



# WEBSITE FOR PROSTATE BRACHYTHERAPY

## Online patient education and clinical information

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### Online convenience

“E-health”, meaning any electronic exchange of health-related data, covers a broad range of services and activities. The Internet is poised to alter many aspects of healthcare delivery and physician–patient relationships. Here, we report our experience at Toronto’s Princess Margaret Hospital with an e-health project for helping to meet the educational and informational needs of prostate cancer patients considering brachytherapy treatment.

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When launched in 2001, the website Brachy4U ([www.brachy4u.ca](http://www.brachy4u.ca)) provided online the detailed brachytherapy information that we formerly had supplied in booklet format at face-to-face consultation in the clinic.

### MULTILINGUAL, INTERACTIVE INFORMATION

We believed the online information might increase public awareness about brachytherapy and cause some men recently diagnosed with prostate cancer to seek a referral for consideration of this treatment modality. Given the multicultural, multilingual nature of greater Toronto, we had the information translated and presented in 5 languages — a service that would be prohibitively expensive in hard-copy booklets. We set up a discussion forum and listed responses to frequently-asked questions. We added links to the Man-to-Man Group (an international prostate cancer support group) and to local patient support services. We added a forum on erectile dysfunction and information to encourage men to find out if they qualify for enrollment in clinical trials.

To eliminate the need for men to phone in after their clinic visit for PSA levels, we began posting results of consenting patients on the website using a combination of the patient’s medical record number and birthdate and omitting all other identifying information. The majority of men were comfortable with this approach and grateful to have easy access to their result without phoning the clinic. We also put the symptom questionnaire, normally filled out at clinic visits, online with

**TABLE 1: Current features of Brachy4U**

- patient education brochures and videos
- clinical trial inclusion criteria in printable format
- periodic newsletter
- general discussion forum
- erectile dysfunction forum
- brachytherapy affiliate program
- physician and nursing fora
- Man-To-Man support link
- symptom evaluation form
- secure access to PSA results

a drop-down menu of responses for each of the 7 questions and automatic electronic submission of answers to the web database, the nurse manager and the responsible physician. **Table 1** summarizes the website services now available.

## VIRTUAL CLINIC VISITS

At this point we seriously reconsidered the necessity for face-to-face clinic followup visits. Many of our brachytherapy patients live at a considerable distance from downtown Toronto. If someone is doing well, has no symptoms or issues to discuss, and his PSA indicates that all is well in terms of cancer control, how often does he need to be seen? We began giving men the option of sending us a locally obtained PSA result, filling out an electronic symptom questionnaire and establishing email correspondence with the specialist for any additional concerns. Many accepted this arrangement, reducing the frequency of visits to annually with interim e-visits every 3-6 months. We believe this is the future direction of medical care for people with chronic conditions that need long-term followup. It is highly convenient for patients, and especially makes sense in a country like Canada which is sparsely populated with centralized healthcare facilities for specialty care. It is efficient — helping to unload the overbooked clinics of specialists — and highly cost-effective.

## Barriers to e-health

The medical system does not presently promote this kind of approach, however, because an overbooked clinic brings in more revenue. Replacing a long clinic list with evenings spent replying to patient emails and checking electronically-received results, gratis, does not reduce physician burnout, and creates numerous potentially troublesome medicolegal issues, so it is no surprise that many physicians refuse to engage in any form of electronic communication with patients. For example:

- What is the appropriate response time for email?
- What if email describing a serious problem or ominous symptoms goes astray and is not received?
- What if an electronic blood result goes missing?
- How should electronic messages be stored so they are part of that patient's medical record and are retrievable?
- Are physicians liable for advice given to patients they have not (recently) examined?

Although guidelines do not exist yet to deal with these issues, we have adopted what we feel is a safe, sensible approach. We encourage patients not to rely on email alone. If they don't receive a response within a reasonable time (same day for something they are very concerned about, 2-3 days for less urgent matters), they know to follow up with a phone call to the office. Automatic email responses are sent when a physician is absent, and supply the expected return date and alternate phone numbers for nursing or medical assistance.

For any substantive issues, a quick summary note summarizing email correspondence is dictated to become part of the permanent medical record. Since we probably are liable for advice given by email, whenever there is any concern that a problem may be of a more serious nature, we recommend that the patient be seen and examined.

## EVALUATING THE SERVICE

Brachy4U increased in popularity and visibility. The number of hits per month rose to a peak of 589,000 in 2004. Collaborating with the University Health Network's Global Centre for e-Health Innovation ([www.ehealthinnovation.org](http://www.ehealthinnovation.org)), we conducted a cross-sectional survey of users to assess demographics, satisfaction with the current website and directions for future growth. To concentrate on our own patient population, the survey was not made available to website visitors. Of the 151 respondents, 87% had home access to the Internet and 79% classified themselves as intermediate to expert users; 76% had postsecondary education. Satisfaction with the website was high, with 78% professing to be very or extremely satisfied.

Regarding the most frequently visited areas of the website, PSA results ranked first at 61%, while 47% of respondents reported reviewing the basic brachytherapy information and 40% used the site to access other related health links. The most desired additional services were online appointment booking (53%) and prescription renewal (38%). As for privacy issues, 46% of survey respondents were not at all concerned and 10% were only mildly concerned. Although the vast majority appreciated the ability to conduct "well" followup visits virtually, 88% indicated they would want to discuss any treatment decision in person.

While encouraging in terms of use and satisfaction levels, these results served to confirm our impression that the majority of those benefitting from this service were well-educated, competent Internet users. Although far from solving the issue of the digital divide — how to reach the more elderly, less educated or less affluent members of the population who don't have access to a home computer — we did encourage involvement of family members: about 11% of our population achieved computer access through a son or daughter.

## FUTURE PLANS AND HOPES

The Internet has a rich potential to supplement the delivery of medical services and to enhance physician-patient communication. We plan to continue ongoing growth and development of [www.brachy4U.ca](http://www.brachy4U.ca). The next steps will be direct pharmacy links for prescription renewal and appointment booking and confirmation. Methodology for enhanced security of information exists that would make direct download to a special section of the website of selected results from the current computerized health record a reasonable and desirable option. We hope the Canadian healthcare system will be proactive in encouraging healthcare professionals to move forward in developing e-health initiatives by recognizing their cost-effectiveness, recognizing them as healthcare services, evolving standards that meet medical malpractice requirements, and working out billing mechanisms.

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