Richard Ivey School of Business
The University of Western Ontario

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CHANG DENTAL CLINIC

Andrew Smith wrote this case under the supervision of Elizabeth M.A. Grasby solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

It was early January 2006, and Chris Miller was contemplating an opportunity to purchase and operate his first dental clinic, the Chang Dental Clinic. Miller had been working as an associate[1] since April 2003, and he believed it was time to run his own practice. Located in Petrolia, Ontario, Canada, the Chang Dental Clinic would provide Miller with an opportunity to "hit the ground running" in his own dental practice. Taking over an established practice meant Miller would not have to attract new patients, hire staff, purchase all the needed equipment, or do a variety of other tasks needed to start a new practice. Through discussions with Stanley Chang, the current owner of the Chang Dental Clinic, Miller believed that Chang's practice could be a proper fit, but Miller still wanted to perform a thorough analysis of the Chang Dental Clinic to ensure this was a good decision.

Miller knew he could find $190,000 for this investment through personal savings and loans from friends and family, but, with a purchase price of $510,000, he would need more funding. Since Miller had no interest in taking on partners, this additional financing would have to come from a bank. Miller had little past experience negotiating bank financing, so he wanted to assess the likelihood of obtaining the loan.

THE DENTAL INDUSTRY

In Ontario, there was a universal health-care system,[2] meaning that a large number of medical treatments and procedures were paid for by the government and not the patient as long as the patient was a resident of the province of Ontario. The dental industry, on the other hand, did not operate in the same manner. Dental treatments and procedures, for the most part, were not covered by the government so patients paid for their dental work. A large proportion of patients had health insurance plans. Although some insurance plans provided full dental coverage, most plans covered at least a portion of the treatment cost, requiring

[1] *An associate is a fully licensed dentist who performs procedures on behalf of other dentists and receives a portion of the patients' billing. Upon hiring, the associate negotiates his portion of the billing.*
[2] *The concept of universal health care in Canada began in Saskatchewan in 1946. By 1961, all 10 provinces, including Ontario, had implemented some form of universal health-care system.*

the patients to pay the remainder. Generally, most practices would allow insurance companies time to pay, but the patients were required to make payment immediately, and the Chang Dental Clinic was no different.

The prices charged for various treatments were relatively standard among different dentists. This was due to the fact that the Ontario Dental Association (ODA) put out a fee guide indicating the recommended price to charge for all potential procedures. Although adherence to this fee guide was not regulated, the industry used it as a guideline, and most dentists followed it fairly closely. Currently, Chang followed the ODA fee guide quite closely, and Miller expected to do the same. The recommended prices were reviewed by the ODA on an annual basis and were adjusted as necessary.

The number of dentists practising was not specifically regulated either, although the limited number of positions in dental school programs in Ontario did serve to limit the number of practising dentists. Despite this fact, there was no shortage of dentists in Ontario. In fact, in most communities, dentists readily accepted new patients so most people were able to find a dentist in their region. Although there were no restrictions as to where a dentist could locate a practice, the industry tended to be self-regulated in this regard. Generally, if an area was already being fully serviced, a new practice would not open. A practice would open in a particular area only if there was a clear need for another dentist.

Most dental practices limited the number and type of services they performed. In general, a routine dental practice provided regular day-to-day services, such as check-ups, teeth cleaning, cavity filling and minor corrective treatments. If the patient's needs were outside the scope of the practice's usual treatments, the dentist would then refer the patient to a dentist who specialized in those procedures. For example, a patient who required the removal of wisdom teeth would be referred to a dental surgeon, or a patient requiring orthodontics would be referred to an orthodontist. This allowed dentists to focus on specific areas of treatment with the hope of providing the highest possible quality of care. This resulted in most dental practices maintaining relationships with specialized dentists who focused on other areas of patient care.

THE CHANG DENTAL CLINIC

Stanley Chang had purchased the Petrolia Dental Clinic in May 2003. Chang had thought it necessary to change the practice's name to the Chang Dental Clinic in order to indicate that there had been a change in ownership and to make his name better known within the community.

