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The Business of Dentistry: A Financial Plan

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The Business of Dentistry: A Financial Plan

By

Katherine Elizabeth Stewart

Submitted in Partial Fulfillment
of the Requirements for
Graduation with Honors from the
South Carolina Honors College

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THESIS SUMMARY:

Throughout my life I have remained steadfast in my passion of perusing dentistry as a career. With many changes and bumps along the way, I have remained fixated on my ultimate goal – to one day open my own dental practice and center the efforts of my practice on helping disadvantaged families in an effort to lessen the gap of social inequity in access to dental care.

My goal has stemmed from a personal experience of having a brother that I never expected. Growing up, my world view was forever changed when a "Lost Boy" entered my home. My father, a college physics instructor, came home one evening speaking about a young man whom he had met that day in his class - a Lost Boy from Sudan. He was a survivor of the Second Sudanese Civil War, where he had been driven out of his home country because of economic, cultural, and religious disparities. As a family, we decided to welcome Archangelo (Arc) into our home as he reached for his dream of acquiring an American education. His example of hard work and perseverance provoked me to work even harder in my own pursuit of education. Through our relationship, I developed an openness and appreciation for people from all cultures, which compels me to be an active contributor to a healthier, safer global community.

At the University of South Carolina, I have taken action to find different ways to be more involved in my local community and to help families and people from underrepresented societies. While it is important to have this overarching goal, I have always wondered how I will be able to finance my goal so that I can have the money, supplies, and human capital to give back to communities in need. Through my thesis I have been able to create a business plan for a future dental practice in the Charlotte, NC metropolitan region. This business plan includes a financial analysis of a brick and mortar practice buyout and a four-year cash flow projection that is suited to present for a bank loan. These financial documents help me get a better look at owning and operating my own practice, and through the business plan I am able to align my financial practice goals with my practice mission.

The Business Concept

“Every tooth in a man’s head is more valuable than a diamond.”

– Miguel de Cervantes, Don Quixote, 1605

Statement of Purpose

The Mission

It is the mission of Stewart Family Dentistry (SFD) to make a positive difference in the lives of our patients by providing high quality dental care to children and adults. Our compassionate, honest, and highly educated team looks to increase our patient's overall health, self-confidence, and personal appearance.

It is also the mission of Stewart Family Dentistry to lessen the gap of social inequity in access to dental care by providing care to patients from disadvantaged families and backgrounds through "Health Professional Service Area Service Saturdays" offered each month.

Health Professional Shortage Areas (HPSA)

According to the National Health Service Corps, an HPSA is "a geographic area, population group, public or nonprofit private medical facility or other public facility for the delivery of health services (including a federal or state correctional institution) that is determined by the HHS Secretary to have a shortage of health professionals. Information considered when designating a HPSA includes health provider-to-population ratios, rates of poverty, and access to available health care services" (4).

SFD Location

Charlotte-Concord-Gastonia Metropolitan Statistical Area (MSA)

Since 2002, the Health Resources and Services Administration has identified three regions in the Charlotte-Concord-Gastonia area that are classified as dental HPSAs ("Data by Geography"). The most recent dental HPSA identified in this region is in downtown Charlotte, and this location was identified in December of 2016. It is in these dental health professional shortage areas that the Stewart Family Dentistry could be the most effective in reaching patients that are disadvantaged in terms of adequate dental access.

As seen in figure 1, in the Charlotte-Concord-Gastonia MSA was designated as a “tier 3” county according to the North Carolina Department of Commerce in 2015. This denotes that the MSA is one of the least economically distressed counties in North Carolina based off of four economic indicators (unemployment rate, median household income, percentage growth in population, and adjusted property tax base per capita). Also, the area ranked 98th in terms of economic distress out of 100 counties (#1 rank being the most economically distressed) according to the North Carolina Department of Commerce (“2015 North Carolina Development,” 6).

Although this MSA may not be distressed economically, it is evident that social inequality is still present. There is a population within the MSA that can currently afford more expensive dental procedures and preventative care, and, at the same time, there is a population that is in need of more free/reduced dental services as seen through the identified HPSA locations.

At this location SFD would be able to meet its mission two-fold.

