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Enhancing public access to information about healthcare professionals that is pertinent to the wellbeing of the patient

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**Abstract** 

The internet is positioned as an easy-to-access resource, assisting individuals to seek information. This research aims to investigate the internet's role in educating the public about healthcare professionals, and in particular, how a web-based resource may be positioned to improve surgical practice exposure. Data was collected via semi-structured interviews with experienced and trained surgeons located in Adelaide, Australia as well as online surveys completed by the public. The results of these two forms of primary data collection suggest that: surgeons are willing to incorporate web-based promotional and educational tools into their new or established practice as uptake of such a resource by patients continues to increase; the public wants greater access to information related to their healthcare professionals and sees value in a website that delivers this to them; and patients and surgeons need to access and utilise such resources free of charge. Based on these findings, the research recommends the creation of an online resource, targeted at the public and the surgical community.

**Keyword:** marketing, healthcare, internet marketing

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#### Introduction

The surgicalindustry structure is hierarchical, withsenior and experienced surgeons taking up academic or politically prestigious roles in public hospitals. For the most part, this stature is transferred into their private practices through referrals at the level of the general practitioner. These referralsare based on the skill of the surgeon, but limitedunderstanding of other surgeons' skills by referrersskews referring patterns to these prestigiously positioned individuals.

On the other hand, younger surgeons who are educated and skilled but do not possess the prestige of their senior colleagues, are positioned lower in the pecking order. As a result, these less-tenured surgeons struggle to establish their name and develop their own business brand in the private surgical landscape. Based on member numbers for the Royal Australasian College of Surgeons (RACS) (2010) and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) (2010), over 200 active surgical members are present in South Australia alone. However, of these 200+ surgeons, more than 80% do not hold senior positions and this results in less exposure within the community.

These two diverse groups of surgeons both service patients. Do these patients need information about any given surgeon (regardless of tenure or status within the surgical community) and/or surgical procedure? In most cases, patients tend to be the passive receivers of information about whom they are to be referred. However, if a patient wishes to carry out self-directed research through the internet on surgeons who specialise in a field specific to their needs, there is currently no website available to assist them.

This research study explored how a web-based search tool for use by the public could place tenured and non-tenured surgeons on a level playing field in terms of exposure and attracting potential patients. It was exploratory because the writer needed to clarify ideas for the

development of a 'first-mover' online tool for surgeons and their patients; the research was designed to *precede* a more detailed study of the market for a business plan.

There are three parts to this report on the research that was undertaken. First, background information on web-based business procedures for a surgery expands on the material in this Introduction. Then data collection processes are described, followed by analyses of that collected data. Finally, recommendations are developed from the findings.

## **Background**

Surgeons, as with other professionals, have specific skills acquired through education and experience. It could be assumed that many believe this is all that is required. However, if they want to establish their own surgical practice this would also require skills in business management as well as marketing in order to promote their business. A business executive with Telstra Business has found that 'a medical practice is a business regardless of whether it has broader social and charitable aims: it employs staff, rents business premises, and must pay business taxes' (Armstrong 2009, p. 34). In addition, working capital is needed to start up a private surgical practice or improve an established practice so finance and accounting skills would also be required. The internet has become useful in the business world; for example, it is used for employment such as through the website <a href="www.seek.com.au">www.seek.com.au</a>, in the real estate sector with <a href="www.realestate.com.au">www.realestate.com.au</a>, and in retail services with online shopping. These types of internet services could also be of value to a medical or surgical practice as it employs staff and requires premises.

Web-based promotional tools have aided the business growth of many medical practices. Armstrong (2009) reports that across a number of healthcare-related disciplines, about 30% to 80% of new patients presenting to a practice are gained through the practice's internet exposure. This has implications for both healthcare professionals and their patients. Patients are now not only taking a greater interest in their wellbeing, but are accessing the internet more frequently to better understand their healthcare professional.