At the time of Chang's purchase, the previous owner had another clinic located in another community, so he had been splitting his time between the two practices. The size of his other practice had led this dentist to conclude that he should sell one of his clinics, i.e., the Petrolia practice, and concentrate solely on the other. Unfortunately, part of the equipment and assets in the Petrolia clinic were being leased, and there were terms of five to eight years left on the various leases. In order for the previous owner to be free of these lease commitments, the purchase was structured so that Chang took over the lease commitments on the equipment and paid one dollar for the business. As the leases expired and the practice grew, Chang began purchasing some of the assets used in the practice.

When Chang had initially looked at purchasing this dental clinic, he had been out of school for two years and was looking for a practice of his own. An acquaintance had indicated an intention to sell his practice, and Chang began discussing the opportunity with him, eventually buying the practice. Upon taking over the practice, the dental clinic was only open three days a week. At the time, Chang did not believe that the number of patients was sufficient to increase the clinic's hours. Over time, Chang grew the business, taking on new patients and eventually reaching the point where this clinic needed to be open one more day each week, therefore operating Monday to Thursday. Chang believed that these hours were sufficient, and since he had enjoyed having Fridays off, he had no intention of increasing the hours any further unless the number of patients got to a point that the reduced hours were damaging patient satisfaction.

As part of the original purchase agreement when Chang took over the practice, there was a transition period until fiscal 2004 began. During this time the previous owner agreed to work part-time as an associate to help Chang with the transition to running the practice himself as well as help with some of the patient overflow. Chang grew to appreciate the help and found that the additional hours available to patients helped to improve overall patient satisfaction. So, when the transition period with the previous owner was finished at the beginning of fiscal 2004, Chang hired a full time dental associate. Similar to the previous owner's role, the associate helped with patient overflow, performing some of the less difficult procedures. This dental associate's contract was renegotiated at the beginning of every fiscal year for the upcoming fiscal year.

Chang was still young compared to many practising dentists. Despite this, his patients indicated a high level of satisfaction with Chang's dentistry skill. Based on his age, Chang knew he would have to work to convince patients of his ability, which was probably what led him to strive for a high level of patient satisfaction. Chang believed his young age may have even given him a slight advantage because it reduced patients' fears that he would soon retire, leaving them without a dentist.

Chang had been happy with the growth and overall performance of the practice since he had taken it over (see Exhibits 1 and 2 for financial statements); however, since he had always yearned to be closer to friends and family, he decided to sell the practice so he could relocate to the town where he grew up, Montreal.

Chang's purchase of the practice had included a purchase of the assets owned by the business and a component for goodwill. Chang also undertook the remaining lease commitments of the business. Miller's purchase of the practice included a purchase of the assets owned by the business, a component of goodwill and the purchase of all outstanding leases, thereby eliminating an annual lease cost. Thus, Miller's purchase price was broken down as follows:

Equipment[3]	$ 141,000
Leasehold improvements[3]	65,000
Office and dental supplies inventory	8,000
Goodwill	296,000
Total	$ 510,000

This type of purchase was standard for dental practices. The assets had value, but a large portion of the purchase price was associated with the goodwill of the business, which stemmed from the practice's patient list and the positive connection that these patients had with the practice. The customers, or patients, of a dental practice were usually very loyal to the practice. This loyalty, however, was mostly towards the dentist within the practice since patients became comfortable receiving care from and developing a relationship with that particular practitioner. Despite this fact, when a practice was sold to a new dentist, most patients still remained loyal to that practice. This was because, unlike the usual business/customer relationship, there was a hassle associated with changing dentists, so most patients were hesitant to switch and would give new dentists a chance to prove themselves.

[3] *All equipment and leasehold improvements purchased would be amortized using the straight-line method over a life of 10 years with no salvage value.*

PETROLIA, ONTARIO

With a population of 5,222 people,[4] Petrolia was a small town located in Southwestern Ontario. Petrolia was situated close to the Canada/United States border, about a 15- to 20-minute drive from Sarnia, Ontario, and a one-hour drive from London, Ontario (see Exhibit 3 for a map of Petrolia's location). The average household income in Petrolia was approximately $63,000,[5] as compared to an average household income of approximately $68,000[6] in Sarnia and $69,000[7] in London. Including the Chang Dental Clinic, there were three dental practices[8] located in Petrolia. As well, there were approximately 45 to 50 dental practices[9] located in Sarnia and approximately 270 dentists in the London area.[10]