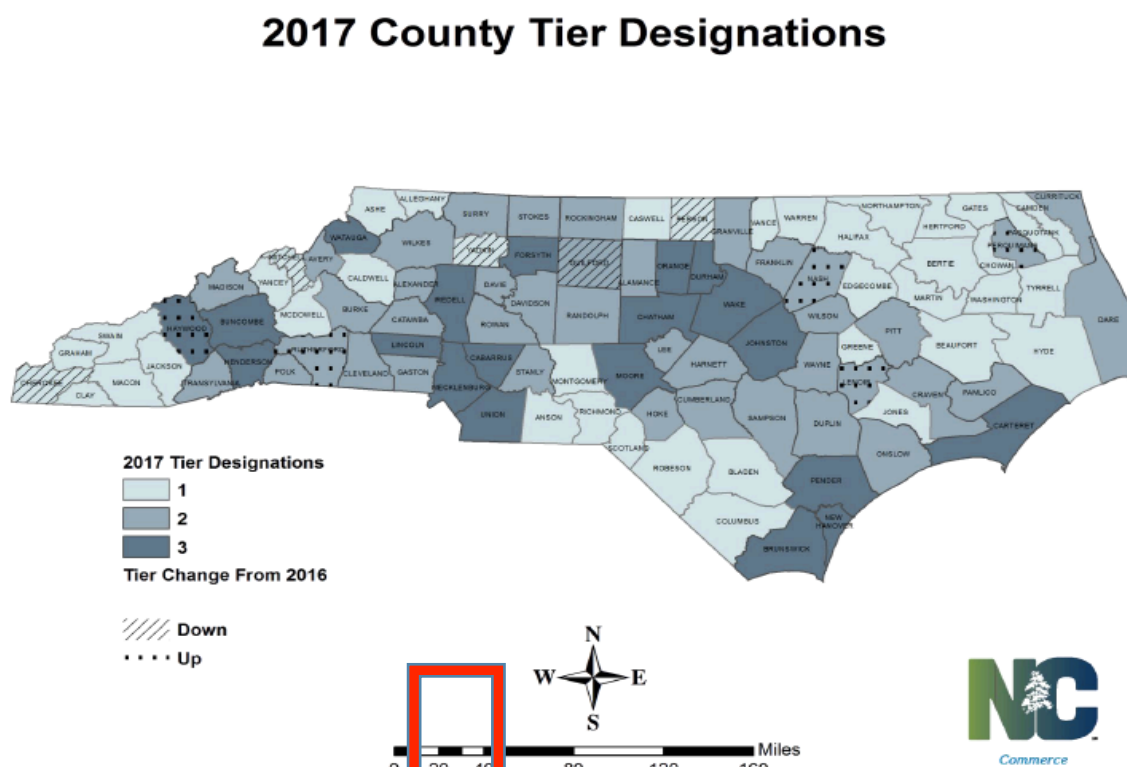


Figure 1. North Carolina Department of Commerce Tier Designations of Economic Distress (Tier 3 being least economically distressed).

Macro-community Considerations

In an article published by the North Carolina Medical Journal, “Educating North Carolina’s Oral Health Workforce in an Evolving Environment,” North Carolina has 70 health professional shortage areas (HPSA). Also, in 2014 North Carolina ranked 47th among the 50 states in terms of dentists-to-population ratio, indicating that North Carolina is in critical need of more dentists (Weintraub et al. 107).

HPSA Outreach/Referrals

Stewart Family Dentistry (SFD) plans to work in conjunction with Charlotte Community Health Clinic, which is the identified dental HPSA in the downtown Charlotte region (HPSA ID: 63799937GO). SFD will accept referrals from Charlotte Community Health Clinic and also use the clinic as a venue to market services to low-income patients. Patients that are referred to SFD through the Charlotte Community Health Clinic will receive care free of charge at Stewart Family Dentistry because patients already pay a fee to Charlotte Community Health Clinic on an income sliding-fee scale. Patients that walk-in for care at Stewart Family Dentistry on an HPSA Service Saturday will be asked to show one of following for free care consideration:

- Proof of Food Stamp Services
- Documentation of Children on free/reduced lunch program at a public school
- TANF Recipient
- Medicaid Documentation
- Proof of Income

*Similar documentation accepted on a case by case basis

Professional Economic Outlook

According to the Bureau of Labor Statistics, in an article entitled “Dentists,” the outlook for employment growth is expected to grow by 18% until 2024. Employment growth in the field of dentistry is expected to grow faster than that of other medical professions, 17%, and faster than the United States average for all other occupations, 7%. Trends show that as the link between oral health and overall systemic health increases, more people will invest in preventative oral health care (Satcher, par. 22). Thus, dentistry as a profession can project an increase in the number of patients visiting the office in the future and also expect to see an increase in the number of patients with dental insurance coverage.

