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"Information Technology"---the solution for the efficiency, effectiveness of Health Services

by

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Performed at

HeadQuarters Hair Solutions Clinic,
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Health Informatics Internship - HINF 7000

In partial fulfillment of the requirements of the Master of Health Informatics Program,
Dalhousie University

Report of Internship for the period June 1 – Aug 31, 2004

Date Submitted: Oct 1st, 2004

Acknowledgement and Endorsement

This report has been written by me and has not received any previous academic credit at this or any other institution.

During this short period summer internship at HeadQuarters Hair Solutions clinic, the intern has received various help and support from many individuals. I would like to thank **Dr. Shepherd** and **Mr. Joe Graves** for their guidance and supervision; **Dr. Robert A. Wadden** for his medical professional knowledge of hair transplant; all the staff at HeadQuarters for their help and cooperation; **Mr. Larry Burke** for his contribution on website updating, **Mr. Ed Kelly** at Workers Compensation Board for his technical support for IT solutions, **Mrs. Margie MacLeod** at Capital Health for her valuable suggestions on the ways of obtaining updated information.

(Signature :) _____   **Date:** _____

Intern: Xiaomin Tracy Lou

Oct 1st, 2004

Supervisor: Mr. Joe Graves, President

(Signature :) _____   **Date:** _____

Executive Summary

The internship is an integral part of the Master in Health Informatics (MHI) program. It has been such a great opportunity for the intern to obtain valuable insights and hands-on experience in a healthcare environment. The health care industry is one of the most information intensive sectors of the economy. It is becoming apparent that management of health care organizations can be improved by intelligent use of information. The purpose of this report is to review the work the intern did during the internship period, discuss how the information technology can be used to improve the quality of Health services (IT for handling information efficiently within the organization, IT strategy for marketing, IT for better quality in serving clients), and recommend changes that will assist the manager at HeadQuarters Hair Solutions, in developing a strategic direction for their Information Management and Marketing Plan.

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1. Introduction

1.1 Background

The health care industry is one of the most information intensive sectors of the economy. It is becoming apparent that management of health care organizations can be improved by intelligent use of information.

1.2 Objective

There are two main objectives for this internship:

- For the intern, it is to achieve some hands-on experience in applying her academic health informatics training into the real word.
- For the organization, it has already realized the power of information technology and would like to see the added value of IT.

1.3 Description of the organization

HeadQuarters Hair Solutions Clinic is a Maritime-owned family business with an enviable reputation and one goal – *to provide quality solutions to those who have experienced hair-loss for any reason.* The difference HeadQuarters has made in the lives of its clientele is a testament to the professionalism, compassion, and dedication of the HeadQuarters team.

At HeadQuarters Hair Solutions Clinic, it is all about hair-loss solutions! They have various options available to address clients' specific hair restoration requirements, from non-surgical options like hair weaving, "Folligraft", genetic Hair Transfusion, and high-

tech laser treatment to the most advanced surgical options such as follicular unit hair transplantation.

Hair-loss solutions from HeadQuarters Hair Solutions Clinic combine today's breakthroughs with nearly 40 years of client service and satisfaction provided by Joe Graves, and his team of dedicated professionals. They've earned their reputation for honest, caring, and discreet service to those who have experienced hair-loss for any reason. They have become the most trusted provider of leading-edge hair restoration solutions in Atlantic Canada.

HeadQuarters has created a sophisticated and contemporary environment. At their clinic you will find an inviting, warm, and relaxing atmosphere. Their professional team is made of surgeon, nurse and technicians who are knowledgeable, highly skilled and caring. They are well trained in all of the non-surgical/surgical procedures and bring with them years of training and experience. Their professional and caring manner will ensure a positive experience.

2. Job Description and Achievement

2.1 Job Description

The intern supported the activities, which improved efficiency and effectiveness of the work performance and outcome of the service provided by HeadQuarters Hair Solutions Clinic.