However, of the 60 000 medical practitioners, only a few hundred medical practices operate with a functioning website (Armstrong 2009). Currently there is no single website on medical practices that the public can utilise, nor is there a centralised arena whereby healthcare professionals can actively promote and drive their business online.

This research focuses on the surgical sector in particular because it is the least internetestablished of all medical practitioners. The referral system between general practitioners and surgeons means that the medical professionals hold all the knowledge, not only about their medical credentials but about the healthcare issues of their patients and the possible surgical procedures. The patient lacks knowledge and usually is the passive recipient of information and direction. This research study considered the question of whether the internet could be used by both surgeons and patients for their mutual benefit.

## Data collection and analysis

Given that no prior research had been undertaken on the use of the internet by surgeons and the public, primary data had to be collected. Interviews and a survey were chosen as the primary means of data collection for two reasons: semi-structured interviews with surgeons would provide in-depth knowledge of the current situation regarding internet usage by the surgical profession and their patients, and the self-administered questionnaire through an internet-based survey would reach out to a broader target audience in order to obtain their views on using the internet to increase their knowledge.

#### Collection of semi-structured interviews

By interviewing individuals with an intimate understanding of the market, knowledge regarding real-life insight with real-life experiences may be obtained. Two surgeons were interviewed because they represented 'critical' cases that met the conditions of the two types of surgeon described in Section 1 Introduction, in an in-depth way (Yin 2008, p. 42). That is,

their tenure status was different and they exploited different tools or relationships to generate and maintain business.

The participants were interviewed in a semi-structured format. This is a 'wide-ranging category of interview in which the interviewer commences with a set of interview themes but is prepared to vary the order in which questions are asked and to ask new questions in the context of the research situation' (Saunders et al. 2009, p. 601). The semi-structured approach worked well as it allowed both interviewees to speak freely. They both elaborated on some of their responses and touched on issues that were not previously considered by the writer.

Both closed and open forms of questions were used. The closed questions were similar to the listing-type questions in the survey. The answers to these questions provided data that could be interpreted as a direct opinion of the interviewee, and consequently addressed the themes specific to the research. On the other hand, the open questions allowed for colourful, detailed, in-depth responses which assisted in painting an overall picture of the market as perceived by the interviewee. It is this colour and detail which helped determine not only what the needs and wants of the surgeon may be, but also the needs and wants of the surgeon's customer, the patient. This information proved to be crucial when the brainstorming of ideas for a new venture, tailored to this research, began.

In both these stages, the ethical procedures of AIB were followed, including signed informed consent and release of findings forms by the interviewees.

The first interviewee shall be referred to as AK. AK is Senior Consultant Surgeon at The Queen Elizabeth Hospital and Noarlunga Hospital, situated in metropolitan and outer-metropolitan Adelaide respectively. AK operates as a general surgeon at both of these sites, with his interests having a colorectal and hernia-repair focus (Colorectal Surgery website, accessed 4 January 2011). Noarlunga Hospital was commissioned in 1991, and AK set up his own private practice there soon thereafter. AK is now positioned in a niche market in

geographic terms, and his practice has developed and continued to grow over the years. This growth has been aided by direct marketing of his business to potential referrers at a local level. Most of these potential referrers have transformed into active referrers, where AK can maintain a sustainable business with organic growth from a consistent customer base. That is, AK rests on the integrity of his reputation, skill-set, practice location and, most importantly, on the reliable referral base he has created. For this reason, AK was selected for interviewing to gain perspective on how an online resource could possibly assist an already established, successful surgical practice.

The second surgeon interviewed will be referred to as FBW. FBW is a consultant gynaecological surgeon at Flinders Medical Centre and Ashford Hospital, both in metropolitan Adelaide. Most of FBW's work is carried out at Ashford, where she is one of at least ten gynaecologists operating at the site. She competes for business with her colleagues. In 2009 FBW moved her practice to new premises where she is the only consulting surgeon; here she can concentrate on her skill, her specialisation and her patients. She is young, ambitious, business-minded and eager to leave her mark on the surrounding community and beyond. Consequently, FBW was approached for interviewing given her ability to innovate and convert changing market dynamics into desirable business outcomes.