Competition Considerations

According to the Bureau of Labor Statistics, there are 840 general dentists employed in the Charlotte-Concord-Gastonia MSA, and the general dentist-to-population ratio is roughly 1 to 2,889 (“May 2016 OES Metropolitan”). It can be expected that if between 52% and 70% of the current MSA population goes to the dentist each year, then practice patient base will fall within the industry norms. As learned from interviewing Dental CPA BJ Kaucher, healthy dental practices typically have 1,500 to 2,000 patients.

In the downtown area around the identified HPSA many competitors are closed on Fridays or are only open part of the day. Many practices also operate on non-traditional working hours with longer lunch breaks and earlier closing times. In an effort to establish a competitive advantage in the area, Stewart Family Dentistry will be open on Fridays as well as during lunch hours to accommodate appointment times for those working in the downtown banking area.

Brick-and-Mortar Buyout of an Existing Practice in Charlotte-Concord-Gastonia MSA

Stewart Family Dentistry will operate in the downtown Charlotte HPSA between the two Charlotte Community Health Clinic locations in an effort to be geographically accessible to both the HPSA identified area and the financial/banking sector of businesses downtown.

Hypothetical Practice

Because a practice in this location is currently not on the market, a hypothetical “current” practice cash flow statement was created to simulate a buyout (appendix document 1). This cash flow statement was created using industry standards as determined from an interview with Dental CPA BJ Kaucher and *Business Basics for Dentists* by David Willis.

Assumptions about the hypothetical practice:

- 2,000 patients
- Collections at 98%
- 1 Dentist, 1 Hygienist, 1 Dental Assistant/Chairside, 1 Clerical employee

Weighted Practice Buyout Analysis

It was projected that the hypothetical practice would have 4% annual growth in collections each year from 2017-2020. Stewart Family Dentistry would plan to buyout this hypothetical practice at a price of \$637,057.66 (appendix document 2) which is 75% of the determined asking price.

Rather than using a typical discounted cash flow model, the appropriate asking price of the hypothetical practice was determined by weighting the projected collections of the practice. This methodology was learned from interviews with Dental CPA, BJ Kaucher. The average of the weighted collections of the hypothetical practice were used as the hypothetical practice’s asking price. From there, a “spectrum” of potential offers that SFD could place were determined. As learned from Dental CPA BJ Kaucher, the ideal practice purchase price should fall between 65-80% of the asking price. For this reason, it was determined that SFD would put in an offer for the practice at 75% of the \$849,410.22 asking price (see appendix document 2).

SFD Modifications to the Existing Practice

One major modification to the existing practice would be the purchase of an CAD/CAM (computer aided design and computer aided manufacturing) machine. By adding this equipment, the practice would be able to do many restorations same-day for patients and thus be able to see more patients per week. This CAD/CAM machine would cost \$100,000 and would be purchased in 2017 (see appendix 3).

Stewart Family Dentistry also expects that collections will not be as high as the hypothetical practice that is being purchased. This is due to the fact that SFD will be offering more free care than the current practice which will increase the number of practice adjustments. Increasing the number of practice adjustments decreases practice collections because practice collections are determined by taking the gross collections less any adjustments. SFD is projecting that the collection ratio for years 2017-2020 will be 94% (see appendix document 3).

It is also projected that SFD taxes will have many tax deductions due to the free services offered at HPSA Service Saturday events. The pro bono tax deductions each year are estimated to be 50% of taxable income (see appendix document 3). Only the cost of materials used in the free services offered will be deducted from taxable income.

Description of SFD Practice

Stewart Family Dentistry will operate in the downtown Charlotte HPSA between the two Charlotte Community Health Clinic locations in an effort to be geographically accessible to both the HPSA identified area and the financial/banking sector of businesses downtown. As a general dentistry practice, the following are typical office activities performed:

- Annual examinations for preventative oral health care (examination of x-rays, teeth, gums, and maxillofacial areas)
- Removal tooth decay and fill cavities
- Tooth repair, restoration, and extraction
- Fitting of dental appliances (dentures, retainers, bridges)
- Cosmetic restoration including crowns, bridges, and caps

Marketing

Stewart Family Dentistry has identified three target market segments – cosmetic dentistry seekers, practical/utilitarian patients, and need-based patients. When planning marketing for SFD, it is critical that all market segments be reached using specific strategies. It is expected that marketing for cosmetic dentistry seekers and practical dentistry seekers can be done through internal and external marketing efforts.