CHRIS MILLER

Chris Miller graduated from the University of Toronto in April 2003 with a degree in dental surgery (DDS). As part of his education, Miller took a variety of courses covering many important aspects that were central to becoming a dentist. Some of these courses were taught using the traditional lecture style, but other courses involved practical applications of treatments, such as creating moulds of people's teeth. One aspect of Miller's education was performing procedures on patients as part of a free clinic held at the dentistry school. Dental students would practise the necessary procedures on the patients who came into the free clinic — ranging from simple teeth cleanings, to freezing the patients, to filling cavities.

Upon graduation, as was common practice for many dentistry school graduates, Miller started his career working as an associate for other dentists. This allowed Miller to gain more experience performing a variety of different procedures, while still having someone with whom to confer around patient care. Also, acting as an associate gave Miller an opportunity to learn more about how a dental practice was run, seeing firsthand how the business side of the clinic operated, from booking patients, to managing staff, to buying supplies and keeping the accounting records.

Miller worked as an associate for three different dental practices. With large student loans to be repaid, Miller was anxious to quickly pay down as much debt as possible so, for a short while, he worked seven days a week: Monday to Thursday for one dentist, Friday and Saturday for another and Sunday for a third dentist. It was not long before this work schedule began to take its toll on Miller, and it became necessary for him to give up his Sunday job. In 2006, having paid down a large portion of his student debt and having put some money into savings, Miller cut his schedule back a bit further, working from Monday to Thursday only.

Miller was extremely personable, and interacting with his patients was something he enjoyed tremendously. Miller knew that, for many people, a visit to the dentist was a stressful event, so he always maintained a pleasant demeanor in an effort to reduce some of the patient's stress. Miller also tried to get to know his patients as much as possible, asking questions and showing a personal interest in them. Not only did this make the experience more pleasant for Miller, but it also helped calm his patients.

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[4] *Statistics Canada 2006: Census Results, www.statcan.ca, February 21, 2008.*
[5] *2006 Census Results listed on the Ontario Economic Development Official Homepage, www.2ontario.com, February 21, 2008.*
[6] *Ibid.*
[7] *Ontario Economic Development Official Homepage, www.2ontario.com, February 21, 2008.*
[8] *Source: The Town of Petrolia Official Website, http://town.petrolia.on.ca, February 21, 2008.*
[9] *Source: Canada411.ca, www.canada411.ca, February 21, 2008.*
[10] *Yellow Pages, London and Area edition, 2005-2006.*

Miller had no previous experience running his own business; however, as part of his dental degree, he had taken courses on how to operate a dental practice. These courses outlined important aspects of running a business such as the basic practices for keeping accounting records for the business. Miller was confident that these courses, along with the practical knowledge gained from working for other dental practices, would help to overcome his lack of experience.

EXPECTATIONS FOR THE FUTURE

Miller was confident that once he took over the practice, even as the new owner and practicing dentist, the trend in sales growth would equate to half the percentage growth in sales from fiscal 2004 to fiscal 2005. Associate fees, dental supplies and laboratory fees varied, based on the revenue earned. Miller projected that, in fiscal 2006, dental supplies costs and laboratory fees would remain at the same proportion of sales as in fiscal 2005. Miller believed he could do more of the work himself, and he expected to reduce the associate fees to 15 per cent of projected 2006 revenues. Miller considered all other costs to be fixed and, as such, they would not vary with sales volume. He also anticipated that the practice would not incur any bad debts or recoveries for fiscal 2006.

When projecting the fiscal 2006 balance sheet, Miller believed that the aging of accounts receivable inventory[11] and accounts payable[12] would remain unchanged from fiscal 2005. Prepaid expenses were also expected to remain the same amount as in fiscal 2005. No fixed assets were expected to be purchased or sold during the upcoming year.