From a healthcare professional point of view, FBW also commissioned her own personalised website, designed to promote communication between herself and potential patients. However, at a business level, the website is intended to reach out to patients that she would be routinely competing for. From the moment her practice became live online, she observed a marked increase in patients with referrals from their GP presenting to her for surgical treatment. She believes this is because patients are more frequently using the internet to gather information about their health and wellbeing, and are now using this information to insist on a referral to their surgeon of choice. With this experience, FBW has identified the behavioural traits of her patients and has adapted her practice to reflect those traits.

In brief, these two surgeons have and continue to approach their respective businesses with the two different methods described in Section 1 Introduction, but operate with the same goals in mind: improve patient comfort about their choice of surgeon and enhance the degree of trust between surgeon and patient.

#### Results of semi-structured interviews

The results of the two semi-structured interviews uncovered the needs, motivating factors and expectations of two surgeons who use different methods to acquire patients. A total of ten questions were directed to both interviewees; some questions had more than one part. The questions were designed to qualify personal experiences, and reinforce these experiences with facts and, where possible, quantifiable figures.

#### Discussions with AK revealed:

- 'Patient education is really important'. Patients who research their surgical procedure
  through reliable resources (pre-consultation) assist in the explanation and
  understanding of the surgery to be undertaken. Easy access to a purpose-built,
  reputable online site would make online resources more user-friendly. However, less
  than 5% of existing patients that present through the current means of referral would
  seek additional information.
- Patients tend to be most interested in the educational background of the surgeon and governing body involvement (e.g. Royal Australasian College of Surgeons);
   government support enforces a high level of information quality. This ensures that information on healthcare professionals is kept up-to-date.
- 'Setting realistic expectations and delivery of appropriate information with an online resource is important'. Emphasis and promotion of niche surgical market or surgical area of interest to prospective patients would assist in the differentiation between surgeons. Criteria for the positive adoption of an online tool would have to be a resource that is regulated and monitored in terms of the information delivered,

- possess a database-type configuration, be open to all surgeons and accessible to the public free of charge.
- When AK was asked if he would be interested in promoting his practice through such an online resource, the response was only 'probably'. Involvement would be favoured towards facilitating patient access to practice contact details and his work/education history. There was little scope to use the online resource as a means of generating new business because his referral base is established and well recognised.

In brief, AK did not think involvement with a web-based promotional tool would increase practice exposure. However, it could act as a source of information that the public could readily access to research his practice's appropriate contact details as well as his surgical credentials.

## In turn, the interview with FBW revealed:

- Patient education is important in treating the physiological and psychological effects
  that may be caused pre-operatively and post-operatively. Patient education by way of
  information brochures, leaflets, interaction with supporting staff within the practice
  (for example, a practitioner nurse) should be supported.
- One-on-one interaction with the surgeon is important in reinforcing a patient's understanding of their procedure and increasing the level of surgeon/patient trust.
- Holistic marketing is important to her business (although FBW's practice is centred on women, marketing to men and organisations specific to men is just as important). Using her website, more patients are now researching FBW and her practice prior to their initial consultation. Of her patient pool, 60% are referred by word of mouth, 20% via practice exposure online, and 20% by usual means.
- Information accessed online with Google is most commonly reported, but has sometimes led to misunderstanding of information by the patient. Fewer patients access specific websites with reputable, well-monitored information (these patients tend to have a paramedical background).

- More patients want to know the educational background of their surgeon, supported by works that the surgeon may have published. Endorsement by government institutions and governing bodies (i.e. Royal Australian and New Zealand College of Gynaecologists) also provide validity about surgeons as well as patients.
- FBW states 'Online promotion is the way to go. It is certainly heading this way'. If an online resource was made available to the public about surgeons, FBW stated, 'I would love to be involved'.

In brief, a web-based tool would act as an additional delivery platform for the information her patients are most commonly seeking about her and her practice. Such a tool would act as an adjunct to her already established website, as well as other marketing initiatives she is currently involved with.