Internal marketing refers to marketing towards existing patients (Willis 214). With internal marketing, it is important for SFD to establish a strong brand in the minds of our patients. SFD branding will help patients develop a sense of trust in our business, and will also help the patient see a clear and consistent value in our services provided. All e-mails, letters, bills, and website links will include the same consistent logo. Through surveys given at the practice, SFD will evaluate the performance of the service provided and the effectiveness of various marketing methods. SFD marketing mediums will be evaluated quarterly to determine if they are still valuable means. Additionally, at the end of each visit a patient will be given a card that they can give to family/friends to refer them to SFD. If a new patient is generated from an existing patient, the existing patient will receive a service discount or a new dental product.

External marketing refers to marketing aimed at bringing in new patients to the practice (Willis 214). Stewart Family Dentistry will largely rely on inter-professional communication as a source of generating new patients. Upon opening SFD, formal messages will be sent to other dental offices in the area about services offered at our clinic as well as other personal information and contact resources. In addition, SFD will have very visible sign placement outside of the office. People who regularly pass the office will clearly be able to see the name and contact information of the practice.

The Stewart Family Dentistry practice website will be a platform for both external and internal patients to use. The website will provide information on the background of the dentist, education and experience in the field, and it will also include information on the services offered. Internal patients will be able to log on to their patient portal on the website and view upcoming appointments, various documents/patient history, and send messages to staff members. External

patients will be able to easily find and navigate our website through the use of search engines such as Google or Bing. A special page on the website will be devoted to the explanation of procedures so that internal and external patients can know what to expect before entering the office. Also, a special page on the website will be devoted to explaining the benefits and abilities of the CAD/CAM technology to cosmetic dentistry in the office.

Marketing towards need-based patients will be slightly different than the traditional marketing efforts. Stewart Family Dentistry will work in conjunction with Charlotte Community Health Clinic to explain the benefits of good oral health on overall health. Patients at Charlotte Community Health Clinic will be given information on SFD and the services offered at HPSA Service Saturday events. The information in these flyers will include elementary explanations of how to know if you have a dental emergency, how to take care of your oral health at home, and how to get help and get started seeing a dentist regularly. All marketing through Charlotte Community Health Clinic will be paper-based in an effort to reduce any barriers that may be associated with electronic communication. Outside of Charlotte Community Health Clinic, Stewart Family Dentistry will advertise to low-income patients through local churches that have community outreach programs. Advertisements in churches will mostly occur in specific neighborhoods of Charlotte (Lockwood, Biddleville, Tyron Hills, Seversville, Double Oaks, etc.) all of which are identified as average/below average neighborhoods in the area.

Personnel at SFD

Stewart Family Dentistry will plan to hire one dental hygienist, one dental assistant (chairside), and one secretary (clerical labor). As a percentage of total collections, staff costs estimated to be 26% which is between the industry standard of 25-30% (Willis 168). All projected staff salaries at SFD are reflected in appendix document 3.

Salaries paid to employees are measured against total collections to determine an efficiency level of the job. If the efficiency level is higher than the industry standard for the job, SFD might be over compensating an employee. Conversely, if an efficiency level is lower than that of the

industry, SFD should consider paying the employee more for the contribution they are making towards total collections (see appendix document 4).

Each year, per rules of the U.S. IRS, SFD will be responsible for paying the employer portion of Social Security Tax and Medicare Tax for each employee. Social Security Tax for SFD per employee is the product of the employee's salary and 6.2%. Medicare Tax for SFD per employee is the product of the employee's salary and 1.45% (see appendix 3).

Dental Assistant Job Description

Duties of the dental assistant will include assisting the dentist chairside, mixing materials, creating medicaments, and providing water and suction to the patient during the procedure. It will also be the duty of the assistant to greet the patient, take them back to the appropriate room, and prepare the necessary equipment for the treatment plan.

The dental assistant should report directly to the dentist. In a case where the dentist is not present, the dental assistant should report to the dental hygienist. Other than setting up materials and instruments, any time the dental assistant is working inside the patient's mouth it is expected that they have direct supervision from the dentist.