The job intern did can be categorized into three main parts:

2.1.1 Information technology marketing

1. Established the email distributing lists for leads from 1996-2004.

2. Replied emails, categorized clients' needs/requests into general questions.

3. Updated and developed the client letter templates for various needs.

4. Conducted creative research through Internet on hair transplant clinic and hair transplant technique.

5. Developed the access database of Nova Scotia doctors' (General Practitioners, Dermatologists, Hematologists, and Plastic Surgeons) information, merged data from database into word document, and mailed the letter out to more than one thousand doctors. All the original information of doctors was obtained from the website: The College of Physicians and Surgeons of Nova Scotia http://www.cpsns.ns.ca/.[1] Acknowledge to Dr. Wadden at HeadQuarters, and Mrs. Margie MacLeod at Capital Health.

6. Developed the access database of Hair salons, estheticians, massage therapists, and other hair related business in Nova Scotia. All the original information was obtained from Aliant yellow page. Acknowledge to Mr. Joe Graves at HeadQuarters.

2.1.2 Medical work

1. For Non-surgical clients:

   - Laser treatment periodically

2. For Surgical clients:

Hair transplant on Fridays and sometimes on Thursdays, acted as a technician, the work involved include:

- Set up the surgery room

- Sterilize surgical instruments

- Temporary Wrap after surgery

- Dissect the scalp into small follicular units

- Plant individual hair follicles using microscopic forceps

2.1.3 Technical work

1. Transferred the previous SAS application software into new computer.

2. Setup network for file/information sharing among computers

3. Scanned clients' photos into computer systems

4. Solved computer related problems routinely

2.2 Achievement/Lessons learned

What the intern has achieved include the following:

o Conducted creative Internet research: including areas such as the existing advanced international hair transplanting practicing procedure

o Understood the whole procedure of the practicing at HairQuarters thoroughly

o Monitored current website and Provided recommendations for improvement

o Used IT as enabler to help supervisor at clinic to handle information

o Applied IT solutions into marketing

3. Health Informatics related issues at HeadQuarters

3.1. IT for handling information efficiently within the organization

The computer system at HeadQuarters was developed several years ago. The applications consisted of only basic financial support - general ledger / accounts payable- accounts receivable and basic demographic information on their clients. Currently, the appointment can be made either through telephone or by Email, however, both ways they record on paper not in the computer system. To enhance the information management, the functions of applications should also include Scheduling component.

3.2. IT strategy for marketing

A company's website is one way of the marketing plans. The HeadQuarters' website was established not so long ago, and at that time it made dramatic success with regard to broadcasting the services they provided. However, nowadays, the website doesn't get enough traffic they should. The reason is that the website needs to be updated, not only for the content, but also for the format. There is definitely a knowledge gap between the clients and health professionals, how can the potential clients get the maximum information when they browse the website? Looking across the websites that are outstanding, most importantly, the website should be very informative and easy to navigate.

3.3. IT for better quality in serving clients

Currently, except that the photos were scanned into computers, all other information of the client clinic record was paper-based. It is very hard for a follow-up for clients; the

best way is to establish the electronic clinic records for clients, so it can track the information faster and provide the feedback that could direct clients accordingly.

4. Summary

4.1 Conclusions

As a hair solutions clinic, HeadQuarters is very successful and is a leader in Atlantic Canada. However, with regards to the information technology application at the clinic, top management already realized its weakness and shortness, the challenge they are facing is to extend the information technology applications within their organization. With more enhanced information technology applications that can improve the information management internally and provide better service to clients externally, HeadQuarters could be much better and more successful.

4.2 Recommendations/ Suggestions

The business at HeadQuarters Hair Solutions Clinic is successful and keeps growing; the clinic is going to move to Bedford site for expanding in December this year. In order to better serve the clients and improve the information management, here are three main suggestions for the near future:

1. Booking appointment/Scheduling component, in computer Database

2. File: client clinic document, in computer Database

3. Current website updating ideas:

    - Link exchange page

    - Photo Gallery(Before and After)

- Online consultation

- Online discussion forum

- Newsletter online subscription

References

[1]   The   College   of   Physicians   and   Surgeons   of   Nova   Scotia
http://www.cpsns.ns.ca/