These results from the interviews with AK and FBW provide a working platform onto which the themes of a new business venture may be considered. These ideas will better enable the creation of an online resource specific to the needs of the surgical community, whilst also considering the needs of the public.

### Collection of data via self-administered questionnaire

This research was exploratory and so the first stage survey did not have to measure a market, rather, the survey of patients could be a convenience sample to discover a broad picture of their perceptions. The survey creation and delivery site of <a href="www.surveymonkey.com.au">www.surveymonkey.com.au</a> was used to gather the opinions of members of the public. A total of 32 survey questionnaires comprising ten survey questions were delivered online. The individuals targeted for this component of the research were chosen to reflect the general composition of any given community. The target group was not gender specific and was well represented by both sexes, with ages of survey recipients ranging from early 20's up to early 60's. This age range was chosen as the writer is of the opinion that this demographic has the resources and capability to access the internet readily, whilst being at a stage in their lives where they

themselves are responsible for their wellbeing. Of the 32 recipients, 28 completed all ten questions (87.5%). The process of question design used four types of question: listing, ranking, rating and matrix(Saunders et al. 2009). These types of question can provide useful insight into themes specific to the research being undertaken. The questions with higher levels of completion were those structured in a listing and rating format; these were probably most easy to answer. In <a href="www.surveymonkey.com.au">www.surveymonkey.com.au</a>, questions structured with a matrix design and to a lesser extent ranking designs, may have been confusing or even overwhelming for the respondents (Saunders et al. 2009).

Lazar &Preece (1999) found that 'one of the primary advantages of email and web-based surveys is that they dramatically decrease response times'. Indeed, respondents in this research study completed the questionnaire within two to three days. Nevertheless, other potential respondents could have ignored the email notification or closed the survey window at any time after starting to answer the questions. Communication via email continues to increase over time so that email users are becoming inundated, and the internet has made it easier to stop or shut down any application, especially when no interviewer is present to oversee respondent compliance.

#### Results of the self-administered questionnaire

The results of the internet-mediated survey uncovered the wants and needs of the public for information, now and into the future. The findings were:

- More than 70% of respondents have or would research their surgeon prior to undergoing their surgical procedure.
- Greater than 96% of respondents found it to be often or always beneficial to have access to detailed information on their surgeon.
- An online resource specific to surgeons would often or always be utilised by 65% of respondents.
- After having received a referral to a surgeon, more than <sup>3</sup>/<sub>4</sub> of those surveyed would undertake further research on their surgeon.

- With access to the appropriate information, more than 96% of respondents would be empowered to suggest an alternate surgeon for them to be referred to.
- 96% of respondents either agreed or strongly agreed that an online resource providing up-to-date detailed information on surgeons within the surgical community would be well received by the public.
- Survey participants identified the internet as being the second most reliable
  communication channel in obtaining information on their respective surgeon; 27 of
  29 respondents rated the internet as a reliable or greater channel, and it is second only
  to the individual's general practitioner, with 28 of 29 respondents rating their general
  practitioner as reliable or greater.

A complete list of survey results is in Appendix.

The overall findings are clear. Patients want to better educate themselves with a view to increasing their knowledge and understanding of their wellbeing. Additionally, those surveyed felt that a purpose-built, online resource would deliver concise, reliable information specific to their needs. Furthermore, the public sees a definite benefit in having access to information on their surgeon at all times.

These are the viewpoints of the demographic that would access such a resource, that is, the public. To create an online service that appropriately delivers on these expectations of the public, more information needs to be collected.

#### **Key learnings**

This research was just the first step in along business planning process for an online tool for the surgery market. Prior to proposing any possible business venture, an opportunity needs to be discovered. Timmons and Spinelli (2009, p. 150) define an opportunity as one that 'has the qualities of being attractive, durable, and timely and is anchored in a product or service which creates or adds value for its buyer or end user'. Such an opportunity has been identified in this research—patients are more readily seeking information and surgeons have

experienced a greater number of patients doing so, but there is no one avenue that patients can routinely make use of to obtain this information.