The dental assistant will be expected to have a Certified Dental Assistant (CDA) certificate from a formal program that is recognized by the Dental Assistants National Board.

Dental Hygienist Job Description

Duties of the dental hygienist will include keeping track of patient care plans, cleaning teeth, taking radiographs, and guiding the patient on how they can maintain their oral health. During a cleaning the hygienist should remove tartar, stains, and plaque. The hygienist should note any specific areas that the dentist may need to examine (potential cavities, gum recession, abnormalities, etc.). During a patient's preventative visit each year the hygienist should take an

x-ray for the dentist. The hygienist should also apply sealants and fluoride when necessary to help protect the patient's teeth.

The hygienist is expected to have an associates degree in dental hygiene from an accredited program that is recognized by the American Dental Association.

Secretary Job Description

It is the duty of the secretary to greet, assist, and handle the organization of the patient's files. The secretary is expected to plan the daily schedule, fill in "no show" appointments, and enter all patient information into the database. It shall also be the job of the secretary to take payments, send out bills, and handle all mail. Each morning the secretary should post the daily schedule as well as pull all treatment plans for the day. The secretary will function as the main point of contact for the business.

Operations

Scheduling

A distinct time code will be given to a patient at the end of their visit to adequately schedule their next appointment time. This code will be determined by the dentist and will contain three digits. Each digit corresponds to a specific handler for the patient – first digit for the first handler, the second digit corresponding to the dentist, and the third digit corresponding to the second handler. The first digit is a number for the first handler of the patient (either hygienist or dental assistant), and the number will correspond to a 15-minute interval. For example, the number 1 as the first digit of the three-digit code sequence will correspond to one 15-minute time period for the first handler. A number 2 will correspond to two 15-minute time periods, or 30 minutes' total. This sequence will ensure that the secretary can determine the time frame needed for the next appointment, and, on the day of the appointment, it will also provide a time frame for each handler.

An example schedule is included in figure 2. This document will be created by the secretary and will include a three-digit time code.

It is projected that SFD will lose 10% of the original office's patient base due to transition. With 1,800 patients at SFD and four weeks of paid vacation, it is estimated that 75 patients will need to be seen each week. Therefore, each day it is estimated that, at the minimum, 15 patients will be seen in an effort to meet overhead costs (see appendix document 5).

Before Lunch Schedule Date: _____

Time	Chair 1	Chair 2	Chair 3 - Hygienist Chair
8:00	Christy Lawton (3-1-1)	Joe Hillingsworth (2-1-1)	Tamera Jones (3-1-0)
8:15	Cr#4	Em.#9	Prev.
8:30			
8:45	↕	↕	
9:00			↕
9:15			
9:30	Harrison Christian (1-2-2)		Eddy Putter (3-1-0)
9:45	X #5		Prev.
10:00			
10:15		Lucy Greene (1-4-1)	↕
10:30		Cr #6	
10:45			
11:00	Lauren Hayward (3-2-1)		Jacky Abernathy (3-1-0)
11:15	/F		Prev.
11:30			↕
11:45			
12:00		Patty Newman (1-1-0)	Courtney Hills (3-1-0)
12:15		CU	Prev.
13:30			
12:45	Jack Turner (1-3-1)		↕
1:00	Em. #6		
1:15			Billy Bobbie (3-1-0)
1:30			Prev.
1:45			
2:00			↕

Notes:

Figure 2. Example daily schedule (dentist rotation denoted using orange arrows).

Fee Policy

Stewart Family Dentistry will charge patients using a cost-based methodology. This methodology is determined by the daily operating profit needed to break even (Willis 193). To determine the minimum amount that needs to be charged per patient, total expenses are divided by the number of operating days. As production increases, the total expenses for the office also increases; therefore, over time there will be an increase in the operating overhead that needs to be charged per patient. At the minimum, quarterly analysis will be conducted to determine the appropriate operating overhead per patient. In doing this, it will ensure that payroll, office expenses and dentist salary are adequately paid. In addition, there will be a slight mark-up beyond the operating overhead charged to each patient – a cash flow “cushion” for the office.

The operating overhead per patient each day is roughly \$253 for 2017 (see appendix document 5). This estimation was determined under the assumption of SFD having traditional 8-hour work days and paying employees for four weeks of vacation. It is expected that one week of the paid time off is actually time spent on HPSA Service Saturday events.