Realizing that financing would certainly be required, Miller spoke to his bank's loans officer/manager to get some information about the financing terms. The loans officer/manager noted that the new practice, if eligible for financing, could obtain a 10-year-term loan on which the principal would be repayable in equal monthly installments of $2,667 per month, due on the last day of each month. The interest would be charged at a rate of six per cent[13] per annum, based on the loan balance at the end of each month (after deducting the principal repayment) and would be paid at the same time as the monthly principal payment. Other bank charges were expected to amount to $500 yearly. Finally, Miller planned to withdraw $140,000 per year from the practice in order to cover his personal living expenses.

If the purchase were to go through, Miller would take possession on February 1, 2006; consequently, Miller decided that if he were to purchase the practice, the first fiscal year for the new business would be February 1 to January 30.

THE DECISION

Miller was very pleased with the potential opportunity to purchase the Chang Dental Clinic, but with a purchase price of $510,000, he needed to be absolutely certain that this was a good decision. With only a $190,000 investment, Miller knew he would need to convince the loans manager to lend him the rest of the financing. Miller knew that if he was interested in this potential opportunity, then others were likely interested as well; therefore, his decision would have to be made quickly, before someone else seized this opportunity. Armed with all the information and with some industry data (see Exhibit 4 for industry ratios), Miller sat down to begin his analysis.

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[11] *Age of inventory is determined using dental supplies expense.*
[12] *All operating expenses are paid on account with the exception of salaries and benefits, equipment leasing, rent and utilities, interest and bank charges, bad debts and amortization.*
[13] *Total interest for the year ended January 30, 2007, was expected to amount to $18,160.*

Exhibit 1

INCOME STATEMENT
For the year ended December 31

	2005	2004	2003
FEE REVENUE	**$ 812,987**	**$ 600,308**	**$ 287,281**
OPERATING EXPENSES:			
Associate fees	166,727	106,486	40,098
Salaries and benefits	127,703	93,868	39,008
Dental supplies	62,715	40,508	26,291
Equipment leasing	52,582	52,582	19,456
Rent and utilities	42,441	38,500	29,428
Laboratory fees	21,626	10,636	186
General and office	17,420	14,193	9,051
Promotion and entertainment	10,775	8,172	794
Automobile expenses	5,104	3,677	1,337
Telephone	11,187	1,251	4,697
Professional fees	5,910	3,294	5,755
Interest and bank charges	5,630	7,015	13,579
Professional development	2,913	406	2,021
Insurance	2,778	1,612	849
Licences, fees and dues	1,843	2,685	1,282
Bad debts (recovered)	(3,647)	17,939	339
Amortization	14,872	10,484	8,687
TOTAL EXPENSES	**548,579**	**413,308**	**202,858**
NET INCOME	**$ 264,408**	**$ 187,000**	**$ 84,423**

Source: Chang Dental Clinic.