Next, seizing and shaping the opportunity are essential. Timmons and Spinelli (2009) highlight 'Four Anchors of Superior Business' when constructing any new business venture. These anchors would be the foundation in creating a successful new venture from this research:

- Value will be created or added to customer or end user. Value would be created for the end user (patients), and value would be added for the customer (surgeons and their established or growing practice).
- A problem will be solved to meet a significant need or want. Patients would be able to access information they desire through a purpose-built online resource, and surgeons would have the ability to pay a premium to enhance their exposure to their target audience in line with or ahead of the competition.
- Robust market and moneymaking characteristics are present. There appears to be a
  growing market with an increased preference for using online resources as a means of
  obtaining information. There are increased advertising options for surgeons and
  organisations in the healthcare industry.
- The venture is a good fit with founder(s) at the time and market, with desirable risk-reward balance. This venture would foster a first-mover advantage, with lower initial investment required when compared to other start-up ventures due to the online manner in which the service is delivered (there are fewer overheads associated with web-based businesses).

In summary, this research produced the following recommendations about delivering on the expectations of the public and the surgical profession in terms of using the internet to access information on surgeons and surgical procedures, and for it to be used as a promotional tool by surgeons.

• The venture would need to be web-based. This will facilitate user ease-of-use, and will not alter current behaviours.

- This online resource should be available to users free of charge. No cost should be
  incurred by surgeons wanting to integrate this resource into their practice for basic
  purposes. By basic, the writer implies that public access will be limited to only
  contact details as well as a brief surgeon/practice brief.
- Surgeons wishing to promote their practice via this site would have an opportunity to subscribe as a premium member. This will incur a cost, but the surgeon would be entitled to deliver greater amounts of information to the end user, personalised to the needs of the end user.
- Appropriate endorsement by governing bodies specific to the target market would have to be given to maintain quality of information delivered to the end user.
- Sufficient advertising by organisations operating within the healthcare industry should support this resource to promote a more holistic appeal for this resource. This advertising would also provide economic incentives for the founder(s).

Once start-up resources have been sought and appropriate business and marketing strategies formulated in accordance with the recommendations listed above, a venture that has recognised an idea and seized an opportunity may be commercialised into a viable, successful new business.

### Conclusion

In summary, this research has discovered the key motivating factors, wants and needs of the public and the surgical community for enhancing public access to information about healthcare professionals and surgical procedures, and use of the internet by surgeons for business purposes. The findings have provided insight into the gaps in the current market, and how these gaps could to be filled. Through surveys completed by the public and interviews carried out with surgeons, a need for information and access to this information was apparent among patients. As well, surgeons want to reach out further to better inform and educate their patients. To achieve this end, I recommended the creation of a new venture that will offer a first-to-market, web-based surgeon information database to the public. This

tool would help the surgical community to make the transition toward an online approach to information for patients, as well as enhance their business' exposure and promotion.

## References

Armstrong, B 2009, 'A doctor's website – a growing necessity?', *Pulse IT*, iss. 11, pp.34-35.

Colorectal Surgery (2010), website, <viewed 4 January 2011, <a href="https://www.colorectalsurgery.com.au/surgery-australia/dr-alex-karatassas">https://www.colorectalsurgery.com.au/surgery-australia/dr-alex-karatassas</a>>.

Lazar, J & Preece, J1999, 'Designing and implementing Web-based surveys', *Journal of Computer Information Systems*, vol. 39, no. 4, pp. 63-67.

Royal Australasian College of Surgeons 2010, website, viewed 10 November 2010, <a href="http://www.racs.edu.au">http://www.racs.edu.au</a>>.

Royal Australian and New Zealand College of Obstetricians and Gynaecologists 2010, web site, viewed 9 November 2010, <a href="http://www.ranzcog.edu.au">http://www.ranzcog.edu.au</a>.