Average fees for a general dentist office in Charlotte, NC are included below in figure 3. By having at least one patient with the hygienist and one patient seeing the dentist in another room, it can be seen that SFD should average well over \$253 per patient each day.

CDT Code	Nomenclature	Common Terminology	Estimated Charge	Class	Estimated Reimbursement for Patients with Insurance	Out of Pocket Cost for Patients with Insurance
D1110	Prophylaxis - adult	"prophy"	\$101.00	Diag & Prev	\$101.00	\$0.00
D2330	Resin-based composite - one surface, anterior	White filling, front tooth, 1 surface	\$185.00	Basic/ Major	\$148.00/\$92.50	\$37.00/\$92.50
D6058	Abutment supported porcelain/ceramic crown	Abutment supported, porcelain crown (white)	\$1,575.00	Major	\$787.50	\$787.50
D2954	Prefabricated post and core in addition to crown	Crown, or "cap", post and core fabricated chairside. Helps hold a crown on a tooth.	\$365.00	Major	\$182.50	\$182.50
D7140	Extraction, erupted tooth or exposed root (elevation and/or forceps removal).	Extraction or pulling of a tooth that is non-surgical. No cutting of tissue.	\$199.00	Basic/ Major	\$159.20/\$99.50	\$39.80/\$99.50
D7230	Removal of impacted tooth - partially bony	Extraction or pulling tooth that has the crown partially covered by bone, referred to as "partially	\$480.00	Basic/ Major	\$384.00/\$240.00	\$96.00/\$240.00

		impacted."				
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Figure 3. Selected average dental fees in 28209 zip code.
Source: Data derived from FAIR Health, Inc.

The Financial Plan

“Beware of little expenses. A small leak will sink a great ship.”
-Benjamin Franklin

SFD Investment Analysis

The capital required to buyout the existing practice, \$637,057, is needed in the form of a loan. This bank loan will be obtained through a commercial bank and will be paid back over 180 months at a 5.5% interest rate. SFD will pay \$62,436.48 per year in debt service (see appendix document 3). As discussed in a personal interview with Dental CPA BJ Kaucher, 80% of the practice purchase price will be attributed to goodwill and 20% to tangible assets.

After purchasing the practice, it is assumed that SFD total production will grow at 4% annually. It is also projected that the compensation for the dentist will start at 30% of DDS production, and salaries for all office employees will grow at 3% annually. For financial statement purposes, it is assumed that the life of the practice is 15 years.

Because the office plans on offering a significant amount of free/reduced care, collections will be at 94% (lower than that of the hypothetical practice that is being purchased). SFD will also have pro bono services at 50% of taxable income. These pro bono services will be tax deductible and only include the cost of materials associated with free care (see appendix document 3).

Pro Bono Service

To determine the amount of pro bono services that SFD can financially offer each year, SFD will take the clinical expenses projected for the year and divide by the number of active patients to derive a “clinical expense per patient.” This number will then be divided by 50% of the respective year’s taxable income to determine how many patient’s SFD can see for HPSA Service Saturday events in a year. In figure 4, below, is a breakdown of the estimated number of pro bono patients SFD can see in 2017 (“clinical expense” is from appendix document 3).

2017 Pro Bono Services for SFD	
Clinical Expense	\$ 52,877.17
Clinical Expense Per Active Patient	\$29.38
Pro Bono Service Projected for 2017	3,031.77
Number of Pro Bono Patients in 2017	103.20
Number of Patients Per Service Saturday Event	8.6
Availability of 9 patients per HPSA Service Saturday Event	

Figure 4. SFD 2017 breakdown of pro bono services

Project Reflection

It is no surprise that dentists often hire dental certified public accountants, or dental CPAs, to assist them in every day analytics of a dental office. While I have researched and predicted the potential dental market in my preferred location, many factors of my predictions will change over time. However, creating a framework for my future office has prepared me to think about the ensuing challenges associated with a practice buyout.

Before making the decision to outright buy a practice in the future, I will also consider “buying in” with an associate to reduce the risk and cost associated with practice acquisition. It is anticipated that, although I have a background in finance, I will also assemble a team to conduct market research and handle my financials before joining or opening practice. In doing this, I will be able to primarily focus on my main job – being a great dentist.