Exhibit 2

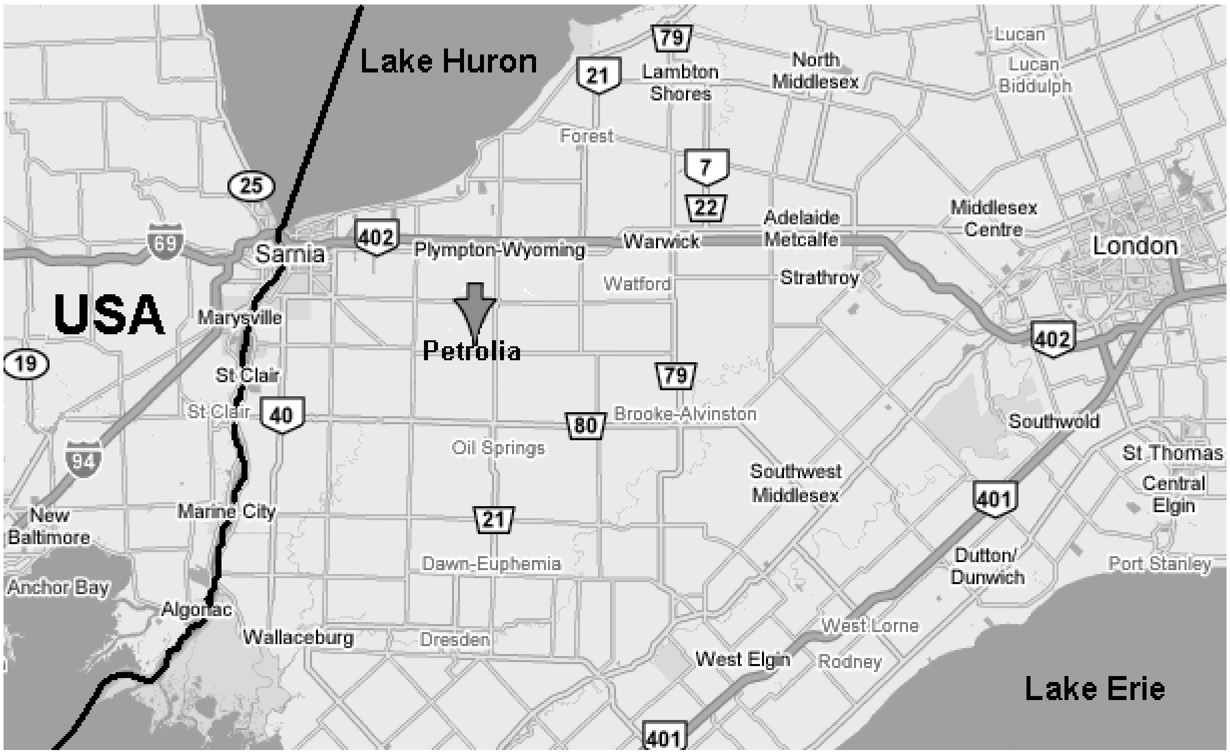
BALANCE SHEET
As at December 31

	2005	2004	2003
ASSETS			
Current Assets			
Cash	$ 4,067	$ —	$ —
Accounts receivable	46,942	41,248	29,528
Inventory	6,366	5,296	2,677
Prepaid expenses	1,646	—	—
Total Current Assets	**59,021**	**46,544**	**32,205**
Long-term Assets			
Fixed assets	69,834	60,625	36,408
Less: Accumulated amortization — fixed assets	(30,595)	(19,171)	(8,687)
Net fixed assets	39,239	41,454	27,721
Goodwill	1	1	1
Total Long-term Assets	**39,240**	**41,455**	**27,722**
TOTAL ASSETS	**$ 98,261**	**$ 87,999**	**$ 59,927**
LIABILITIES AND OWNER'S EQUITY			
Liabilities			
Bank indebtedness	$ —	$ 39	$ 8,201
Accounts payable	10,929	10,724	8,173
Total Liabilities	**10,929**	**10,763**	**16,374**
OWNER'S EQUITY			
S. Chang, Capital	**87,332**	**77,236**	**43,553**
TOTAL LIABILITIES AND OWNER'S EQUITY	**$ 98,261**	**$ 87,999**	**$ 59,927**

Source: Chang Dental Clinic.

Exhibit 3

LOCATION OF PETROLIA



Source: Google maps.

Exhibit 4

KEY INDUSTRY RATIOS

RATIO	2005	2004	2003
Percentage of Total Assets:			
Cash	23.0%	22.3%	20.4%
Accounts receivable	5.7%	6.8%	6.8%
Inventory	0.4%	0.4%	0.6%
Fixed assets	42.8%	45.3%	47.4%
Intangibles	15.2%	12.8%	13.4%
Percentage of Total Liabilities and Equity:			
Accounts payable	3.0%	2.6%	2.7%
Long-term debt	44.2%	41.0%	42.7%
Equity	7.0%	10.1%	3.8%
Percentage of Total Sales:			
Operating expenses	88.5%	88.2%	89.1%
Net income before taxes	9.7%	9.6%	8.6%
Current ratio	0.8	0.7	0.7
Acid test ratio	0.7	0.6	0.6
Age of accounts receivable[1]	N/A	N/A	N/A
Age of inventory[1]	N/A	N/A	N/A
Age of accounts payable[1]	N/A	N/A	N/A
Interest coverage	4.5×	3.8×	3.5×
Debt to equity	71.6	29.4	59.0
Return on equity	95.9%	88.7%	75.2%
Return on assets	18.1%	15.5%	13.5%
Fixed asset turnover	15.3×	13.9×	12.8×
Total asset turnover	4.7×	4.8×	5.9×

Source: The Risk Management Association (RMA): Annual Statement Studies (2007-2008).

[1] *Not available.*