Saunders, M, Lewis, P & Thornhill, A 2009, *Research Methods for Business Students*, 5<sup>th</sup>edn, Pearson Education Limited, Essex, England.

Timmons, JA &Spinelli, S 2009, *New Venture Creation: Entrepreneurship for the 21*<sup>st</sup> *Century*, 8<sup>th</sup>edn, McGraw-Hill Irwin, New York.

Yin, RK 2008, Case Study Research, Sage, Beverly Hills.

## Appendix Results of online questionnaire

**Question 1:**Prior to undergoing your relevant surgical procedure, did you/would you search for information relating to your surgeon? Please choose ONE response.

## Attempted by 32 respondents

### Answer 1:

	Number of respondents			
Yes	23			
No	9			

**Question 2:**How beneficial would you find having access to detailed, informative information on your surgeon and their practice prior to undergoing your surgical procedure? Please choose ONE response.

## Attempted by 29 respondents

#### Answer 2:

	Number of respondents	
Not at All	0	
Sometimes Beneficial	1	
Often Beneficial	9	
Always Beneficial	19	

**Question 3:**If the resources were available for you to research your surgeon and their practice online, how often would you utilise such a resource? Please choose ONE response.

## Attempted by 29 respondents

#### Answer 3:

	Number of respondents		
Never	1		
Sometimes	9		
Often	6		
Always	13		

**Question 4:** As for the information provided on your surgeon, rank the four items listed below in order of priority (1 – lowest priority, 4 – highest priority). Please answer with ONE response per column and row.

## Attempted by 28 respondents

#### **Answer 4:**

	Could be Useful to Know	Good to Know	Important to Know	Must Know
Patient Testimonials	1	9	11	7
Area of Interest/Specialisation	1	3	10	14
Educational Background	3	13	5	7
Video Clip of Surgeon introducing themselves, their practice and their specialty	23	3	2	-

**Question 5:** After having been referred to a surgeon for your required surgical procedure at the level of your General Practitioner, did you/would you consequently search for information on your surgeon? Please choose ONE response.

### Attempted by 29 respondents

#### Answer 5:

	Number of respondents		
Yes	22		
No	7		

**Question 6:**In the instance where you were seeking some type of elective surgery, would you routinely follow the referral of your General Practitioner, or would you attempt to search for your surgeon yourself? Please choose ONE response

### Attempted by 30 respondents

#### Answer 6:

	Number of respondents		
Follow advice of General			
Practitioner	23		
Search Yourself	7		

**Question 7:** After having access to information as it relates to your surgeon of interest, would you then feel empowered to approach your General Practitioner and ask for a referral to this surgeon ahead of any other surgeon? Please choose ONE response.

## Attempted by 29 respondents

### Answer 7:

	Number of respondents		
Yes	28		
No	1		

**Question 8:** In the instance where you have been referred to a surgeon by your General Practitioner, did you/do you feel that your GP has proven knowledge and understanding of your surgeon? Please choose ONE response.

## Attempted by 28 respondents

#### **Answer 8:**

	Number of respondents	
Yes	17	
Some knowledge	7	
No	2	
Not Applicable	2	

**Question 9:** Would you agree that an online resource promoting surgeons and their practice would be well received, aid in the delivery of concise, up-to-date information to the public, whilst improving patient understanding of their surgeon? Please choose ONE response.

## Attempted by 30 respondents

## Answer 9:

	Number of respondents		
Strongly Disagree	1		
Disagree	-		
Uncertain	-		
Agree	19		
Strongly Agree	10		

**Question 10:** With the goal in mind to access information on your prospective surgeon, which of the following communication channels do you feel would deliver reliable and detailed results? Select in order of priority (1 - least reliable, 5 - most reliable). Please answer with ONE response per column and row.

## Attempted by 29 respondents

## Answer 10:

	Least Reliable	-	Reliable	-	Most Reliable
Internet	1	1	7	9	11
Radio / TV	14	7	6	2	-
Newspaper	4	17	7	1	-
Brochures / Flyers	10	3	8	7	1
General Practitioner	-	1	1	10	17