working through the financial documents as my role is more strategic and operational. I can understand financial documents but building them myself was difficult. In an operational role, I find more utility in an income statement than in a balance sheet. Nonetheless, I got a fuller appreciation of how an investor or an auditor may view a business unit's operation.

The next step to implement the business plan will be to obtain leadership buy-in from the business partners. The sleep program is an income leader yet there may be other markets or services where the sleep program could expand. Related to markets, obtaining up-to-date market data is not readily available. An effort should be made to acquire more information about the target population – sleepy kids.

Works Cited

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