Chapter 3.3.4

WEB-BASED NETWORKING: A CASE STUDY

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> *'Clearly there are pockets of frustration among rural physicians in Canada. Part of that frustration comes from feeling isolated, as if the problems that we experience in our small town are unique to us. We rarely get to hear that so many other rural physicians experience similar concerns. We can't meet in the hallways of the big virtual rural hospital to find solutions because the corridors are dozens or hundreds of kilometres in length.'* (1)

Introduction

Back in the1990s, 'email' was hyphenated, and any article on physician 'web-based networking' would have definitions of 'Gopher', 'Netscape' and 'Search Engine' (such as Lycos and Open Text). In that glossary of almost forgotten terms there would have been an entry for 'Listserve: an e-mail-based discussion group based on a mailing list of individuals with a common interest'.

The listserve was a very useful medium for connecting rural doctors, as it could connect individuals across the street as effectively as across the world. The technology handled the prevalent dial-up connections well, and because it was expected to be asynchronous, people from different time zones could converse on a range of topics. All they had to do was to email to a common email address and everyone on that listserve would receive their post.

At the time, a number of such listserves for rural doctors sprung up, with one of the first being RURALMED sponsored by the Society of Rural Physicians of Canada (SRPC). Others included RURALNET-L from Marshall University School of Medicine in Huntington, West Virginia, United States (and another with that name from the University of Cape Town, South Africa); RURAL-CARE from Finland (and another with that name from Australia); RURAL-DOCTORS from the United States; and CaRMeN from the College of Family Physicians of Canada (2). As the internet evolved, some of the listserves flourished but most were abandoned, either by the proponent, or by the users, or both.

Listserves for rural doctors in Canada

In Canada there were two listserves for rural doctors: CaRMeN and RURALMED.

Having started off small in 1995, RURALMED persists and grows. On the heels of RURALMED, CaRMeN, 'the Canadian Rural Medicine Network, was a project of the College of Family Physicians of Canada, developed to promote all aspects of rural medicine but especially the education and training of rural physicians, present and future' (3). According to Dave Williams, director of IT at the College, RURALMED '...started to attract more attention and it was felt that it was counterproductive to run our list [CaRMeN]' (4).

The short history of a listserve

Dr John Wootton, RURALMED's listmaster and SRPC president, remembers RURALMED's origins:

> '*I was taking a break from the 1995 Rural and Remote Medicine conference being held in Montreal by the SRPC. I hiked up to the McGill computer store hoping to look at the first Macintosh Powerbook (with a new Associate Professor card in my pocket, in case I wanted to buy something) and noticed on a cork-board an advertisement about an Engineering faculty listserve.*'

This was a new concept to John and as he read about its being a method to join disparate individuals together, it seemed to him something that rural doctors could use.

> 'I phoned the McGill Computer department who was in charge of hosting the listserves and set one up. The name RURALMED came off the top of my head. I walked back to the hotel and announced the listserve at the Annual General Meeting - and that was it.'(5)

The RURALMED listserve had its first message on Mothers' Day at 8:29pm on 11 May 1995. There were just 35 members on the list. With minimal advertising[1] it increased to 200 subscribers within a year – and in two decades it has grown to having 1,000 subscribers from 12 countries.

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[1] There was an article about RURALMED on the 8th page of the 4th issue of the SRPC newsletter, 'Doc'.

In the early days, the four external aspects of the SRPC - namely its web page (on which RURALMED is advertised, its rules published and the postings archived); the Rural and Remote conference (at which it started and seeded the listserve); the CJRM (which provided a precis); and RURALMED itself - were all interconnected. Furthermore what drove discussions on the listserve often drove the political action of the SRPC. This may be less so today as the Society has matured, but 16 years on the listserve remains the vox populi of rural doctors and their issues, while almost everything else on the internet is much more transient.

John Wootton remarks that it is '… a bit surprising that it [RURALMED] continues to flourish and remains hosted by McGill, through benign neglect, for the 15 years plus that it has been running' (5). During this time a web-based inscription form for RURALMED was hosted by the Calgary Department of Family Medicine; John Wootton's email has changed (several times); and even the list's archives, initially done by WebDoctor, had to be taken over by the SRPC where they remain accessible by internet browser in a password protected portion of www.srpc.ca.

There have been a number of related lists that have been sponsored by the SRPC. RuralMed Francaise, the RuralAnaesthesia list, RuralMed BC and a Student list. For various reasons these have never been quite as popular as the main RURALMED list, however.