Acquiring a practice in the future is not a guaranteed cash flow, and a large emphasis of Stewart Family Dentistry will need to be placed on marketing and patient retention plans in order to have a sustainable patient base. The start of retaining patients will come from hiring employees that believe in the practice mission and are trustworthy, skilled, and competent in their day to day work. Because I can not be in every room all the time, I have to trust in my staff to make sure that they are treating patients the way that I would want them to be treated.

Because of all of the variables associated with planning a dentistry, this project is to be viewed as an outline for my future practice rather than a step-by-step plan. Through this project I have been able to better understand all of the planning involved with owning a dental practice. Also, I have been able to see potential obstacles associated with setting up a practice. In all, this project has successfully helped me gain a glimpse into the business of dentistry.

APPENDIX 1. Hypothetical Charlotte-Concord-Gastonia MSA Practice Cash Flow Statement

	Current Practice (2016)	Current Practice %
Revenue:		
DDS Production	635,542.86	75%
Hygiene Production	211,847.62	25%

Total Production	847,390.48	100%
Total Collections (@ 98%)	830,442.67	98%
Expenses:		
Clerical	76,265.14	9%
Clerical Payroll	5,834.28	0.69%
Chairside	59,317.33	7%
Chairside Payroll	4,537.78	0.54%
Hygiene	67,791.24	8%
Hygiene Payroll	5,186.03	0.61%
Clinical Expense	50,843.43	6%
Office Expense	33,895.62	4%
Lab Expense	42,369.52	5%
Facility and equipment	74,739.84	9%
Doctor Compensation*	222,440.00	35%
Misc.	116,261.97	14%
Total Expenses	759,482.19	
Net Cash Flow	70,960.48	

APPENDIX 2. Weighted Buyout Analysis of Hypothetical Practice in Charlotte-Concord-Gastonia MSA

Year	2017	2018	2019	2020
Weight	4	3	2	1
Collections	\$863,660.37	\$733,230.03	\$934,135.06	\$971,500.46
Collections w/ weight	\$3,454,641.49	\$2,199,690.09	\$1,868,270.12	\$971,500.46

Total Weighted Average	849,410.22
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Sales Price Spectrum			
Practice Sales Rate of Gross Collections	80%	75%	65%
Proposed Sale Prices	\$679,528.17	\$637,057.66	\$552,116.64

APPENDIX 3. SFD 4-year Pro-Forma Cash Flow Statement

	2017	2018	2019	2020
Revenue:				
DDS Production	660,964.57	687,403.15	714,899.28	743,495.25
Hygiene Production	220,321.52	229,134.38	238,299.76	247,831.75
Total Production	881,286.10	916,537.54	953,199.04	991,327.00
Total Collections (@ 94%)	828,408.93	861,545.29	876,943.12	931,847.38
Expenses:				
Clerical	78,553.10	80,909.69	83,336.98	85,837.09
Clerical Payroll	6,009.31	6,189.59	6,375.28	6,566.54
Chairside	61,096.85	62,929.76	64,817.65	66,762.18
Chairside Payroll	4,673.91	4,814.13	4,958.55	5,107.31
Hygiene	69,824.98	71,919.72	74,077.32	76,299.64
Hygiene Payroll	5,341.61	5,501.86	5,666.91	5,836.92
Clinical Expense	52,877.17	54,992.25	57,191.94	59,479.62
Office Expense	35,251.44	36,661.50	38,127.96	39,653.08
Lab Expense	44,064.30	45,826.88	47,659.95	49,566.35
Facility and equipment, excluding depreciation	74,556.80	77,539.08	80,640.64	83,866.26
Doctor Compensation	198,289.37	206,220.95	214,469.78	223,048.58
Misc. Expenses	115,977.25	120,616.34	125,440.99	130,458.63
Total Expenses	746,516.10	774,121.74	802,763.97	832,482.20
Debt Service - Bank Loan*	62,463.48	62,463.48	62,463.48	62,463.48
Equipment purchases	100,000.00	-	-	-
Practice acquisition costs - attorney	5,000.00	-	-	-
Total Acquisition Expenses	167,463.48	62,463.48	62,463.48	62,463.48
Net Cash Flow	-85,570.65	24,960.06	30,779.65	36,901.70
Depreciation	31,852.88	31,852.88	31,852.88	31,852.88
Depreciation of new equipment	5,000.00	9,500.00	8,550.00	7,700.00
Amortization	33,976.41	33,976.41	33,976.41	33,976.41
Taxable Income	6,063.54	12,094.25	18,863.84	25,835.89
Pro Bono Expense Tax Deduction	3,031.77	6,047.13	9,431.92	12,917.95
Tax @ 40% Estimate	1,212.71	2,418.85	3,772.77	5,167.18
Net Cash Flow After Tax	-86,783.36	22,541.21	27,006.88	31,734.53