As heard on RURALMED: A conversation about GP anaesthesia

In early years the discussions on RURALMED were written up for each issue of the Canadian Journal of Rural Medicine (CJRM). The following precis of the early RURALMED discussions, taken from the first issue of CJRM, shows how service needs for general practitioner (GP) anaesthesia, rolled into GP anaesthesia training, into workload, and into new techniques and how they could improve patient care - and how this could be shared among more physicians to make them sustainable.

> 'There was disagreement on whether western Canada needs to train GP anesthetists. Some sources suggest there are not enough positions even for specialist anesthetists. It was noted, however, that in many rural areas there is not enough volume for a specialist to make a fee-for-service living, and in these areas the role of GPs with extra training is easy to defend.

> Regionalisation has brought into question the viability of some rural surgical/anesthetic services. The following question was posed: How big does a community need to be, or how far from a regional centre, before it has a 'right' to basic surgical or obstetrical hospital services?' (6)

The training of GP anesthetists was discussed, with a call for national standards and for the involvement of rural physicians in setting these standards. It was noted that in Ontario it was very difficult to get third year anesthesia training positions. It was suggested that as older GP anesthetists retired there would be no-one to replace them. This led to a discussion of the actual experience of rural GP anesthesia. One participant commented that the level of anesthesia and obstetrics in rural communities tended to be high and complications infrequent. There was also speculation about the positive effects on patients' recovery when they are in the presence of physicians and nurses known to them, and the positive effects of proximity of family. These factors would be worthy of study in the rural context.

Rural obstetric anesthesia was the subject of another anesthesia thread. There is clearly no absolute consensus as yet about the role of epidural anesthesia in the management of labour, especially in the rural context. Conflicting claims about the effect of epidurals on the progress of labour abound. References were cited linking epidural anesthesia to an increased incidence of instrumental delivery. Other evidence was put forward suggesting a lack of association. The issue is clearly complex. Again, the suggestion was made that the context of the epidural (i.e. supportive, familiar surroundings) was also important.

These aspects aside, it was noted by several participants that provision of epidural services in a rural area is difficult at the best of times. Many GP anesthetists working in rural areas are already on call frequently for surgery and are reluctant to provide an 'epidural service,' wary of the toll on their families and their personal time. As a result, some areas provide epidurals only when labour is 'prolonged and complicated.' Nevertheless, the provision of the service is described by one physician as leading to 'huge professional and maternal satisfaction.' (6)

The introduction of a new, combined spinal epidural technique was discussed, with the suggestion that this technique might open the door to the involvement of non-anesthetist family practitioners in the provision of the service.' (6)

The beat goes on

With the growth of on-line email services (e.g. gmail based in the USA) it is increasingly difficult to ascribe countries of origin to the RURALMED subscribers, but the majority are Canadian. Among them are rural GPs and specialists, students, residents, nurse practitioners, and a few academics. Subscribers do not have to be members of the SRPC but as the listserve and the Society's growth have been interdependent, it is not surprising that most are members of the Society.

There are only a few rules associated with the list. Collegiality is expected; attachments are discouraged (as some subscribers remain on dial-up); and while advertisements are welcome, commercial interests who would use RURALMED for targeted advertisement are prohibited.

The future

The future of rural doctor web-based networking is, on one level, easy to predict. Innovations will provide increasing bandwidth and smaller and more powerful physical devices are being paired with new ways to communicate. Rural doctors will continue to be physically isolated and will seek others in similar circumstances with whatever technology is available.

Which technology will be dominant in this role is a matter of contention. Short messaging systems (SMS), blogging (individual diaries), wikis (on-line submissions with tracked modifications by multiple users), podcasts (streamed audio) and social networking websites (typified by Facebook and Twitter) are already affecting medical practice, although they have not limited listserves (7). Currently it appears that the RURALMED listserve remains the dominant networking technology for rural doctors (in Canada) and it is continuing to grow – growth that needs to balance enough pertinent and engaging traffic to be worthwhile with not be too much traffic to overwhelm it.

John Wootton suggests that RURALMED continues partly because the newer technologies don't fit as well.

> 'The content of RURALMED was never conducive to one-liners as the most interesting posts have been at some length. In fact some responses are so long that you almost have a reluctance to read them. RURALMED is not as intrusive as Twitter and Facebook, and does not demand a response as there is no sense that there is a group of people hanging on their screens waiting for your immediate response.'

There can be a large number of rural doctors 'lurking' on the listserve, responding only occasionally when an issue of particular importance to them is discussed. 'By virtue of the fact that RURALMED handles the whole range of rural issues, with expectation of communal and not individual response, it endures.'

After all this meandering of intertwining threads to encompass discussions on the value of rural medicine, the need for better training for this setting and workforce issues continue to this day.

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