APPENDIX 4. SFD 2017 Employee Efficiency Projections Compared to Industry Standards

Staff	Industry Efficiency Standard	SFD Efficiency
Clerical/Front Office	8-10%	9%
Chairside	7-10%	7%
Hygiene	33-42%	33%

APPENDIX 5. SFD 2017 Overhead Expenses and Gross Production Per Patient Calculations

Scheduled Off Time (weeks/yr.)	4.00
Weekly Operating Expenses (including time off)	19,041.24
Daily Operating Overhead to Break Even	3,808.25
Daily Hours of Operation	8.00
Operating Overhead Per Hour to Break Even	476.03
Active Patient Base	1,800.00
Estimation of Patients Per Week	75
Estimation of Patients Per Day	15
Operating Overhead Per Patient Per Day	253.88

	Industry Standard	SFD (2017)
Gross Production Per Patient	\$300-\$500	\$489.60

Works Cited

- "2015 North Carolina Development Tier Designations." *North Carolina Department of Commerce - Labor & Economic Analysis Division*, 2015, <https://www.nccommerce.com/Portals/0/Incentives/CountyTier/2015%20Development%20Tier%20Rankings.pdf>.
- Barnett, Jessica C., and Marina S. Vornovitsky. "Income, Poverty, and Health Insurance Coverage in the United States: 2005." *United States Census Bureau*, Sept. 2016, <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p60-257.pdf>.
- "May 2016 OES Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates." *U.S. Bureau of Labor Statistics*, May 2016, https://www.bls.gov/oes/current/oes_16740.htm.
- "Dental Hygienist." *U.S. Bureau of Labor Statistics*, 17 Dec. 2015, <https://www.bls.gov/ooh/healthcare/dental-hygienists.htm>.
- "Dentists." *U.S. Bureau of Labor Statistics*, 17 Dec. 2015, <https://www.bls.gov/ooh/healthcare/dentists.htm>.
- "FH Dental Cost Lookup: Get Started." *Fair Health*, 26 Mar. 2017, <https://fairhealth.org/>

hconsumer.org/dental_cost.php.

“Data by Geography – Mecklenburg County, NC.” *Health Resources & Services Administration*, 8 Apr. 2017, <https://datawarehouse.hrsa.gov/tools/DataByGeographyResults.aspx?geoType=County&geoCd=37119>.

Kaucher, BJ. Personal interview. 11 Nov. 2016.

"National Health Service Corps Scholarship Program" *National Health Service Corps*, March 2017, <https://nhsc.hrsa.gov/downloads/spapplicationguide.pdf>.

Satcher, David. “Oral Health in America: A Report of the Surgeon General” *National Institutes of Dental and Craniofacial Research*, 2000, <https://www.nidcr.nih.gov/DataStatistics/SurgeonGeneral/Report/ExecutiveSummary.htm#partTwo>.

"North Carolina County Labor Market Conditions." *North Carolina Department of Commerce – Labor and Economic Analysis Division*, Jan. 2017, <https://www.nccommerce.com/LinkClick.aspx?fileticket=rCyLsGIADAM%3d&tabid=4457&mid=8994>.

Weintraub, Jane A, et al. “Educating North Carolina’s Oral Health Workforce in an Evolving Environment.” *North Carolina Medical Journal*, vol. 77, no. 2, Mar. 2016 pp. 107-111. EBSCOhost, doi:18043/ncm.77.2.107.

Willis, David O. *Business Basics for Dentists (1)*. Somerset, US: Wiley-Blackwell, 2013.

ProQuest ebrary, [http://site.ebrary.com/lib/southcarolina/reader.action?ppg=255&](http://site.ebrary.com/lib/southcarolina/reader.action?ppg=255&docID=10672845&tm=1479750254087)

[docID=10672845&tm=1479750254087](http://site.ebrary.com/lib/southcarolina/reader.action?ppg=255&docID=10672845&tm=1479750254087)